Intimacy Motivation and Psychosocial Adjustment:
A Longitudinal Study

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Abstract: Longitudinal data of 57 middle-aged men from the Grant Study of Adult Development were analyzed in terms of nine indices of psychosocial adjustment and four social motives: achievement, power, affiliation, and intimacy motivation. The Thematic Apperception Test (TAT), administered in 1950-52, was scored for the four motives. Psychosocial adjustment, determined by ratings made primarily with reference to life history data gathered between 1950 and 1967, was comprised of scores on income level, occupational promotion, occupational enjoyment, days of sick leave, marital enjoyment, regular vacations, pastimes with friends, drug or alcohol misuse, and psychiatric visits. High intimacy motivation at age 30 was significantly associated with better adjustment 17 years later. The results are discussed in terms of contemporary theories of psychosocial adaptation.

In 1937 philanthropist William T. Grant and the director of the Harvard University Health Services, Dr. Arlie V. Bock, set into motion one of the most extensive longitudinal inquiries into the natural patterns of psychological health ever attempted. The Grant Study of Adult Development, as it came to be known, has followed over 40 years a large cohort of male graduates from the Harvard College classes of 1939-1944. The subjects were specially chosen to exemplify the highest standards of psychosocial adaptation and instrumental achievement prescribed by middle- and upper-middle-class American society in the middle years of the twentieth century. Drawing upon a wealth of data collected by physicians, psychiatrists, psychologists, social workers, mental health workers, and an anthropologist, numerous publications based on the Grant Study sample began to appear in the mid 1940s (Heath, 1945; Hooten, 1945; Monks, 1951). More recently, Vaillant (1971, 1975, 1977) has brought to the data a psychoanalytic frame, interpreting the developmental patterns revealed over the life spans of these men in terms of a hierarchy of ego defenses drawn from the theoretical writings of A. Freud (1937), Hartmann (1958), and other ego psychologists.

In 1950-52 a number of the subjects in the Grant Study, each approximately 30 years in age, were interviewed by an anthropologist and administered the Murray (1943) Thematic Apperception Test (TAT). These TAT data played a minor role in subsequent analyses until McClelland (1979) reanalyzed a subset of the protocols in terms of the social motives need for achievement (n Ach), need for power (n Pow), and need for Affiliation (n Aff). The present investigation utilizes the McClelland (1979) results for the TAT and supplements them with (a) scores for a recently developed and validated TAT measure termed the "intimacy motive" (McAdams, 1980, in press; McAdams & Powers, 1981) and (b) ratings of psychosocial adjustment completed in the late 1960s and early 1970s. The purpose of the investigation is to determine which of the four social motives, assessed via thematic coding of the TAT, best predicts subsequent scores on psychosocial adjustment in this cohort of now-middle-aged men.

The thematic measurement of human social motives was pioneered by the work of McClelland and his associates (McClelland, Atkinson, Clark, & Lowell, 1953) on the achievement motive. Assessed via highly objective coding of narrative thought samples written or told in response to ambiguous picture cues, the need for achievement is defined as a recurrent preference or readi-
ness in an individual for experiences of success in accomplishing a variety of tasks of intermediate challenge. Over the years an impressive array of findings has established a rich nomological net around the \( n \) Ach construct suggesting that the motive energizes, directs, and selects certain kinds of achievement-oriented behavior in certain situations (Atkinson & Feather, 1966; Atkinson & Raynor, 1974; Heckhausen, 1968; McClelland, 1971; McClelland et al., 1953). Following the general model of empirically deriving and cross-validating a thematic measure of social motivation set down in the \( n \) Ach research, Winter (1973) developed a coding system for the power motive which measures the recurrent preference in individuals for experiences of having impact on others and feeling strong. The construct validity of the power motive has been supported in a number of studies reported in Fodor and Farrow (1979), McClelland (1971, 1979), Winter (1973), and Winter and Stewart (1978). Finally, the need for affiliation has purported to measure the recurrent experiential preference for warm and close interpersonal relationships (Heyns, Veroff, & Atkinson, 1958), but evidence for the validity and predictive power of the construct is scattered and weak (Boyatzis, 1973; McAdams, 1980).

