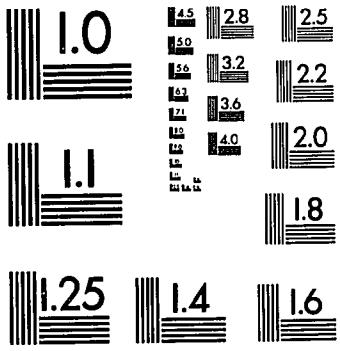

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FUTURE ORIENTATION AND HIGH ACADEMIC ACHIEVEMENT IN ECONOMICALLY DISADVANTAGED, INNER-CITY COLLEGE STUDENTS

City University of New York PH.D. 1985

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FUTURE ORIENTATION AND HIGH ACADEMIC ACHIEVEMENT IN ECONOMICALLY DISADVANTAGED, INNER-CITY COLLEGE STUDENTS

by

David Evelio Freire

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

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Abstract

FUTURE ORIENTATION AND HIGH ACADEMIC ACHIEVEMENT IN ECONOMICALLY DISADVANTAGED, INNER-CITY COLLEGE STUDENTS

by

David Evelio Freire

Advisor: Professor Harold Wilensky

The relationship of temporal dimensions to college achievement was investigated in 122 high and low achieving, economically and educationally disadvantaged, inner-city college students. They were chosen from the Baruch, City and Hunter Colleges of The City University of New York. A standardized procedure assessed: time orientation through graphic linear representations of long-term intervals; temporal expectations and extension through Wallace's Open Events Test; hopeful temporal anticipations through Beck's Hopelessness Scale; and temporal continuity through Wessman's Continuity Scale. The data were analyzed by *t*-tests (two-tailed), then correlated with grade point average, followed by a multiple regression to predict to college grade point average. All the above temporal measures were found to be significantly related to college achievement. However,

the groups did not differ on the California Psychological Inventory's Self-Control Scale, although some trends emerged in the predicted direction. A theoretical discussion touching on the issue of teleological conceptualizations in human behavior is presented. The implications of the results are discussed. Various cognitive modes of intervention are extrapolated from the findings and presented. Overall, this investigation conceptualized academic achievement as involving psychological skills that can be researched effectively, and consequently taught to students by deliberate and systematic interventions.

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Chapter I

INTRODUCTION

The basic question which prompted this research was: What psychological factors account for high versus low academic achievement among economically disadvantaged, inner-city college students? Most of the reports regarding academic achievement among this population have been case studies or program reports. Systematic psychological research in this area is needed. The purpose of this study was to investigate the dynamics of academic achievement among economically disadvantaged, inner-city college students.

The research was based on the following set of propositions: (1) High academic achievement requires that the student be able to control and regulate his immediate moment-to-moment emotional needs and consequent reactions, i.e., delay immediate impulse discharge. (2) The psychological capacity to control and manage immediate need-tension frees a student to become relatively more future oriented. (3) A positive psychological future orientation is a necessary ingredient for high academic achievement. (4) Students whose subjective futures are characterized by a greater proportion of hope and optimism, will possess a greater capacity for self-control, and academic achieve-

ment. Therefore, given the above set of propositions, it should follow that high academic achievers: (1) have a greater capacity for the self-control of need states, (2) are future oriented, and (3) are more hopeful and optimistic about their futures, than their low achieving counterparts.

Thus the present study was designed to assess the relationship of self-control patterns and subjective time experience to the academic achievement of college students from economically disadvantaged backgrounds. An attempt was made to conceptually separate the role of self-control variables from that of temporal variables.

This investigation conceptualized academic achievement in terms of ego functioning. In this respect, our view is similar to the position detailed by Rapaport (1951), who postulated that thinking develops as a function of delays in impulse discharge. Thus the development of thinking, i.e., of mental manipulations and operations which anticipate the future, orient our actions according to it and correctly relate means and ends to each other, entails increasingly greater ability to control and regulate the expression of emotion in consideration for (scholastic) reality consequences. Moreover, if this conceptualization is correct, it should be possible to demonstrate that the capacities to delay and/or anticipate the future (or lack

thereof), play an integral part in academic success versus failure.

Although this research is important in light of its theoretical questions, it is also of practical import. Empirical support for the posited relationships may generate a series of interventions that educators as well as other professionals could use. Such empirically-based interventions would be more attuned to the individual's psychoeducational status and needs.

The subjects were chosen from the CUNY SEEK Program. SEEK (Search for Education, Elevation and Knowledge) provides economically and educationally disadvantaged students with academic and counseling services. A stipend is also provided to help meet educational costs. The program emerged during the social upheavals of the sixties, as a response to the outcry of the underprivileged for an equal right to a college education. SEEK provides appropriate courses for students in need of remedial education, to help students make up deficiencies in high school training. Thus, the program is committed to maximizing the intellectual growth of students who have had limited educational opportunities. By providing a range of special courses and services, the program endeavors to integrate students into the mainstream college curriculum. It offers these services as long as the student remains

in good academic standing throughout his undergraduate education. However, one serious problem encountered by SEEK is a high attrition rate among its students. Too many high school students emerge from New York City schools barely literate. The Board of Education reports that about 42% of its students do not graduate from high school. This number climbs for minority children, who make up 71% of the students. The New York Urban League calculates that three of every four black children who enter public schools do not graduate. Aspira, an Hispanic education association, reports that eight of every ten Hispanic children drop out (Auleta, 1984). But the problem does not stop there. According to the American Educator (1985), a major study of 100,000 U.S. schoolchildren found that, although students at each age level had little difficulty making judgements about what they read, most lacked the problem-solving and critical thinking skills necessary to explain and defend their judgements. Many high school students do not possess the higher order intellectual skills we would expect of them: 40 percent draw simple inferences, 80 percent cannot write a persuasive essay, 66 percent cannot solve a math problem requiring several steps. Therefore, SEEK and other institutions welcome and encourage studies that identify variables which contribute to retention and high college achievement.

Chapter II

LITERATURE REVIEW

Delay of Impulse Gratification and Self-Control

Delay of impulse gratification and subjective future variables have been implicated in the successful development and achievement of long-term, time distant goals (Freire, Gorman and Wessman, 1980; Lopez-Baez, 1980; Knapp and Garbut, 1958; Singer, Wilensky and McCraven, 1956; Spivak, Levine and Springle, 1959; Teahan, 1958).

Ever since its original delineation in "The Interpretation of Dreams" (1900), the importance of self-control patterns that require delay of gratification discharge has been studied from a wide spectrum of theoretical frameworks, from Freud to the present (Mischel, 1974, 1972; Rapaport, 1958, 1950; Roberts and Erikson, 1968; Wormith and Hasenpusen, 1979). Regardless of the level of abstraction and differing operational definitions, the findings of these theorists converge on the fact that the concept of voluntary postponement of gratifications for the sake of more time-distant, long-term gains, is fundamental for the successful functional adaptation of the individual to his external, as well as internal, environment.

The ability to voluntarily refuse immediate gratifi-

cation and to tolerate self-imposed delays of reward is at the core of most philosophical concepts of "will power", and their parallel psychological concept of "ego strength" (Mischel, 1974, 1972; Rapaport, 1958, 1950). It is difficult to imagine socialization, or indeed civilization, without such self-imposed delays of personal pleasure. Learning to wait for desired outcomes, and to behave in the light of expected future consequences is essential for the successful development and achievement of long-term, time-distant goals. Even the simplest, most rudimentary steps in socialization require learning to postpone one's impulse gratifications, and to express them only under appropriate conditions of time and place, as seen for example in the toilet training of children. Similarly, enormously complex chains of deferred gratifications are required for individuals to achieve the long-term, future-oriented rewards provided by our culture's social structure and institutions. Consider, for example, the deferrals of personal pleasure required to achieve occupational objectives, such as careers in science, medicine or business. The path leading to the successful academic achievement of long-term goals is marked by a continuous series of delays of impulse gratification, as seen in the progression from one grade to the next, and from one stage to the next more advanced one, in the long

course from occupational choice to occupational success. In social relationships and realization of life plans our culture also requires delays, as seen in the expectation that individuals should postpone sexual relations, marriage and children, until they are "ready for them". Although judgements of what constitutes such readiness differ greatly across cultures and among different people, some norms concerning appropriate timing are found in every society (Mischel, 1974).

