

HAPPINESS IS LOVE: FULL STOP

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Acknowledgments: This work was supported by research grants KO5-MH00364 and
MH42248 from the National Institute of Mental Health

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Modern ethology and neuroscience make clear that all mammals are hard-wired for love. Of all the fauna on earth, however, *Homo sapiens* is the most radically dependent on love. Thus, ethologist Konrad Lorenz called love “the most wonderful product of ten million years of evolution”; psychoanalyst Erich Fromm wrote, “without love humanity could not exist even for a day”; and evangelist St. Paul concluded, “And now abide faith, hope, love, these three; but the greatest of these is love.”

Mammalian love involves attachment that is selective, enduring and often remarkably unselfish. If the loved one leaves, the grief that ensues is also selective and enduring. Not all mammals manifest such attachment, but many do. The Greek philosophers did not understand love. Their *agape* (universal unselfish love) is not selective, and the Greeks’ *Eros* (instinctual desire and lust) is not enduring. Satisfy his lust and the romantic troubadour loses interest.

For 40 years I have directed a 70-year Harvard project, The Study of Adult Development. I was recently quoted as asserting that the most salient finding to be drawn from the study was: “Happiness equals love—full stop.” A newspaper editor challenged me. Did my sweeping, sentimental generalization really reflect the most important finding of a multi-million dollar, seven-decade study designed to identify the key ingredients that lead to a rewarding life? I spent a month reviewing the data, and my conclusions remained those of Virgil: *Omnia vincit amor*. Only Virgil was arguing from sentiment and I was arguing from real data. Let me explain.

Begun in 1938 the Study of Adult Development had intended to harness medical, anthropological, and psychological sciences in order to understand what determines health rather than illness. The study had been funded in its early years by a department store magnate, William T. Grant. He had hoped that a longitudinal study of healthy men would help him identify effective managers. The student health service director, Dr.

Arlie Bock, the designer of the study, hoped among other things that the research would help the United States, about to be embroiled in World War II, select better officer candidates. They were interested in identifying super men, not best friends.

Originally, the study had been planned to last twenty to twenty-five years—in those days an incredibly ambitious goal. The originators never dreamed that it would continue for seventy years. I have been the director of the study for the last 40 years; thus, I am privy to who actually became the leaders and the best friends.

Nevertheless, when I began to respond to the editor, I wondered: Was love really that important? Perhaps I was speaking from my heart and not from science. In order to find out, I went back to the drawing board. I reviewed the findings on 268 Harvard sophomores selected in 1938-42 and followed prospectively until 2010.

In order to demonstrate that our intimate attachments to other people—and them to us—matter, and matter more than anything else in the world. I shall examine the power of the childhood and young adult variables to predict “rewarding” lives from age 50-80. Criteria for a “rewarding” late life included a decathlon of 10 “events” in Table 1. Two “events” reflected economic success: high earned income and high occupational prestige. Four “events”, reflected subjective and objective biological success. Three “events” reflected good relationships: a happy marriage (40-70), close father-child relationships, and social supports at age 70. The final “event” was never in 70 years receiving professional help for mental distress. (This variable was an objective means of defining the vague term “mental health” and correlated more highly with longevity than almost any variable in the Study.)

What young adult variables could predict success in these 10 events in later life? There were 8 potential predictors of a “rewarding” late-life adjustment that were favorites among the original investigators. (Table 2). These predictors were relatively independent of close relationships. Two were obvious: IQ and parental social class. (Remember, these Harvard graduates came from very different backgrounds. Half of the students’ mothers had not been to college, and fully half of the students needed scholarships and/or worked during the academic year to pay their tuition. Other study fathers had made over a million dollars a year -- during the Great Depression.)