To fill the gap left by a number of inconclusive findings concerning the affiliation motive, McAdams (1980) empirically derived and cross-validated a new thematic coding system theoretically grounded in the writings of Bakan (1966) on the communal mode of human existence, Maslow (1968) on “Being-Love,” Sullivan (1953) on the need for interpersonal intimacy, and Buber (1970) on the I-Thou encounter. Termmed the intimacy motive, the construct is defined as a recurrent preference or readiness for experiences of close, warm and communicative interpersonal exchange. A number of validational studies have documented substantial intimacy motive X behavior relationships in the contexts of peer ratings (McAdams, 1980), interpersonal behavior in a laboratory setting (McAdams & Powers, 1981), story memory (McAdams & McClelland, Note 1), and autobiographical recollections of various qualities of experience (McAdams, in press). Hypothesized to be a key in the relative predictive success of intimacy motivation as opposed to \( n \) Aff is the thematic emphasis in the former upon a being and communal orientation to relationships which stands in contrast to the doing (striving) and agentic theme which appears to characterize affiliation motivation (McAdams & Powers, 1981).

In the present project, therefore, intimacy motivation measured at age 30 is hypothesized to be positively associated with subsequent psychosocial adjustment in mid-age. The hypothesis is generally derived from the myriad theoretical and clinical propositions suggesting that the capacity for interpersonal intimacy is a virtual sine qua non of psychosocial adjustment in contemporary American society (cf., Bakan, 1966; Erikson, 1963; Fairbairn, 1952; Guntrip, 1971; Maslow, 1968; Sullivan, 1953). The communal-being theme of intimacy motivation — denoting a surrender of manipulative control in the process of relating to another — is assumed to render it superior to \( n \) Aff as a predictor of adjustment. Achievement and power motivation are hypothesized to be unrelated to adjustment.

Psychosocial adjustment will be measured as a global index comprised of scores on occupational adjustment (income level, promotions, occupational enjoyment, days sick leave), interpersonal relations (marital enjoyment, regular vacations, pastimes with friends), and mental health (drug or alcohol misuse, number of psychiatric visits).

**Method**

**Subjects**

The sample consisted of 57 men who participated in a longitudinal study of male adult psychological health described in detail by Vaillant (1977) and Vaillant and McArthur (1972). These men were drawn from a large subject pool which at one time numbered 200
men from the Harvard college graduating class of 1942-44. The 57 subjects selected for the present study were all the subjects who in the late 1960s consented to be interviewed on the issue of psychological health and for whom (a) sets of TAT stories written in 1950-52, and (b) total adult adjustment data were both available and intact in the late 1970s.

The 200 men in the original Grant Study sample came from a 7% sample of the three graduating classes of 1942-44. Ten percent of this group entered the study according to such chance factors as self-referral and having an older brother who had also participated in the study. The remaining 90% were chosen in the following way: 40% of each of the three graduation classes were excluded by virtue of mediocre academic achievement; 30% more were excluded because of known medical or psychological difficulties; and the names of the remaining 30% were submitted to college deans who each year selected about 100 men whom they recognized as "sound" (Vaillant & McArthur, 1972).

Of these, one in five did not participate due to scheduling problems or other personal reasons.

In college the individuals in the resultant highly select group were interviewed by psychiatrists, psychologists, and social workers, given extensive medical examinations, and administered psychological tests such as the Army Alpha, vocabulary, block assembly, and a short Rorschach Inkbrot Test. After graduation the subjects were followed up with annual questionnaires through 1955, and questionnaires every two years thereafter. In 1950-52 a social anthropologist interviewed most of the men in their homes, when the subjects were approximately 30 years of age. At this time, she administered the Murray TAT to many of the men. Stories were told verbally, tape recorded, and later transcribed.

Of the total Grant Study sample, 80% of the men were Protestant in college, 10% Catholic, and 10% Jewish. All were white. Many were from middle- and upper-middle-class backgrounds, although there was marked variability. At the time of initial contact in college (early 1940s), one-third of the subjects had fathers who earned more than $15,000 per year, but almost one-third had fathers who earned less than $5,000 annually.

Vaillant and McArthur (1972) emphasize that the men in the Grant Study were selected to exemplify the highest standards of adaptation and achievement that prevailed in the United States at the time of World War II. Generally first-borns, these Harvard students had exhibited mastery and independence in college, substantial academic achievement, and few signs of incipient pathology. One quarter of the sample eventually became lawyers or physicians; 15% became teachers, mostly at the college level; and 20% went into business. Vaillant and McArthur (1972) add:

At age 47, the average man in the study had the income and social standing of a successful businessman, but he had the political outlook, intellectual tastes, and the lifestyle of a college professor. Twenty-five years after college, the subjects remained relatively healthier and occupationally more successful than their classmates. Their mortality was 50% less. Four times as many held class offices as would have been expected by chance (p. 417).