In contemporary psychoanalytic literature, the concept of delay of gratification discharge had gradually come to play a pivotal role in the analytic theory of thinking and ego development.[1] The gradual shift from the prelogical, chaotic, impulsive, diffuse and syncretic character of primary process thought; to the more logical, abstract, temporally structured, deliberate and reality oriented secondary process, is postulated to involve as a key step, the delay or deferment of gratification discharge (Freud, 1900). As Freud discussed the se-

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[1]The works of Blank and Blank (1974); Federn (1952); Hartmann (1939; 1950, pp. 74-96); Hartmann, Kris and Lowenstein (1947, pp. 11-18); Jacobson (1964); Kris (1950, pp. 540-560); Mahler (1975); and Rapaport (1950, pp. 161-170; 1951), have provided and added new breadth to Freud's conception of the ego.

quence of thought development, the gradual establishment of the delay and deferral mechanism provides the clue to the emergence of the reality principle (Freud, 1911, pp. 13-21). Rapaport (1950, pp. 162-164) went on to elaborate Freud's conceptualization, writing:

> Freud's concept is that ideation arises only when this process of gratification discharge is interfered with. When the need tension arises to the point where discharge should take place but the need-satisfying object is not present, the discharge is delayed. During the externally-imposed delay begin changes which are to have such far reaching significance for the development of the ego, and of thought processes. . . .The primary process aimed at direct discharge of cathexes, and when circumstances delayed such discharge substituted for it wishfulfillment in the form of hallucinatory revival of the need-satisfying object. The secondary process converts this involuntary delay due to external circumstances into an internally controlled delay, assuming postponement of discharge until external reality conditions have been found suitable for discharge. . . .The core of this change from the primary to the secondary process appears to be the change in the character of the delay. The delay to begin with was due to external circumstances and is turned into an ability to delay, into an internal control. Thus is a necessity made a virtue.

Stating that "thinking explores the possible pathways of action to find the one of least resistance, least danger, and greatest directness, while preserving almost intact (in delay) the energy necessary for motor action" (1950,

p. 169), Rapaport later concluded that the capacity for delay is the "hallmark of the ego" (1958, pp. 745-757).

To summarize, delay of impulse is the fundamental condition for human thinking; it is the prerequisite of every thought, and indeed gives birth to thoughts. It should be clear that by delay we do not want to imply any quantitative temporal factor; but rather that a process responsible for many aspects of thinking has been successfully consummated. Thus, the gradual development of thought processes represents a progressive mastery over impulse. Aspects of thinking -- imagery, temporal anticipation, memory, concept formation -- are crystallized into a system usually referred to as purposive or logical thinking (Rapaport, 1968).

In concluding, it will be noted that when a delay of gratification is imposed on an individual by external circumstances or forces we label it frustration; when the delay is self-imposed we call it self-control (Mischel, 1974; Rapaport, 1950). In this study delay will be defined by the latter term.

Subjective Future

As previously shown, this study theoretically and developmentally presumes that the ability to conceptualize the subjective future is one very important conse-

quence of the successful emergence of delay of impulse discharge. Thus, it would appear that the acquisition of delay of gratification allows for the formation of self-control patterns which play a pivotal role in the structuration of subjective future. According to this view, the morphogenesis of subjective future begins at infancy. In discussing the emergence of consciousness and experience of time, Gorman and Wessman (1977) call to our attention that according to Freud, the tentative establishments and fluctuations of object attachments and cathexes (in early infantile development), were at the bottom of the origin of the concept of time. Freud (1936) evidently held that the emergence and development of the time-structured, secondary process, from the timelessness of primary process, required optimal frustration with the resultant delay (due to the absence of the need-gratifying object), promoting and enforcing reality oriented, future anticipation. That is, the shift from the pleasure principle to the reality principle was intrinsically bound to the gradual emergence of temporal awareness, with increasing capacity for anticipating future gratifications. Hartmann (1939) later added: "The reality principle implies the function of anticipating the future, orienting our actions according to it, and correctly relating means and ends to each other." So that

with the gradual emergence of delay of impulse gratification, a shift in, and structuration of, the time orientation of the personality is brought about, so that the individual begins to gradually develop "consciousness of the passage of time". The emerging emphasis is more on the capacity to delay and regulate the tendency to immediate impulse discharge until environmental circumstances are favorable for gratification discharge.

Later theorists (Wallace and Rabin, 1960; Yates, 1938) attributed developing awareness of time to the patterns of bodily rhythms experienced during the oral and subsequent periods. These rhythmic patterns and expectations presumably are formed from the summation of proprioceptive and kinesthetic, sensori-motor feedback, experienced as a result of the periodic frustrations and satisfactions of bodily needs, and their accompanying succession of sensations. These are gradually colligated and internalized by the child, providing the basis for the initial development of the sense of time. Thus, initially the infant's awareness of time is limited to the immediate present. This notion expands with the advent of reflective thought, when the child's life is organized into longer cycles (Freud, 1936; Hartmann, 1939; Piaget, 1971). The emergence of temporal awareness and conceptions of time is a gradually evolving process through

childhood and adolescence. At about the age of 8, the child can reconstruct past time and conceive of future time. According to Piaget, when reversibility is attained, the individual can reason about time. At age 10, the notion of sequence is strengthened and children can extend their thinking from the actual present to the potential future. By mental age 12, historical time becomes understandable. The adult concept of time generally emerges around age 14, with the attainment of the understanding of continuity. Time concepts usually crystallize around mental age of 16, when the typical adolescent understands continuity and gains awareness of how to both control and use time. Overall, while a great many observers of child development regard temporal awareness as emerging from early emotional life, we must recognize that the exact sequence and character of these stages is only beginning to be adequately conceptualized and that much remains to be understood and carefully formulated (Gorman and Wessman, 1977).

Recent years have witnessed an increasing interest in time as a psychological variable. As with delay of gratification, the experience of subjective time has been studied from a wide theoretical spectrum, and under a variety of guises (Doob, 1971; Fraisse, 1963; Gorman and Wessman, 1977; Wallace and Rabin, 1960). Cottle (1976) dif-

ferentiates between subjective and objective conceptions of time. In the linear or objective conception of time, moments are experienced as they occur, one succeeding another in an unending continuum. This concept illustrates the way time flows chronologically. The notion derives from the measurable characteristic of time (e.g., "clock time"). Yet, the subjectivity of psychological time dominates "chronological" estimations of extensions such as clock and calendar time. The simplest temporal inquiries call forth subjective as well as objective responses (Cottle and Pleck, 1969). An objective chronological extension is usually reported with a subjective perception. When asked about the duration of a time unit, such as "how long is a day?", the individual may respond by stating how many hours a day lasts, or by answering "very long" or "not long enough", depending on the amount of need-tension experienced by the individual (Irwin, 1961). Cohen (1966) illustrated the distinction between the objective and subjective experience of time by writing: "A month is about four times the 'duration' of a week, a month ago is not felt to be four times as remote as a week ago" (p. 81).

Among techniques that have been used in attempting to assess how individuals broadly structure and experience time are: questionnaires (Cottle, 1969), factor analyzed inventories (Calibresi and Cohen, 1968; Wessman, 1973),

Q-sorts (Brayley and Freed, 1971), metaphor preference tests (Knapp and Garbut, 1958), and ratings of stories and projective test productions (Wallace, 1956; Epley and Ricks, 1963). Another way of examining the subjective realities of time perspective is to ask respondents to symbolically represent the extension of temporal units "as they seem to be" (Cottle and Pleck, 1969). The lines test is used for this purpose. It has been utilized to obtain subjective estimates of temporal orientation on a symbolic space by measuring the amount of investment which a person places on the past, present or futureness of temporal experience (Farnham-Diggory, 1966; Freire, Gorman and Wessman, 1980; Rychlak, 1972). The findings indicate that subjects varied in perception of time units such as days, weeks, and years. Temporal perspective varies among individuals regardless of sex, age and race. As cognitive development unfolds, a reorganization of individuals' temporal constructs occurs. As individuals mature, they modify their construction of past, present, and future time. Additionally, socialization (e.g., reinforcement of future orientation) promotes changes in temporal perspective, making it more future oriented.

Wallace (1960) defines future time perspective as: "The timing and ordering of personalized future events."