TABLE 1
A “DECATHLON’ FOR DEFINING A
FLOURSHING LIFE FROM AGE 50 TO AGE 80

1. Maximum earned income (usually between age 55 and 60)
2. In “Who’s Who in America”
3. Relative success at work, love and play from age 50-65
4. Good objective physical health at age 70
5. Physically active at age 75
6. Subjective and objective good physical *and* mental health at age 80
7. Social supports other than wife and kids from age 50-75
8. Close to kids age 50-80
9. Good marriage age 50-80
10. Low lifetime distress (no use of therapists or psych meds)

TABLE 2
PREDICTOR VARIABLES

A. Early Study Variables Independent of Attachment

(15% of 80 Predictions Significant)

1. Parental Social Class
2. IQ
3. Somatotype
4. Masculine Body Build
5. “Vital Affect”
6. Athletic Prowess
7. “Friendly”
8. Treadmill Endurance

B. Other Common Early Risk Variables Independent of Attachment

(16 % of 50 Predictions Significant)

1. Ancestral Longevity
2. Alcoholic Relatives
3. Depressed Relatives
4. Years of Education
5. Childhood developmental problems

C. Early Variables Reflecting Attachment

(85% of 40 Predictions Significant)

1. Warm Childhood
2. Overall College Soundness
3. Empathic Coping Style (age 20-35)

4. Warm Adult Relationships 30-45

Six other items were theorized by the study to predict good officers and store managers: Mesomorphy, Masculine body build, “Vital Affect”, Athletic Prowess, Friendly and Treadmill Endurance. In only 8 out of a possible 80 matches (8 predictors times 10 outcomes) did any of these 8 variables significantly predict “rewarding” adjustment to life—none of them *strongly*. (By *strongly* I mean a correlation that could have occurred by chance less than one time in 1,000.)

Five additional commonly cited childhood risk variables to aging: early ancestral death, alcoholic relatives, depressed relatives, years of education and developmental problems in childhood were significant in only 8 out a possible 50 matches, none of them *strongly*. However, if the three types of genetic vulnerability (to depression, to short life and to alcoholism) were summed, heredity did become a significant risk variable— affecting 7 of the 10 outcome variables and two *strongly*. In short genes are important – just not as important as love.

Thus, if, as the most important prologue to a good life, I substitute Love (variables reflecting attachment) for genes and physical vigor, prediction became far more successful. Since warm relationships are hard enough to measure in the 21st century let alone in 1940, I used the four indirect measures illustrated in Table 2, part C.

During college both the men and their parents were interviewed in depth. To assess the first attachment indicator, the assessment of a cohesive home-life was combined with a warm relationship with mother, with father and with siblings to reflect a 20-point scale. However, no one had thought to make such a rating until the men were age 50, when it was made by young raters kept blind to all data after age 18.

The second predictor was the study staff’s A, B, and C original consensus rating of the men’s overall soundness at age 21 but the facets of the scale that I have underscored below were not those emphasized originally.

A = Would have no “serious problem in handling problems that might confront them.”

B = “If a boy was lacking in warmth in his touch with people” or too “sensitive.”

C = Men who showed “marked mood variations” or were “markedly asocial.”

The third predictor was the “maturity” or “immaturity” of the men’s involuntary coping style from 20 to 35. *Mature coping mechanisms* included “suppression” (patience and stoicism), “altruism” (doing for others what you wished had been done for yourself), and “anticipation” (allowing painful emotions to come consciously to mind before the event). *Immature coping mechanisms* included “fantasy” (imaginary friends), projection (externalizing blame), “hypochondriasis” (help rejecting complaining) and “acting out” (tantrums). While often soothing the subject, these latter behaviors do not win friends. In effect, the extremes of coping style reflected narcissism and empathy during young adulthood.

The final predictor “Object Relations (age 30-47)” *subtracted* points: for not being married for more than ten years, not having children, being distant from own children, few friends, no enjoyable contact with family of origin, no clubs, and no games with others. Although not assessed until mid adulthood, this variable was used because, astonishing as it seems in the 21st century, there was no earlier measure of capacity for attachment.

These four measures of warm relationships all *strongly* correlated with each other. More important, these four variables were highly predictive of not only Love in the future but also of future income and occupational prestige. Out of the 40 possible matches (four predictors times ten outcomes), 34 were significant and 12 *strongly* ($p < .001$). For example, the 84 men with poor childhood relationships reported an average maximum earned income of \$150,000 a year (in 2009 dollars). The 41 men with the warmest childhoods earned a maximum of \$343,000 a year. The 12 men with the most mature (empathic) coping style reported a maximum income of \$369,000 a year; the 16 men with the most immature (narcissistic) coping style reported a maximum income of \$159,000 a year. To put these differences in perspective, the difference in average maximum earned income between men whose parents had been in the upper-upper and in the lower-middle social class was only \$12,000—a statistically insignificant difference. (A Harvard

diploma is a great social equalizer.) Still more important, of course, these four early life variables predicted intimate relations in late life even more powerfully. Indeed, to my surprise maintaining even physical health was a reflection of having had many warm relationships in the past and close companions to play with in time present.