Further information on the Grant Study men, including comparisons with the Terman (Terman & Oden, 1959) sample of the intellectually gifted, is provided in Vaillant and McArthur (1972).

Although not all relevant data have survived, the 57 subjects in the present study do not appear to differ in any important respect from the original 200. Class and ethnic breakdown are essentially the same, and the various outcome variables that are available (concerning physical health and mortality, college performance, adult adjustment, personal habits, etc.) show virtually no significant difference between the two groups.

Measuring Motives

TAT protocols obtained in 1950-52
were coded for achievement (n Ach), power (n Pow), affiliation (n Aff), and intimacy motivation. Stories told to the following Murray (1943) TAT cards were scored for n Ach, n Pow, and n Aff: 6BM, 14, 7BM, 4, and 3BM. Thematic coding was done in 1975 by trained scorers whose agreement with expert scoring of practice stories was at least 85%. The TAT coding schemes for achievement and affiliation motivation are available in Atkinson (1958), and the power motivation system is presented in Winter (1973). All raw motive scores were corrected for story length and transformed to standard scores (\( M = 50, SD = 10 \)).

The measurement of intimacy motivation was more complex. An essential objective was to choose certain picture cues that would likely elicit responses exhibiting sufficient intimacy content and yet also a variety of themes to assure individual differences. The authors also had to find pictures for which responses were available for most of the subjects, since no subject was administered all 20 TAT pictures and many pictures were severely underrepresented. Five pictures were eventually chosen: 6BM, 7BM, 4, 12M, and 10. Some subjects had not responded to pictures 12M and 10; therefore, standardized scores for intimacy motivation for each picture were computed, and a mean standardized score was obtained for each subject (the sum of the individual picture standardized scores divided by the number of pictures, of the five selected, to which responses were available). These mean scores were corrected for story length and converted to \( T \) scores (\( M = 50, SD = 10 \)) to facilitate comparisons with other motive scores.

The first author scored the protocols for intimacy motivation in 1979 according to the standard scoring system (McAdams, Note 2). Hence intimacy motivation was scored by a different coder than those scoring for the other three motives. Since the first author devised the intimacy motive scoring system, his agreement with expert scoring of practice stories is virtually 100%. Other trained scorers for intimacy motivation have shown high agreement with expert scoring, ranging from 89-93% (McAdams, Note 2). The intimacy motive scoring system is comprised of ten content themes, each of whose presence (score +1) or absence (score 0) in a given story is assessed. The themes center around the quality of close, warm, and communicative interaction manifested by the characters in a given story. Below is a brief description of the ten thematic categories:

+ A: Relationship produces positive affect. An interaction leads to love, friendship, joy, peace, or tender behaviors on the part of characters.

Dlg: Dialogue. Characters engage in reciprocal and noninstrumental communication.


CC: Commitment and concern. A character shows commitment or loyalty towards another or a character helps another or shows humanitarian concern.

TS: Time-space. A relationship transcends temporal or spatial limitations.

U: Union. Characters come together after being apart.

H: Harmony. Characters perceive interaction as harmonious or smooth.

Sr: Surrender of control. Character surrenders manipulative control in an interaction.

Esc: Escape to intimacy. Characters leave a nonintimate setting and proceed to an intimate one.

COW: Connection with outside world. Characters experience a "relationship" with their environment.

**Adult Adjustment**

Based on interview and questionnaire data collected after graduation from college until 1967, nine fairly objective indices of adjustment in various facets of living were operationalized to comprise an overall estimate of adult adjustment. The nine indices were readily
quantifiable and well-representative of assumed standards of psychological adjustment in a cohort of this kind, favored by society and embedded in the sociocultural milieu of the United States middle and upper-middle classes in the years 1940-1970. The separate ratings were highly intercorrelated (see Vaillant, 1975) and heavily weighted towards data collected from the ages 30-47, subsequent to the administration of the TAT in 1950-52. The nine separate indices of adjustment were defined and scored as follows:

1. 1967 income. Income in 1967 > $20,000 = 1; Income < $20,000 = 2.
2. Steady promotion. Received steady promotion or increasing responsibility, if possible, every five years since graduation = 1; Failure to do so = 2.
3. Games. Regular pastimes or athletic activities with nonfamily members = 1; None = 2.
4. Vacations. For more than half of years described, used full allotted vacation time = 1; Did not use full allotted vacation time for more than half of the years described or spent vacation time at home doing chores or on dutiful visits to relatives = 2.
5. Enjoyment of job. Expressed satisfaction with job on three or more occasions and once in the years 1965-67 = 1; Failed to express satisfaction with job on three or more occasions or once in the years 1965-67 = 2; Expressed explicit dissatisfaction with job at three points in time and once during the years 1965-67, or had changed occupational fields once or jobs three times since age 30 without evidence of concomitant improvement in personal satisfaction or success = 3.
6. Psychiatric visits. Ten or less psychiatric visits as an adult = 1; More than 10 visits = 2.
7. Drug or alcohol misuse. No evidence of detrimental (interferes with health, work, and personal relations at home) use of alcohol and no use of sedative or stimulant drugs weekly for more than three years and no use of tranquilizers for more than a year = 1; Yes to one of the above (alcohol, sedative/stimulant, tranquilizer) = 2.
8. Days sick leave. Less than five days per year of work missed due to illness = 1; Five or more = 2.
9. Marital enjoyment. For 15 years or more subject had sustained a marriage that by all evidence, including recent self-reports by both husband and wife, seemed happy = 1; Intermediate marriage = 2; Marriage where divorce had been "seriously considered," sexual relations were reported "not as good as wished," and the subject and his wife expressed chronic dissatisfaction or divorce without remarriage = 3.

Agreement between two independent raters for adjustment items 1, 2, 3, 6, 7 and 8 was 85% or higher. Agreement for items 4 and 5 was 75%-85%. Item 9 was a nonblind rating based on all available data (excluding TAT motive scores) made by a single psychiatrist (the second author). All 57 subjects in the present sample had married.

The sum of the scores for the nine items constituted the overall score of adult adjustment. The best possible score, therefore, would be the lowest — a score of 9 (indicating extremely high psychosocial adjustment). The worst possible score would be the highest — a score of 20 (poor adjustment).

**Results**

Adjustment scores ranged from 9 (best adjustment) to 17 (poorest adjustment), $M = 12.46, SD = 2.24$. The median score was 12.

For all four motives, standardized scores corrected for story length were split at the mean ($T = 50$), with high scores for each motive defined as $T \geq 50$ and low scores defined as $T < 50$. High or low motive score was the independent (classificatory) variable and adjustment score the dependent variable for four $t$ tests that were subsequently performed, one for each motive. Mean adjustment scores for high vs. low TAT motive scores for $n$ Ach, $n$ Pow, $n$ Aff, and intimacy motivation are shown in Table 1. The only significant difference in mean adjustment ratings for high vs. low motive score was for the intimacy motive. $t$
Table 1
Mean Adjustment Scores* of Subjects High and Low on Intimacy, Achievement, Affiliation, and Power Motivation

<table>
<thead>
<tr>
<th>Motive</th>
<th>N</th>
<th>High Motive (T ≥ 50)</th>
<th>Low Motive (T &lt; 50)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intimacy</td>
<td>57</td>
<td>11.53 (28)</td>
<td>13.34 (29)</td>
<td>-1.81**</td>
</tr>
<tr>
<td>2. Achievement</td>
<td>52</td>
<td>11.75 (20)</td>
<td>12.94 (32)</td>
<td>-1.19*</td>
</tr>
<tr>
<td>3. Affiliation</td>
<td>52</td>
<td>11.89 (18)</td>
<td>12.76 (34)</td>
<td>-0.87</td>
</tr>
<tr>
<td>4. Power</td>
<td>52</td>
<td>12.75 (28)</td>
<td>12.17 (24)</td>
<td>0.58</td>
</tr>
</tbody>
</table>

* Adjustment scores ranged from 9 (best adjustment) to 17 (poorest adjustment), M = 12.46, SD = 2.24.

† Different ns due to the unavailability of n Ach, n Pow, and n Aff scores for five subjects who did not respond to all of the TAT pictures used to calculate these motive scores.

‡ Numbers in parentheses denote number of subjects for whom mean of adjustment scores is calculated.

* p < .10.
** p < .01.

(55) = 3.05, p < .01. Subjects high in intimacy motivation assessed via the TAT in 1950-52 showed better psychosocial adjustment (M = 11.53) in 1967 than subjects scoring low in intimacy motivation (M = 13.34). A nonsignificant (p < .10) but positive trend was also obtained for TAT n Ach.