Future extension is the distance in time units that an individual characteristically projects himself into the future. Future extension is a function of individuals which permits them to draw up a model for the future. Future extension influences the behavior of the individual (Arieti, 1955; Minkowsky, 1958). Personality theorists such as Freud and Adler consider future extension and the ability to anticipate a crucial aspect of personality organization. Investigators have found that the capacity to extend oneself into the future is a positive sign of mental health (Arieti, 1955; Brayley and Freed, 1971; Israeli, 1936). Individuals suffering from mental disturbances exhibit a lack of future extension (Wallace, 1956). Competence, punctuality and satisfactory academic progress have all been positively related to future extension (Blatt and Quinlan, 1967; Goldrich, 1967; Kraus, 1967).

Two future related concepts which are embedded with future orientation are hope and expectations. An optimistic orientation enables an individual to generate positive future expectations with serious consideration given to future consequences. A pessimistic outlook about the attainment of future goals and uncertainty about the direction of future changes leads to a discouraged attitude towards the future, curtailing the individual's ability

to generate positive expectations. As Maslow (1968) stated:

> The future also now exists in the form of ideals and hopes. . . .One for whom no future exists is reduced to the concrete, to hopelessness, to emptiness. (p. 214)

Demoralized individuals cannot successfully cope with the tasks required for high college achievement. Hope would therefore appear to be one important factor which contributes to college achievement. Individuals who are hopeful and confident in the future tend to actively strive to achieve their goals. As Lewin (1948) stated, "Hope means that 'something in the future, the real situation will be changed so that it will equal my wishes'".

Hopelessness, on the other hand, has been described by Fromm (1971) as "passive waiting". Individuals do not actively strive, nor set expectations. Rather, they passively await for the future to bring something without their involvement. Lewin (1948) stated a similar viewpoint when he wrote:

> . . .Only when the person gives up hope does he stop 'actively reaching out'; he loses his energy, he ceases planning, and, finally, he even stops wishing for a better future. Only then does he shrink to a primitive and passive life. (p. 103)

Hopelessness has been identified as one of the core characteristics of depression (Beck, et. al., 1974). It has

been found that depressed patient have an unrealistically negative attitude toward the future (Vatz, Winig and Beck, 1969). Apparently, negative expectations result in the "passive waiting" and "passive life" that both Fromm and Lewin describe.

In contrast, hopeful individuals do not attempt to predict the future, yet can anticipate it and prepare themselves for it through the setting up of positive expectations. Fromm further stated:

> Hope is paradoxical. It is neither passive waiting nor is it unrealistic forcing of circumstances that cannot occur. . . .To hope means to be ready at every moment for that which is not yet born, and yet not become desperate if there is no birth in our life time. . . .Those whose hope is weak settle down for comfort or for violence; those whose hope is strong see and cherish all signs of new life and are ready every moment to help the birth of that which is ready to be born. (1971, p. 9)

Aside from time orientation, there is a further aspect important for hope to be effective as a motivator of concrete, future oriented behaviors. As Lewin (1948) further stated:

> One aspect of time perspective which is essential for morale is realism. . . .Morale demands both a goal sufficiently above the present states of affairs, and an effort to reach the distant goal through actions planned with sufficient realism to promise an actual step forward. . . .

> How high the individual can set his goals and still keep in touch with the reality level is one of the most important factors for his productivity and his morale. The principle of realism tends to safe guard the individual against failure and to keep ambition down to earth. (pp. 113-119)

Thus, in order for an individual's hope to be effective as a motivator of behavior, it is essential that it be reality bound and not fantasy-ridden.

As the individual's temporal experiences characterized by future orientation matures, continuity appears to emerge. Wessman (1973) states that continuity refers to the positive anticipation of a full and structured future, and also to a purposive, unified, continuous sense of time. With the appearance of continuous time, future anticipation becomes possible. Mature individuals can extend themselves into the future, less restricted by their personal histories. The future is no longer a reproduction of the past, but gains new meaning and insight for personal growth. This serves to deepen individuals' understanding of themselves. The future is enriched with new possibilities as the notion of temporal relatedness matures. As an individual gets older, more and more of his past and future affect his present mood and action. A sense of direction and continuity integrates the succession of events that comprise a person's life and occupational career. It provides the person the opportunity to

gain insight into the past and to anticipate the future. The sense of continuity helps the individual to see continuous changes rather than unrelated and discontinued occurrences. Future anticipations become creations that are related to personal history. Wessman found that individuals who lack a sense of continuity express an absence of aims and future goals and lack of commitment. Such individuals possessed a fragmented, disjointed, unrewarding, and empty conception of time. Thus, the findings of these investigations support the view that characteristic ways of experiencing and utilizing time vary greatly among individuals along dimensions that can be assessed and measured, and that these differences are meaningfully related to personality characteristics (Lopez-Baez, 1980).

For the purpose of the present study, after carefully weighing the various ways of conceptualizing psychological time which appear in the literature, the investigation of subjective time was conceptually and operationally subdivided into five components or aspects: (1) orientation, (2) extension, (3) expectations, (4) hope, and (5) continuity. These dimensions were chosen because it was felt that they would best serve to provide a differentiated view of some of the important aspects that comprise what we have come to globally label as subjective time. It

was also felt that a combination of techniques would yield a rich, detailed and composite picture of subjective temporal dynamics among disadvantaged, high achieving college students.

Delay of Impulse Gratification, Subjective Future and Academic Achievement

As the above discussions have shown, delay of impulse gratification has been conceptualized as intrinsically bound and developmentally antecedent to the structuration of future oriented cognitions. The development of the ability to anticipate the future, and to recognize the relationship between past and present behavior and future consequences, signifies a well differentiated subjective time orientation. The ability to anticipate the future, in turn, has been found to be an essential ingredient of high academic achievement. Previous studies have indicated that the high academic achiever seems to be characterized by more hopeful attitudes and a greater concern for future goals (Gough, 1952, 1953; Teahan, 1958). The setting up of goals implies a temporal orientation that is geared to the future, since a person's goals imply expectations and anticipations of future successes. High academic achievers might therefore be expected to show an essentially future oriented approach to life, char-

acterized by a time perspective with broader scope than that of the less successful student. Findings of this nature have already emerged from a study by Teahan (1958), in which it was found that high achieving students had a more extensive total time perspective than low achieving students. Indeed, Sattler (1963) found that students who are academically unsuccessful, pessimistic, or who have limited need achievement, possessed a limited future orientation. It would therefore follow that orientation to the future is a personality dimension which differentiates between high versus low academic achievers. Thus delay of gratification, a factor which is a necessary component for subjective future cognitions to emerge, would consequently appear to be a necessary component for high academic achievement to flourish.

To sum up, the present study examined self-control patterns and temporal dimensions of high achieving disadvantaged SEEK students, in contrast to their low achieving counterparts. It was felt that this contrast would provide useful insights which could contribute to higher retention and therefore lower attrition, among disadvantaged college students.

Definition of Terms

Academic Achievement. For the purpose of this study,

it was operationally defined as follows: (a) students with 30 or more college credits who have attained a cumulative grade point average of 3.0 or higher (i.e., the equivalent of "B" or better) were defined as high academic achievers, and (b) students with 30 or more credits who have a cumulative grade point average of 1.90 or below (on academic probation) were defined as low academic achievers. In addition, high school grade point average and reading, writing and mathematics scores at time of college entry were measured.

Continuity. Refers to the positive anticipation of a full and structured future, with an expected continuity of past, present and future aims, within a unified, continuous sense of time. It is the perceived degree of relatedness and continuity between time dimensions (i.e., past, present and future). Continuity was operationally defined for the purpose of this study as the total score on the Long-Term Personal Direction scale of the Ricks, Epley, and Wessman (1973) Temporal Experience Questionnaire (TEQ).

Delay of Gratification. According to Mischel (1974) and Rapaport (1950) when a delay of gratification is imposed on an individual by external circumstances or forces, we label it "frustration"; when the delay is self-imposed it is termed "self-control" and defined as the

degree and adequacy of patterns of self-regulation, and the relative quantity of freedom from impulsivity and self-centeredness an individual experiences in his interactions with his environment. Control of impulse discharge was operationally defined for the purpose of this study as the scores on the Self-Control Scale of the California Psychological Inventory (CPI) (Gough, 1956; Wormith and Hasenpusen, 1979).