Certainly my rash conclusions about the importance of relationships would not have occurred to any of the originators of the study. Nor did the capacity for warm, intimate relationships commonly cross the minds of social scientists anywhere else. It is hard to remember that the pre-World War II Anglo-American social sciences had helped fuel Nazi eugenics. Many psychiatrists believed that personality was determined by body build and there was a popular psychiatric diagnosis called “constitutional inferiority”. In 1938, when the Study began, constitution and eugenics were commonly seen as more potent than environment. Physical anthropology was still dominant. Franz Boaz’s cultural anthropology that would capture the hearts and minds of college students in the 1960s was still relatively esoteric. The Grant Study investigators were far more interested in understanding the physiology and somatotypes of the Grant Study men than their intimate relationships. The Nazi’s had not yet given the study of “race” a bad name.

The initial data collection years of the Study were the early years of World War II. Thus, it was understandable that besides seeking the antecedents of “normality” and mental health, efficient officer selection was on the investigators’ minds. The study’s predictive criteria for “good officer material” included: "vital affect," athletic prowess, a mesomorphic body build, masculine (as contrasted to feminine) body build, high IQ, perseverance on a treadmill, and “friendliness” (a variable that further follow-up revealed that was more correlated with extraversion than capacity for intimacy).

The first book on the Grant Study by Earnest Hooton (a distinguished Harvard physical anthropologist), *Young Man You are Normal*, was based in a world of constitutional medicine. Hooton (1945) wrote, “When physique, studied from different stand points, turns out to be so intimately related to various personality traits, it is clear that body build must also furnish clues to the social capacities of the individual.” He quotes a study of ROTC recruits in which 41% of men with a strong masculine component were considered “excellent officer material”; and not a single man with feminine body build (narrow shoulders and broad hips) was considered of equal value.

Of course, there was no follow-up to document these claims. Instead of testing the claims of social environmentalists experimentally, to discover if their predictions could also be correct, Hooton dismissed his opposition as “crass environmentalists.” Thus, Study physicians and physiologists studied their subjects in minute biological detail. But capacities for love, intimacy, “emotional intelligence,” and close friendships were largely ignored. Of interest was that these childhood variables were the only ones in Table 2 that actually predicted final World War II military rank- in other words, good officer material. (The range was from private to major.)

Let me offer two further pieces of evidence for my assertion that social science has only considered the capacity for loving attachment as important over the last 50 years. First, the not uncommon malady of Infantile Autism was not discovered until 1943; its close “relative,” Asbergers syndrome, was not identified until 1944. It took fifty years more until these two disorders were included in standard diagnostic nomenclature. Until 1943 physicians lived in a world where many understood arcane phenomena like quantum mechanics and the transmission of photographs via television, but where none could conceptualize a disorder due to a congenital absence of empathy. Yet this genetic incapacity affects roughly 300,000 Americans with devastating consequences.

My second piece of evidence is that until recently Love from Aristotle to Freud— was conceptualized as *Eros*, not as attachment. Love was thought to be due to hypothalamic instinct, not limbic pair bonding. Not until 1950 did psychoanalyst-ethologist John Bowlby popularize the concept of *attachment*—and that the fact that babies become attached to their mothers because the mothers cuddled them, sang to them and gazed into their eyes. Later, psychologist-ethologist Harry Harlow had to teach psychiatrists and psychologists that mother-child attachment did not, as the classical Freudians maintained, occur just because mothers fed their babies; but pair bonding in humans evolves and depends on a loving environment in childhood. In his 1958 presidential address to the America Psychological Association Harry Harlow was driven to exclaim, “Psychologists not only show no interest in the origin and development of love and affection, but they seem to be unaware of its very existence.”

Thus, it is understandable that in 1940, during ten hours of psychiatric interviews the Study men were queried about their religious upbringing, masturbation, and their

views upon Freudian theory, and premarital sex but not about best friends or girlfriends. In the twenty-first century it is difficult to remember that our understanding of attachment and love is more recent than our understanding of how to make atomic bombs.

To summarize, love begets love; while adolescent social class, intelligence, body build and a hail-fellow-well-met approach to life contributed much less to successful aging. Happiness IS love - full stop.