Of the 27 subjects scoring high in intimacy motivation (T ≥ 50) in 1950-52, 19 (70%) showed adjustment scores of 12 or below (scores equal to or better than the median for the entire group).

Table 2
Correlations Between Intimacy Motivation and Adult Adjustment Items

<table>
<thead>
<tr>
<th>Adult Adjustment Items†</th>
<th>Intimacy Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1967 income</td>
<td>.26*</td>
</tr>
<tr>
<td>2. Steady promotion</td>
<td>.15</td>
</tr>
<tr>
<td>3. Games</td>
<td>.12</td>
</tr>
<tr>
<td>4. Vacations</td>
<td>.26*</td>
</tr>
<tr>
<td>5. Enjoyment of job</td>
<td>.39**</td>
</tr>
<tr>
<td>6. Psychiatric visits</td>
<td>.10</td>
</tr>
<tr>
<td>7. Drug or alcohol misuse</td>
<td>-.17</td>
</tr>
<tr>
<td>8. Days sick leave</td>
<td>.01</td>
</tr>
<tr>
<td>9. Marital enjoyment</td>
<td>.38**</td>
</tr>
<tr>
<td>Total Adult Adjustment (Σ 1-9)</td>
<td>.39**</td>
</tr>
</tbody>
</table>

Note: Positive correlations refer to an association between high intimacy motivation and higher adjustment for each item.

† Items are described under Method.

* p < .05.
** p < .01.

Of the 30 subjects scoring low in intimacy motivation (T < 50), only 12 (40%) showed adjustment scores of 12 or below. The chi square for this breakdown is significant: X² = 4.13, p < .05.

Table 2 shows Pearson correlations between intimacy motivation and the nine individual adult adjustment items as well as the total adult adjustment score. Intimacy motivation is significantly positively related to total adult adjustment, r (55) = .39, p < .01. Four of the nine individual adjustment items show positive correlations which reach statistical significance, with enjoyment of job (r (55) = .39, p < .01) and marital enjoyment (r (55) = .38, p < .01) correlating the most strongly with intimacy motivation.

Only one adjustment item is negatively, though insignificantly, related to intimacy motivation — drug or alcohol misuse, r (55) = -.17, NS.

Discussion

In the present longitudinal analysis, scores on the TAT measure of intimacy motivation, determined from imaginative stories told by subjects at age 30, predicted later psychosocial adjustment based, primarily, upon data pertaining to occupational success, interpersonal relations, and mental health gathered from questionnaires and interviews administered between the ages of 30 and 47. Subjects high in intimacy motiva-
tion at age 30 tended to be better adjusted 17 years later when adjustment was evaluated in terms of rather concrete criteria particularly appropriate for a highly select sample of this kind. The highest correlation for individual adjustment items are between intimacy motivation and two measures pertaining to the quality of affective life — enjoyment of job and marital enjoyment. The other three measured motives — \( n \) Ach, \( n \) Pow, and \( n \) Aff — failed to predict adjustment, although the achievement motive showed a nonsignificant trend in the positive direction.

Although the Grant Study sample of men is hardly representative of the population of middle-aged men residing in the U.S. today, the findings are in keeping with most contemporary Western understandings of mental health and adjustment which give high priority to the capacity for interpersonal intimacy as an essential ingredient in adaptation. Although classic psychodynamic theory has been depicted as emphasizing the intrapsychic over the interpersonal, Freud's suggestion that *Lieben und Arbeiten* constitute the clearest affirmation of healthy genitality betokens the centrality of interpersonal intimacy in even the early psychoanalytic writings. This interpersonal motif has been more fully articulated by the "object relations" theorists (cf., Fairbairn, 1952; Guntrip, 1971) and has emerged as a most compelling melody in the influential writings of Sullivan (1953) who has argued for the harmonious integration of intimacy and "just" as the cardinal criterion of adult adjustment. Clinicians and theorists of many persuasions have followed suit: Maslow (1968) describes experiences of "Being-Love" which appear more readily accessible to self-actualizers; Loevinger (1976) identifies themes of interpersonal interdependence and "mutual concern for communication" as harbingers of higher ego stages; and Sears (1977) writes that at age 60 the men in the Terman (Terman & Oden, 1959) study of the intellectually gifted report that the deepest sources of life satisfaction lie in interpersonal relationships such as intimate ties with spouse, children, and friends.

The present findings, therefore, affirm these theoretical formulations and illustrate the predictive validity of a thematic measure of the general tendency to engage in intimate interaction with others.

**Reference Notes**


**References**


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