Future Expectations. Refers to the individual's personal anticipations and expectations regarding his future behaviors, i.e., his projected future self-image. It consists of events that the individual expects will occur to him, or that he envisions making happen. For the purpose of this study it was operationally defined by the total percent of future expectation statements given on Wallace's Open Events Test, and by the various content categories which subsequently emerged.

Future Extension. Refers to an individual's conceptualization and and anticipations regarding probable events in his personal future. It can be viewed as reflecting how far into the future an individual typically projects himself. Future extension is a function of thinking which permits individuals to draw up a model for the future. Competence, punctuality, and satisfactory academic progress have all been positively related to future extension

(Blatt and Quinlan, 1967; Goldrich, 1967; Kraus, 1967). It was operationally defined for the purpose of this study as the mean projected age of the events anticipated on Wallace's Open Events Test.

Hope. Refers to a system of positive expectancies concerning the person and his future life. Erickson (1964) described it as: "The enduring belief in the attainability of fervent wishes, in spite of dark urges and rages which mark the beginning of existence" (p. 118). It was operationally defined for the purpose of this study as low scores on the Beck's Hopelessness Scale, which has three component factors: affective, motivational, and cognitive.

Relative Temporal Orientation. Refers to the aspect of the time dimension (past, present or future) which has primary relevance for current choices. It is the amount of investment which a person places on the past, present or futureness of temporal experience. Time orientation was operationally defined for the purpose of this study as the score on the Time Line Technique, which yields relative past and future orientation scores (Farnham-Diggory, 1966; Freire, Gorman and Wessman, 1980; Gorman, et. al., 1973; Rychlak, 1972).

Hypotheses

The study tested the following predictions:

H_1: High academic achievers, in comparison to their low achieving counterparts, will have:

a. A greater capacity for self-control, and therefore a lesser propensity towards impulsiveness.

b. A more predominant and extensive future time orientation.

c. A more hopeful outlook towards life.

H_2: The capacity for self-control of immediate emotional need, and the tendency to anticipate the future will be positively correlated.

H_3: Hopeful attitudes and future orientation will be found to be positively correlated.

Chapter III

METHOD

Subjects

The subjects were 122 economically disadvantaged, inner-city, SEEK Program college students attending either Baruch, City or Hunter College of the City University of New York. They were subdivided according to their overall grade point average (GPA) into two groups of 61 students each. If a student had a GPA of 3.00 or higher on 30 or more credits, he was assigned to the high academic achiever's group. Conversely, if a student had a GPA of 1.90 or below on 30 or more credits, he was assigned to the low academic achiever's group.

The samples were approximately matched for ethnicity (i.e., for about 80% of the cases). The ethnic composition in both samples can be defined as follows: 36.9% Black-Americans, 8.2% other-Black (Caribbean, Haitian, African), 20.5% Puerto Rican-Americans, 18.9% other-Hispanic (Cubans, Dominicans, Central and South Americans), 9% White immigrants (Russians, Greeks, Eastern-Europeans), 6.5% Orientals (Chinese). According to parents' occupations and levels of education, the socioeconomic status in both groups was homogeneous: All students were primarily from low-income, working-class backgrounds and

were receiving financial aid (See Tables 1, 2, and 3).

Both groups were matched for age. Student's median age was 21 years, with a range of 19 to 52 years. Mean ages were $\bar{X}$ = 23.2 and $\bar{X}$ = 21.9 years for the high and low achievers, respectively. In both groups, the majority of students were female: 36% of the high achievers were male, while 64% were female; and 25% of low achievers were male, while 75% were female. Overall, 91.8% of all the students who participated were single, 2.5% were married, 4.9% were separated and 0.8% were divorced.

Academic Achievement. Besides college GPA, the following information was available: high school GPA; reading, writing, and mathematics test scores at the time of college entrance; and the number of college credits completed at time of testing. These data will be reported later in Table 4.

Procedures

All the scales and procedures were incorporated into a general questionnaire format, which was administered to the students in a classroom setting, taking an average of 50 minutes to complete (See Appendix). The following scales and measures were used:

Self-Control. The Self-Control subscale of the California Psychological Inventory (CPI) (Gough, 1956), which

TABLE 1

Parents' Education and Income Levels for High and Low Achievers: Means and Standard Deviations

	High Achievers (N=61)		Low Achievers (N=61)			
Variable	M	SD	M	SD	t	p
Father's Education	9.0	3.95	10.0	3.76	1.41	N.S.
Mother's education	9.0	3.79	9.8	4.09	1.08	N.S.

TABLE 2

Parents' Occupational Status: Frequency Distribution

	High Achievers (N=61)		Low Achievers (N=61)	
	Fathers	Mothers	Fathers	Mothers
White Collar Work	15%	8%	18%	15%
Blue Collar Work	67%	46%	62%	38%
Retired	3%	7%	7%	3%
Unemployed	15%	39%	13%	44%

TABLE 3

Distribution of Family Income for High and Low Achieving Groups

	High Achievers (N=61)	Low Achievers (N=61)
$ 3,000 and Under	6	10
$ 3,000 - 5,999	22	12
$ 6,000 - 8,999	14	15
$ 9,000 - 11,000	8	14
$12,000 - 14,999	3	3
$15,000 - 17,999	6	4
$18,000 - 20,000	1	2
$21,000 and Over	1	1
	61	61

measures the adequacy of patterns of self-control and regulation, and freedom from impulsivity and self-centeredness, was the instrument used to assess self-control. The scale consists of 50 True or False items. According the the test manual, the validation studies indicated that low scorers tend to be seen as impulsive, excitable, irritable, self-centered, overemphasizing personal pleasure. High scorers tend to be seen as calm, patient, reflective, practical, self-denying, thoughtful and deliberate; being conscientious, strict and thorough in their work. Internal consistency analysis was used in the design of this scale. It was standardized using college-age populations. Gough reported test-retest correlations ranging from .68 to .86.

Continuity. The Temporal Experience Questionnaire (TEQ) was designed by Ricks, Epley and Wessman to assess different ways in which people experience and use time (Wessman, 1973). The Long-Term Personal Direction scale of the questionnaire was used as the measure of continuity (See Appendix). The positive items of the scale indicate a sense of continuity and commitment to long-term goals. The items suggest a strong motivation and positive anticipation of a full and structured future, with an expected continuity of past, present, and future aims. The items reflect a unified, continuous, and rewarding

sense of time. Negative items in the scale express an absence of aims and future goals, with lack of commitment. Their tone is one of discouragement and futility. The future appears empty, unstructured, and devoid of purpose. The items reflect a fragmented, disjointed, unrewarding, and empty conception of time (Wessman, 1973).

Factor analysis was employed in the construction of this scale. The authors included in the scale the ten highest positive items and the ten lowest negative items from a 200-item pool that measured the construct. A version from the scale adapted for high school students was used (Lopez-Baez, 1980). The modified scale was judged appropriate by Wessman. Responses to the items were on a 4-point scale ranging from VERY LITTLE to OFTEN. Scores ranged from -1 to +4, and the scores on the ten negatively loaded items subtracted from the score on the ten positively loaded items. These ranged from -30 to +30. To avoid negative numbers, a constant of 30 was added to each combined factor score. Possible scores ranged from 0 to 60.

Extension. The Open Events Test (Wallace, 1956) was the procedure used to assess future extension. It asks the students to list up to ten events that they expect might happen to them during the rest of their lives, and give the age they might be when each event happens. S's

future extension was obtained by computing the mean age, which consists of the average number of years included in the expectations they listed. It should be an indication of how far into the future they typically picture their personal expectations and plans.

Hope. The Hopelessness Scale devised by Beck (1961) (See Appendix) was used to measure individuals' negative expectancies concerning themselves and their future lives. The internal consistency of the scale has been analyzed by means of coefficient alpha (KR20), which yielded a reliability coefficient of .93. Beck and Weissman (1974) report the correlation with the clinical ratings of hopelessness in a general practice sample as .74. This highly reliable instrument has been used in the diagnosis of hopelessness and depression.

