Wellness, or holistic health, represents a positive attitude toward the integration of physical and psychological aspects of lifestyle. There have been few attempts to assess wellness that contain more than questionnaire items across several component areas. This paper describes a test battery that includes physical (nutrition, cardiorespiratory endurance, body composition, muscular strength, muscular endurance, and flexibility) and psychological components (health locus of control, self-esteem, and stress and coping skills) and that can be administered in 90 minutes. In addition, an attempt is made to devise a brief global projective measure of inner balance, or coherence congruence, that can substitute for the test battery and be useful for monitoring wellness in specific populations. (Author/JD)
Wellness Assessment: A Rationale, A Measure, and Physical/Psychological Components

Gilda Shuffield and Richard H. Dana

Wellness, or holistic health, represents a positive attitude toward the integration of physical and psychological aspects of lifestyle. There have been few attempts to assess wellness that contain more than questionnaire items across several component areas. This paper presents a battery that includes physical (cardiorespiratory endurance, body composition, muscular strength, muscular endurance, and flexibility) and psychological components (health locus of control, self-esteem, and stress, and coping skills) and can be administered in 90 minutes. In addition, the attempt is made to devise a brief global projective measure of inner balance, or coherence congruence that can substitute for the test battery and be useful for monitoring wellness in specific populations.
Wellness Assessment: A Rationale, a Measure, and Physical/Psychological Components*

Gilda Shuffield and Richard H. Dana

Wellness assessment represents a holistic model of health that is predicated on self-knowledge and a self-imposed regimen as part-and-parcel of a self-managed lifestyle. Central to practices of wellness is a set of positive beliefs about the self that define an inner balance, or congruence or sense of coherence. Although wellness implies integration of behaviors across several domains, there have been few published attempts to assess wellness that encompass more than questionnaire items representing component areas (e.g., Ardell, 1983; Clark, 1981).

This preliminary report of an assessment battery juxtaposes physical, nutritional, and psychological measures (Figure 1) which are briefly described below. These measures were administered to pilot assesses—college student volunteers in the authors' classes. Information was collated across measures and put in a format for feedback (Table 1). Individual and group feedback emphasizes information as well as pinpointing and describing avenues of possible remediation. Remediation consists of information per se, assistance on how to use information, references to additional information resources, and/or referrals to community resources.

A rationale for wellness assessment may be found in a biopsychosocial orientation that posits multiple causes and multiple effects in any health paradigm. In addition, wellness is a subjective, global self-appraisal as well as a set of comparisons with normative data. Focus on wellness recognizes that prevention is preferable and more cost-effective than cure. Finally, wellness assessment is a model that places responsibility for care directly upon the consumer as a result of information that occurs during feedback on several aspects of lifestyle.

This ongoing project has two major goals:
(a) the development of a technology for wellness assessment that can be used directly by consumers and provides, in addition, a vehicle for health records.
(b) to focus attention upon the construction of a single psychological measure of the construct that underlies these wellness components. Such a measure would be of value in screening and in specialized assessment procedures.

*Presentation to the Society for Personality Assessment meeting in Tampa on March 17, 1984.
Physical/Psychological Components

The assessment components were nutrition, physical activity, health locus of control, self-esteem, sources of stress/coping strategies, and inner balance.

Nutrition

Dietary recall for a 24-hour period was used and the specific foods were converted into 10 codes for large nutrients (calories, proteins, saturated fats, unsaturated fats, complex carbohydrates, sugar) and small nutrients (cholesterol, sodium, vitamin C, iron). These data were entered into an Apple computer using the Dennison Inventory of Nutritional Experiences (DINE) Program (Dennison, 1982) which compares actual and ideal diet. The result of this comparison is the number of actual-ideal matches. DINE scores range from zero to 10, or from very poor (0-1) to perfect (10).

Physical Fitness

The components of physical fitness measured here are body composition, cardiorespiratory endurance, muscular strength, muscular endurance, and flexibility (Kusinitz & Fine, 1982).

Body composition. Level of fatness was measured using a skinfold caliper pinch of skin. For women, iliac crest and triceps, and for men, triceps, biceps, and iliac crest measures were taken. These recordings were made with a computerized instrument (SKYNDEX) and converted into percentiles based on norms for 17+ year old men and women (AAHPERD, undated).

Cardiorespiratory endurance. The McArdle Step Test, with a 3-minute time period, was used with a 24-cycle cadence for men and 22-cycle cadence for women. Taped directions monitored the entire process. After a 90-second recovery period, pulse rate was compared with duration of effort using a scoring table (Mathews, 1978, p. 270).

Muscular strength. A hand dynamometer was used to measure grip strength in kilograms and converted into pounds.

Muscular endurance. Flexed leg sit-ups for a 60-second period were used to estimate muscular endurance. The numbers of sit-ups were compared with percentile norms for 17+ year old men and women (AAHPERD, undated).

Muscular flexibility. Muscular flexibility of the low back and posterior thighs was determined by sit and reach. Sit and reach was done facing a box with an extended centimeter scale. Each of several trials was recorded until the same measurement occurred on two consecutive trials. This measure was converted into percentile norms for 17+ year old men and women (AAHPERD, undated).

Health Locus of Control

Health locus of control was measured by the Multidimensional Health Locus of Control Scale (Wallston, Wallston & DeVellis, 1978) which has subscales for internal control (ILLC), reliance on powerful others (PHLC), and reliance on chance or fate (CHLC). Separate scores for each subscale were compared with mean and standard deviation ranges for samples of college students (Wallston & Wallston, 1981).

Self-esteem

Self-esteem was measured by the Self-Attitude Scale (Rosenberg, 1965) which was developed for older adolescents. The self-esteem concept is broadly defined as the degree to which one considers oneself...
a worthy person. The 10 statements are responded to by extent of agreement/disagreement. Resultant scores can be classified as low, moderate, or high.

**Psychological Well-being**

Psychological well-being was measured by the Bradburn Scale (Bradburn, 1969). This measure is thought to tap "happiness" as an underlying construct and has been used by Bradburn with a nationwide, stratified sample in an attempt to capture the affective tone (positive, neutral, or negative) of the person's recent life experience.

**Life Stress**

Stress was measured by a checklist adaptation of the Schedule of Recent Experiences (Sarason, Johnson & Siegel, 1978). The numbers of events checked were tallied to provide an index of stress since this is the simplest and most efficacious life event weighting scheme (Ross & Mirowsky, 1979).

**Coping Strategies**

Assesees were asked to briefly describe in writing a stressful crisis that occurred during the past 12 months and to indicate actual techniques used for alleviation. A checklist of coping items (Billings & Moos, 1981) served as the basis for description of techniques. These items represented cognitive, behavioral, and avoidance coping responses which are further clustered as problem-focused or emotion-focused. Mean scores for coping responses from community adults were used for comparison.

**Inner Balance**

We have tried to measure inner balance, or what Antonovsky (1979) has referred to as "sense of coherence", by means of selected Rorschach plates (III, VI/VII, VIII) and TAT cards (1, 3BM, 16) using scoring for manageability, comprehensibility, and meaningfulness components (Antonovsky, 1983). However, it appears more feasible to use his 27-item questionnaire that has been standardized on an Israeli urban Jewish adult population and demonstrated to be highly related to health,
References


Figure 1

Wellness Components

- Physical Condition
- Health Locus of Control
- Stress Level
- Psychological Well-Being
- Inner Balance "Sense of Coherence"
- Diet/Nutrition
- Coping Skills
- Support Systems
- Self-Esteem