The Hopelessness scale yields 3 factors: (1) an affective factor labelled feelings about the future, which is related to hope, enthusiasm, happiness and faith; (2) a motivational factor labelled loss of motivation, which is related to giving up, deciding not to want anything, not trying to get something that is wanted; and (3) a cognitive aspects factor labelled future expectations, which is related to anticipations regarding what life will be like, getting good things, things not working out, and the future being vague and uncertain.

Relative Temporal Orientation Assessed by Graphic Representations on a Time Line. The translation of temporal dimensions into graphic representations on a time line was the procedure employed to assure relative temporal orientations (Freire, Gorman and Wessman, 1980; Gorman, et. al., 1973; Rychlak, 1972). Each student was presented with a horizontal line 260 mm. in length which they were instructed to think of as representing their lifetime. The left side of the line was labelled with the letter "B", and the right side of the line was labelled with the letter "D", representing birth and death, respectively. In addition, the words "Past" and "Future" were printed under the letters "B" and "D", respectively. Students were instructed to place a mark on the line which represented where they felt they were now, and write the word "NOW" above the mark, thus dividing the line into relative graphic representations of the extent of their relative future and past orientations, respectively.

Chapter IV

RESULTS

The purpose of this investigation was to examine psychological factors which may account for high academic achievement among economically disadvantaged, inner-city college students. It was hypothesized that an ability to control impulsivity, a subjective time experience characterized by a strong future time orientation, and an attitude toward life marked by a high degree of hope, are interrelated, and would contribute significantly to high academic achievement.

This chapter reports the findings of the study. The first section presents the academic achievement data. The second section examines the relationship among the criterion variables. And the third section reports on a multiple regression and temporal characteristics predictive of high versus low academic achievement among disadvantaged, inner-city college students.

The data on temporal orientation differences between high and low achievers were analyzed by *t*-tests (two-tailed), then correlated with grade point average, followed by a multiple regression to predict to college grade point average.

Academic Achievement Data

As was expected, highly significant differences emerged between the high and low achieving groups regarding various prior measures of academic ability and performance. However, there was one unexpected finding. Although the groups differed significantly with regard to high school GPA, reading scores, math scores, and number of college credits completed, they did not differ significantly with regard to their writing scores. Table 4 presents a summary of these findings, along with their corresponding means and standard deviations.

Tests of Hypotheses and of the Variables

Self-Control. Contrary to hypothesis, no significant difference was found between the high and low achievement groups on Gough's CPI Self-Control scale (See Table 5), though the data did approach significance.

It is of interest to note that the Gough CPI Self-Control scores correlated highly (r = .48) with the Ricks-Epley-Wessman TEQ Continuity scores (the variable with the highest predictive power to college GPA), indicating that the higher the Self-Control score, the greater the individual's Continuity score (See Table 7). Self-Control also correlated significantly (r = .35) with the cognitive component of Beck's Hope score, i.e., imaginative expec-

TABLE 4

Comparison of Means and Standard Deviations for College Grade Point Average, High School Grade Point Average, and Reading, Writing and Mathematics Test Scores at Time of Entry

	High Achievers (N=61)		Low Achievers (N=61)			
	M	SD	M	SD	t	p
College GPA	3.27	.24	1.68	.19	40.91	<.0001
High School GPA	78.50	6.21	75.40	4.40	3.19	.002
Reading[a]	1.30	.46	1.50	.50	2.07	.041
Writing[b]	6.60	1.70	6.20	2.10	1.24	N.S.
Mathematics[b]	25.41	6.42	22.34	8.10	2.32	.022

[a]Reading test was scored as 1 = Pass, 2 = Fail.

[b]Passing score for Writing = 8; Passing score for Mathematics = 25.

TABLE 5

Comparison of Means and Standard Deviations for High and Low Achievers Relative to Major Variables

	High Achievers (N=61)		Low Achievers (N=61)			
Measurements	M	SD	M	SD	t	p
Self-Control (CPI)	29.02	6.70	26.70	7.20	1.87	.064
Continuity (TEQ)	43.87	8.65	37.25	7.52	4.51	.001
Cognitive Component of Hope (Beck)	5.87	1.20	6.67	1.51	3.64	.001
Affective Component of Hope (Beck)	5.30	.80	5.57	1.13	1.57	N.S.
Motivational Component of Hope (Beck)	8.40	1.02	8.79	1.32	1.84	N.S.
Total Hope Score (Beck)	21.93	2.87	23.80	3.71	3.11	.002
Future Representation (Time Line)	177.7 mm	25.51	164.0 mm	33.71	2.53	.01
Past Representation (Time Line)	82.3 mm	25.51	96.0 mm	33.71	2.53	.01
Future Extension Age (Open Events)	31.8 yrs	7.32	29.5 yrs	4.73	2.04	.04
Total Number of Future Expectations (Open Events)	9.23	1.36	8.61	2.04	1.98	.05
Family Size	2.89	2.15	2.54	1.85	0.95	N.S.
Gender	1.64	.48	1.75	.43	1.38	N.S.

tations about the future, indicating that the greater the Self-Control score, the greater the future expectations (See Table 7). A small correlation but in the expected direction emerged between Self-Control and college GPA, indicating that the better the ability to control impulse, the higher the college GPA.

Continuity. As hypothesized, high achieving students scored higher ($\bar{X}$ = 43.9) on the Ricks-Epley-Wessman Temporal Experience Questionnaire (TEQ) Continuity scale, indicating their anticipations of a full and structured future, with an expected continuity of past, present and future aims than their low achieving counterparts ($\bar{X}$ = 37.3). A t-test revealed these differences in mean scores to be fairly substantial (See Table 5). Furthermore, the TEQ Continuity scale was the aspect of temporal experience which correlated the highest (r = .42; p = .001) with college GPA, indicating that the greater the subject's ability to anticipate a positive future and experience time as continuous, the higher his college GPA is likely to be (See Table 6). Moreover, a highly significant correlation (r = .66; p $<$.001) emerged between Continuity and the cognitive component of hope, revealing that the greater the positive sense of temporal continuity, the greater the ability to imagine future expectations (See Table 7). TEQ Continuity scores also correlated significantly (p = .01)

TABLE 6

Correlations of Temporal Orientation Measures and Self-Control with College Grade Point Average

Variable	r	p
Continuity (TEQ)	.42	.001
Cognitive Component of Hope (Beck)	.34	.001
Total Hope Score (Beck	.31	.001
Future Representation (Time Line)	.27	.01
Past Representation (Time Line)	-.27	.01
Self-Control (CPI)	.19	.05
Total Number of Future Expectations (Open Events)	.16	.05
Future Extension (Mean Age; Open Events)	.16	.05

Note: Only significant correlations (p = .05 or better) are shown. Major variables that had no significant correlation with college grade point average have been omitted from the table.

TABLE 7

Significant Intercorrelations Among Major Variables

	Continuity	Cognitive Component of Hope	Total Hope Score	Future RePresentation	Past Representation	Future ExPectations Total	Future Extension Age
Self-Control (CPI)	.48***	.35***	.24**				
Continuity (TEQ)		.66***	.69***	.25**	-.24**		.19*
Cognitive Component of Hope (Beck)			.87***	.20*	-.20*	.26**	
Total Hope Score (Beck)				.19*	-.22**		
Future Expectations (Total No. Open Events)							.27**

Note: Only significant correlations (p = .05 or better) are shown. Major variables that had no significant intercorrelations are omitted from the table.

*** = .001
** = .01
* = .05

with relative future orientation as measured by the time line, indicating that the higher the Continuity score, the greater the amount of investment a student places on the futureness of temporal experience (See Table 7).

Hope. The Beck hopelessness measures were reversed, and used as the measure of hope. Only on the cognitive component of hope did the high achievers ($\bar{X}$ = 5.77) differ significantly from the low achievers ($\bar{X}$ = 6.67) with their lower score, indicating greater hopefulness (See Table 5). Otherwise, no significant differences were found between the groups with regard to the affective or motivational components of hope; indicating that low achievers are not clinically depressed, but rather primarily inhibited in their imaginative processes.

The cognitive component of hope was found to covary with college GPA, indicating that the greater the ability of the student to imagine positive expectations, the greater his college GPA (See Table 6). Thus, it would appear that a distinguishing trait between the groups is that high achievers are more liberated in their imaginations, and therefore more able to generate future oriented aims and expectations than their low achieving counterparts, who conversely appear to be more inhibited in their imaginations, and therefore unable to generate as many future oriented cognitions. The cognitive component of hope

also covaried with number of college credits successfully completed (r = .29; p = .001), indicating that the greater the ability to imagine and generate future oriented cognitions, the more the number of completed college credits.

Overall, the groups differed on their total Hope scores (See Table 5), indicating that high achievers are more hopeful and optimistic than their low achieving counterparts, who appear to be more despondent and demoralized, further revealing the powerful influence and role that cognition, and consequently belief systems, are exercising on academic achievement among disadvantaged, inner-city college students. As was previously shown, it it was mainly the cognitive or imaginal component of the total hope score on which the groups differed.

Future Representation. Again, as was hypothesized, a difference emerged between the groups with respect to the graphic representations of how far on the time line from the "Birth" point they would place their respective "NOW" marks (See Table 5). The high achievers attributed greater salience to the future ($\bar{X}$ = 177.7 mm.) than to the past ($\bar{X}$ = 82.30 mm.); while in comparison the low achievers attributed lesser salience to the future ($\bar{X}$ = 164.0 mm.) than to the past ($\bar{X}$ = 96.0 mm.). A t-test showed these differences to be significant (See Table 5).

Thus, the results indicate that the high achiever is future oriented; an "antevert" as it were. A positive correlation emerged between future representation and college GPA (r = .27; p = .01), indicating that the greater the graphic representation attributed to the future, the higher the student's level of achievement (See Table 6). Future representation also correlated with the Continuity scale on the TEQ (r = .25; p = .01), indicating that the more future oriented the student is, the greater his tendency to anticipate the future, orient actions according to it, and experience the passage of time as unified and continuous (See Table 7). Finally, a negative correlation emerged between the tendency to attribute greater salience to the graphic representation of the past and the cognitive component of hope (r = -.20; p = .01), indicating that the greater the graphic representation of the past, the greater the lack of future aims and expectations (See Table 7).

Future Extension. Again, as expected, a significant difference was found on Wallace's Open Events Test between the groups regarding the extent of the mean age ($\bar{X}$ = 31.8 yrs. and $\bar{X}$ = 29.5 yrs. for high a low achievers, respectively) extended into the future. A t-test revealed these differences to be significant (See Table 5).

Future Expectations. A significant difference emerged between the high and low achievers regarding the total number of their future expectations written down on Wallace's Open Events Test (See Table 5), with high achievers giving a greater number of future expectations ($\bar{X}$ = 9.23) than their low achieving counterparts ($\bar{X}$ = 8.61).

Furthermore, a gratifying aspect of these data is the positive correlation (r = .26; p < .01) which subsequently emerged between the number of written expectations given by students on the Open Events Test and the cognitive component of hope as assessed by the Beck scale (See Table 7), indicating that these techniques may be measuring related aspects of what makes up the establishment of future expectations.

Multiple Regression of Major Variables Related to High Academic Achievement

Considering how many variables were found to differ between the high and low achievers, it seemed reasonable to determine whether any other variables in combination distinguished the two groups more effectively than any other variable by itself. For this purpose multiple regression was employed under the option of forward stepwise inclusion. In this method the variable that best discriminates between the two groups enters the equation first,

followed in succession by each next variable that makes a statistically significant improvement in the prediction. The process continues until no variable makes a significant improvement in the prediction.

When this method was applied to the present data, the regression ran four steps, as indicated in Table 8. It is observed that the four predictors in descending order of importance were Continuity, Family Size, Future Expectations and Gender. The direction of the beta weights indicate that the higher achievers have higher TEQ continuity scores, larger family sizes, more future expectations on the Open Events Test, and are more likely to be female. To obtain a sense of the power of this regression, which accounted for almost one-quarter of the variance between the two groups, it is of interest to note how well it predicted the membership of these two groups. Table 9 shows the results of this prediction, where it is observed that symmetrical numbers of high and low achievers are correctly classified. The overall percentage of correct classifications was 72.1%.

TABLE 8

Multiple Regression of High Academic Achievement

Variable	Beta	Percentage of Variance	Percentage of Explained Variance
Continuity	0.370[a]	9.3	39.6
Family Size	0.220[b]	5.6	23.6
Future Expectations	-0.173[b]	4.4	18.5
Gender	-0.171[b]	4.3	18.3
Total	R = 0.486	23.6	100.0

[a] $p < .01$

[b] $p < .05$

TABLE 9

Classification of Correct and Incorrect Predictions as Derived from the Multiple Regression

		TRUE	
		High Achievers	Low Achievers
Predict	High Achievers	44	17
	Low Achievers	17	44

Note: 72.1% correct classification.

Chapter V

DISCUSSION

As was hypothesized, significant relationships were found between the academic achievement of disadvantaged students and a varied set of measures reflecting temporal awareness and orientation. The tasks required the students to engage in rather complex mental manipulations, operations and conceptualizations regarding their subjective experience of the passage of time, and how they organize their behaviors relative to it. Clearly a high degree of interrelationships emerged among this set of measures of abstract temporal thinking, especially with regard to Continuity and the cognitive aspects of Hope.

Possible Limitations and other Considerations

Before considering some of the major implications of these findings, some possible limitations should be noted:

1. It was assumed that the subjects responded to the data collection instruments honestly and accurately, and that they were valid and appropriate measures of the psychological constructs. Misunderstandings on the part of the subjects could have led to erroneous information and faulty conclusions. However, methods

appeared to be understood by the subjects and the data from various measures converged to reveal a consistent and meaningful pattern.

2. The homogeneity of the sample may not warrant generalizations beyond economically disadvantaged, inner-city college students. Variations in socioeconomic status may yield different results. Of course, this is a common limitation of any investigation and ultimately requires further study with varied populations to establish the generality of these findings.
3. The relations found are correlated and not causal in nature. But, as will be discussed later, possible interventions in future research programs could show the efficacy of altering temporal orientations in influencing academic achievement.

A relevant consideration is the possible influence and relation of previous academic abilities measures to the differences in the high and low achieving groups. Although the high and low achievers were found to differ

with regard to measures of academic achievement prior to, and at the time of college entry (See Table 4), an analysis of the high school GPA's ($\bar{X}$ = 78.5 and $\bar{X}$ = 75.4, respectively), when compared to the larger discrepancy present in college GPA ($\bar{X}$ = 3.27 and $\bar{X}$ = 1.68, respectively), suggests that something other than intelligence is making a difference in the student's present scholastic performance. It is argued that these differences in present academic performance represent the product of, and not the cause of, greater future orientation on the part of the high achievers. This is in accord with Teahan's (1958) findings in his comparison of the future time perspective of high and low academic achievers. He noted:

> Intellectual level was measured by the California Primary Mental Maturity Test which was administered in group form. Although no attempt was made to control for differences in intelligence between high achievers (mean I.Q. 108.3) and low achievers (mean I.Q. 95.5), the correlations obtained between intellectual level and the various measures of time perspective were found to approach zero in all cases (ranging from very low minus to very low plus correlations).

Similarly, Epley and Ricks (1963) also noted that although grades depend to a certain extent on intelligence,

> . . .the content of TAT fantasies of the future indicated something other than intelligence; the prospective stories suggested that their authors had oriented their thoughts and lives around long term constructive endeavors, both of achieve-

> ment and of self-realization. Students with long prospective thoughts are able to look ahead to major goals and to use intelligence in reaching them, while students with less sense of direction wander aimlessly through college, looking for a guiding voice. (p. 46)

Thus, other empirical evidence suggests that differences in academic achievement are not solely a function of greater "intelligence" (a construct fraught with problems), but rather that factors relating to the individual's orientation in time play a crucial role in achievement (Epley and Ricks, 1963, p. 56; Teahan, 1958, p. 379). This is consistent with Cattell's (1983) contention that the total effectiveness of the individual is not merely just due to intelligence, but also to a number of character qualities and personality traits. It would appear that motivational, personality and temporal measurements are as important in determining academic achievement as mental ability measures.

The lack of significant difference found between high and low achievers on the California Psychological Inventory's Self-Control scale was surprising (See Table 5). However, a $p = .064$ is close enough to the .05 level of significance to be worthy of further investigation with other measures of self-control. It also suggests that there may be some individual questions on the CPI Self-Control scale worth investigating further for their predictive value.

General Findings and Their Theoretical Implications

Overall, the results of the different temporal techniques used appear to suggest that the disadvantaged high achiever is predominantly an "antevert" as far as his time-related thoughts and feelings are concerned. This type of student accentuates the future in his phenomenological field, and therefore possesses a significantly greater future time orientation than his low achieving counterpart. The TEQ Continuity scale indicates that the high achiever is an individual with a strong sense of continuity, direction and steady purpose in his life, with the setting of long-term goals, and hope in their attainment. High achievers are characterized by strong motivation toward, and positive anticipation of a full and structured future, with an expected temporal relatedness of past, present and future aims. They experience time as unified, continuous and rewarding. According to Wessman (1973) such individuals are hopeful and genuinely happy persons with an emotionally rewarding past life, and considerable enjoyment and satisfaction in the present. It is this solid basis for their self-esteem that appears to support their favorable anticipation of the future. Individuals high in Continuity would also appear to be high on a set of traits that could be described as identity and personal integration. Overall, they are wlll socialized, responsible, and integrated

personalities who have a well defined sense of self and subjective future.

In contrast, the disadvantaged low achievers are more characterized by discontinuity and lack of direction in their lives. They express an absence of aims and future goals, with lack of commitment. The tone is one of discouragement and futility. The future appears empty, unstructured and devoid of purpose to them. Their responses suggest a fragmented, disjointed, unrewarding and empty conception of time. The low achiever is prone to unhappiness, low self-esteem and depressed moods. According to Wessman (1973) individuals low in continuity are pessimistic individuals with an unsatisfying past life, and little emotional reward in the present. They are characterized by a greater degree of identity diffusion and poorer personal integration. Overall, they appear to be poorly socialized and somewhat irresponsible, experiencing problems in evolving a satisfying sense of self and of subjective future.

Moreover, the picture that emerges from the Time Line findings is that high achievers expand the subjective graphic representation of their futures and constrict the representation of their pasts; while conversely, low achievers constrict their representations of their futures, and expand their representations of their pasts.

In addition, the high achievers appeared to be more liberated in their imagination on the Open Events Test, both listing somewhat more events and projecting them further into the future. They seemed more able to generate future oriented aims and expectations than their low achieving counterparts, who conversely appeared to be somewhat more inhibited in their imagination and therefore unable to generate as many future oriented cognitions.

Thus, while continued and concentrated effort and attention to school subjects may be tedious and boring to the disadvantaged low achiever, these chores to the disadvantaged high achiever may represent meaningful subgoals on a time continuum in which the final end, i.e., the purpose or goal, is eventual success. As the psychoanalytic theorist and practitioner Hartocollis (1983) wrote, "Time, when it does not contain the conditions of change. . .is experienced as slow, monotonous, boring. Time goes fast for people who perceive their present as inherently related to their future, what they are doing now and what they are experiencing now as leading to an emotionally arousing future -- a future that makes a difference. . . ." (p. 71)

Students high in future orientation and extension also appear to be more hopeful and optimistic according to the Beck measures. This agrees with Lewin's (1948) theo-

ries concerning the relationship between self-confidence, hope and planning for a better future. Lewin wrote,

> The life space of an individual, far from being limited to what he considers the present situation, includes the future, the present and also the past. Actions, emotions and certainly the morale of the individual at any instant depend on his total time perspective. . . .A positive time perspective, a time perspective guided by worth-while goals, is one of the basic elements of high morale. At the same time the process is reciprocal; high morale itself creates long-range time perspective and sets up worth-while goals. . . .Poor morale makes for a poor time perspective, which in turn results in still poorer morale; whereas high morale sets not only high goals, but still is likely to create situations of progress conducive to still better morale.

Our findings lend support to Lewin's position. The person without hope and confidence concentrates his attention on his immediate surroundings, gaining whatever satisfactions he can in the present. In similar fashion, the student who has a history of poor grades might perceive the future as one in which only marginal success could be expected. Thus hope that positive changes can be expected in the future would be intimately related to a person's temporal orientation, and to the extensiveness of their plans, goals and aspirations. According to Stotland (1971, p. 1), "The importance of hope for man has long been known to laymen and professional. It is widely accepted that with

hope, man acts, moves, achieves. Without hope, he is often dull, listless, moribund." It would therefore appear that hope is one coping mode available to disadvantaged individuals (Breinitz, 1985). As the present study suggests, how well a student has learned to hope in the midst of trying situations can have a powerful influence on his ultimate scholastic outcome. Accordingly, hopefulness is treated here mainly, but not exclusively, as a construct used to tie together antecedent and consequent events; as a mediating process, in order to explain why a given antecedent event led to a given behavioral outcome (Stotland, 1971).

At this point it will be recalled from Chapter I that this investigation conceptualized academic achievement in terms of ego functioning, this position being similar to Rapaport's (1951), who postulated that thinking develops as a function of delays in impulse discharge; and that reciprocally, the further the development of thinking, the greater the ability to control and regulate the expression of emotion in consideration of (scholastic) reality consequences. However, in light of the findings that greater scores on hopefulness were associated with higher academic achievement, it can be argued that differences between the groups are not a simple function of impulse delay. Various theorists have held that more than just causal and/or de-

terministic tendencies motivate a man's or woman's thinking and consequent actions. These tendencies would appear to be teleological and/or finalistic in nature. This would be in agreement with Rychlak's (1972) contentions regarding human behavior. He noted:

> But this tells us something about the nature of the animal which experiences . . .cognitively. It has an intellect which is not best tied to "present" events, at least not in the exclusive sense. To project intentions and aspirations seems a positive and healthy way of behaving for the human animal. It may be shown historically that such conceptions harken back to theoretical constructs relying on final causality. To neglect such teleological attributes of man seems an unnecessary loss to psychology, albeit in the name of scientific parsimony. [Hope] research may provide an avenue of support for those who view man as an animal that behaves "for the sake of" cognitive premises. (p. 78)

Thus, the philosophy of hope is antithetical to the reductionistic and deterministic outlook of early Freudian thinking and more in agreement with the views of Alder and later psychoanalytic theorists, who have emphasized the significance of the future and active goal seeking. It would appear to challenge the accepted psychological maxim that "past behavior is the best predictor of future behavior". It opens new possibilities and adds new avenues of research for the exploration of the prediction of human behavior and growth.

Obviously, man is not born with an established capacity to behave for the sake of cognitive premises and future expectations. Rather, he gradually learns and develops this ability with proper training and education. According to Rapaport (1950), in the beginning of psychological development, it is the absence of the need-gratifying object which forces delay to occur, and reality oriented anticipations to follow. It would appear that if the anticipations are fulfilled (and not disappointed), with increased mental maturity, it becomes the positive anticipations which in turn contribute to increased delay ability; the anticipation of gratification reinforcing the capacity to delay. The psychoanalyst Hartocollis (1983) notes that ". . .the anticipation of gratification or success results in happy excitement that may be identified as. . .hope" (p. 75). Hope would then seem to reinforce the reality principle by increasing the ability to wait and postpone personal pleasure. Thus, with increased cognitive development, a "feedback loop" would appear to emerge between the ability to delay gratification and the ability to anticipate gratifications. It seems, then, that with the passage of time, the anticipation of gratification comes to play an ever-increasing role in determining an individual's time-related thoughts and consequent behaviors. Therefore, if an individual's ability to imagine future gratification

and generate positive expectations is unstable and precarious, it can be expected that his subjective future will not be very extensive or broad in scope, characterized mainly by the anticipation of disappointment and hopelessness. Furthermore, this poverty in positive anticipations can be expected to undermine the individual's capacity to delay gratification, making it more difficult for him to tolerate deferrals of personal pleasure required to achieve occupational careers. This difficulty in postponing personal pleasure can be expected to weaken the person's ability to take imagined consequences of future actions into consideration, given that he will tend to behave impulsively. However, if an individual's capacity to anticipate gratification is tenacious, it seems to generalize and give rise to the hopeful anticipation of a full and structured future, thereby strengthening his ability to wait for desired outcomes.

Possible Applications for Intervention Programs

In accord with previous theory and research, this study has shown that there is a basic domain of significant beliefs and attitudes toward time and temporal experience among economically disadvantaged students that can be differentiated and measured, showing that these dimensions are meaningfully related to academic achievement. The

study makes a contribution to understanding an important aspect of what contributes to high academic achievement among disadvantaged, inner-city college students. It suggests the possible value of the use of temporal orientation variables in the field of student development and counseling in general. Whereas up to the present, interventions to bring about increased academic achievement have primarily focused on facilitating the development of reading, writing and math skills, this study suggests a new area of potential intervention: temporal orientation. The investigation points the way to the possible use of cognitive variables, i.e., imagined future anticipations, hopeful expectations, temporal continuity, future orientation, etc., in understanding and possibly improving low achieving students' academic behavior and performance.

One of the underlying purposes of this study was to use the findings for the development of interventions by which low achieving students may be provided with supportive services which are more attuned to their psychoeducational needs. This approach conceptualizes academic achievement as involving certain psychological skills that may be taught effectively to students by deliberate and systematic interventions. One important question which arises out of the results of the research is: If we modify the imaginative future expectations and ruminations

of low achieving students, will their academic performance improve? A possible solution to this question could come from experimental attempts to intervene through the modification of imagined anticipations and expectations. Using the human capacity to imagine, an attempt could be made to modify what low achieving students tell themselves about what their future lives will be like (given the empirical evidence which suggests that the disadvantaged high academic achievers imagine a subjective future which is qualitatively different from that imagined by their low achieving counterparts).

In addition, through proper counseling the students can be helped to become aware that being a student requires planning in time and adherence to schedules. He will need enough time to do homework, use the library and write papers. At registration, he will need to plan a program that has no conflicts between classes, that allows him time for meals, that lets him get to his part-time job on time, and that allows him to get to his classes on time. During the first week of classes, he should sit down with the syllabus handed out by his instructor (on the first day of classes) and a calendar for the whole semester, and transfer onto that calendar the dates for exams. Also, the dates when papers or other work are due. Then he should note the dates when he plans to do library research, write first

drafts and second drafts, etc. The calendar also should also include such dates as: the last day to drop a course, the last day to make up last semester's incomplestes, as well as the dates of important social functions. In short, the student should be required and helped to make plans for the entire semester, then required to use it as a guide or map to orient his actions during the semester. in a similar but less detailed manner, he could be encouraged to visualize and plan on paper his entire stay in college and subsequent career (Baumel, 1983).

Overall, the aim of interventions such as these would be to counter, at a cognitive level, the low achievers' negative future anticipations and self-defeatist beliefs and expectations. It also aims to help develop practical strategies for teaching the importance of scheduling and future planning required for the accomplishment of long term academic and career goals.

In conclusion, what is being hypothesized here is that based on the research findings, it might very well be that low academic achievement may be substantially modified through the manipulation of subjective temporal orientation variables which contribute to high academic achievement. If we can help students to positively anticipate and realistically implement plans for the future, perhaps their academic performance and entire lives may be significantly altered.

A P P E N D I X

DESCRIPTION

Hi! My name is David Evelio Freire, and I'm an ex-SEEK student now graduating in clinical psychology. I'm conducting a survey about how we SEEK students learn. The purpose of the survey is to help other students do better academically. The purpose is also to show students how to "tighten up their academic act" and succeed in college, without flunking or dropping out. It's about making it and succeeding in college. The reason for having your I.D. number is so that your results can be given to you. I believe they will be helpful to you. If you're interested in getting your results, leave me a telephone number where you can be reached. Write it on your questionnaire. I will be available to discuss your results if any of you would like that.

For the results to be of value, it is important that you answer each and every question as truthfully as you can. There are no right or wrong answers. Work as fast as you can.

I will be available throughout the period to answer any questions you might have. You will have one period to complete the questions.

I appreciate your cooperation. Thank you very much.

Introduction

College..... Counselor.....

I.D.#..... Age..... Male..... Female..... Date.....

Marital Status: ...Married ...Single ...Divorced ...Widowed ...Separated

How many credits have you completed?..... Number of Semesters in College.....

Occupational Goal..... Major.....

Source of Income (Check all that apply): .....Job (In Years) .....Parents
.....Social Security .....Veterans Benefits .....Public Assistance
.....Retirement Plan .....Financial Aid .....Other (Specify).....

Approximate Family Income: .....Less than $3,000 .....$3,000-5,999
.....$6,000-8,999 .....$9,000-11,999 .....$12,000-14,999
.....$15,000-17,999 .....$18,000-20,999 .....Above $21,000

Type of Housing: .....Own Home .....Apartment .....Project .....Dorm
.....Other (Specify).....

Language Spoken at Home: .....English .....Spanish .....French
.....Other (Specify).....

Religion: .....Protestant .....Catholic .....Jewish .....Moslem
.....Atheist .....Other (Specify).....

Race or Ethnic Group: White (Not Hispanic)..... Black (Not Hispanic).....
Hispanic (Specify)..... American Indian..... Oriental.....
Other (Specify).....

Check Person(s) you live with (Indicate numbers where appropriate):

.....Father .....Brother .....Children
.....Mother .....Sister .....Spouse
.....Alone .....Others (Specify).....

Are Parents Living Together? .....Yes .....No

Father's Occupation..... Highest Grade Completed.... Living?....
Mother's Occupation..... Highest Grade Completed.... Living?....

THIS MATERIAL IS STRICTLY CONFIDENTIAL AND WILL BE USED FOR STATISTICAL PURPOSES ONLY

TIME LINE TEST

DIRECTIONS: Think of the line below as your lifetime. Imagine that B represents Birth (which happened in the past), and D represents death (which will happen in the future). Put a mark on the line that shows where you are "NOW", and put the word NOW. You can put the mark any place you want to, just so it shows me where on the line you feel "NOW" would be.

Past Future

Note: In order to comply with dissertation format specifications, original Time Line was scaled down such that .5 cm. = 1 cm.

OPEN EVENTS TEST

DIRECTIONS: First, list up to ten things (or events) you imagine doing or which may happen to you in your future. These do not have to be in the order they might happen.

1. _____ ☐
2. _____ ☐
3. _____ ☐
4. _____ ☐
5. _____ ☐
6. _____ ☐
7. _____ ☐
8. _____ ☐
9. _____ ☐
10. _____ ☐

Second, in the box provided next to each event, write tre age you think you will be when this even happens.

THE CONTINUITY SCALE

DIRECTIONS: Read each of the following statements. Place a checkmark (✓) in the blank that you believe indicates how well the statements describes you.l

1. I move in an orderly way twoards goals set long ahead of time.

   very little ____ sometimes ____ frequently ____ often ____

2. I feel stuck in a rut and unable to get out of it.

   very little ____ sometimes ____ frequently ____ often ____

3. I feel very certain of who I am and where I am going in life.

   very little ____ sometimes ____ frequently ____ often ____

4. I feel the future is an empty vacuum sucking me in.

   very little ____ sometimes ____ frequently ____ often ____

5. I am aware of a sense of continuity in my life.

   very little ____ sometimes ____ frequently ____ often ____

6. I go into the future like a cork floating on the sea, being pushed by the tide.

   very little ____ sometimes ____ frequently ____ often ____

7. I plan much of my life around a few main goals.

   very little ____ sometimes ____ frequently ____ often ____

8. I feel my life is a series of starts and stops -- stuck, moving, then stuck again.

   very little ____ sometimes ____ frequently ____ often ____

9. I have my future well mapped out.

very little | sometimes | frequently | often

10. I keep my future open and uncommitted.

very little | sometimes | frequently | often

11. I feel continuity between one year and the next.

very little | sometimes | frequently | often

12. I shy away from long term responsibilities.

very little | sometimes | frequently | often

13. I feel that my life is like a continuous, uncut thread.

very little | sometimes | frequently | often

14. I feel that life has no pattern or reason.

very little | sometimes | frequently | often

15. I set goals for myself that will take months or years to reach.

very little | sometimes | frequently | often

16. I think of the future as empty, hollow, and dark.

very little | sometimes | frequently | often

17. I feel that others are patient with me.

very little | sometimes | frequently | often

18. I disregard the future and take things as they come.

very little | sometimes | frequently | often

19. I try to imagine what life in the United States will be like in the future.

very little ____ sometimes ____ frequently ____ often ____

20. I feel that time is broken, chopped up, and without direction.

very little ____ sometimes ____ frequently ____ often ____

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