Conceptualization and Measurement of the Spiritual and Psychological Dimensions of Wellness in a College Population

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Abstract. Wellness is commonly conceptualized as having many dimensions, but little effort has been made to evaluate how spiritual and psychological wellness are related to overall wellness. To explore the relationship between measures of spiritual and psychological wellness and perceived wellness in a college student population, the authors administered a series of survey instruments to 112 undergraduate students under quiet classroom conditions. They used the Life Attitude Profile to measure spiritual wellness, the Life Orientation Test and the Sense of Coherence Scale to measure psychological wellness, and the Perceived Wellness Survey to measure overall wellness. Path analysis performed with a proposed theoretical model revealed that the effect of life purpose on perceived wellness was mediated by optimism and sense of coherence, which had independent effects on perceived wellness beyond that of life purpose. The findings suggested that an optimistic outlook and sense of coherence must be present for life purpose to enhance a sense of overall well-being.

Key Words: psychological health, spiritual health, wellness

One of the primary goals of Healthy People 2010 is to increase quality and years of life for all Americans. Improving the quality of student life has long been a concern for university educators, administrators, and professional staff, who have placed particular emphasis on students' health-related quality of life because college students typically experience developmental and behavioral-associated threats to health that are unique to this phase in their lives.

In a 1997 article in the Journal of American College Health, Grace suggested that campus health providers focus their efforts beyond individual behaviors. Health improvement efforts, he wrote, would be enhanced by building campus "wellness communities." The thrust of his suggestion was that college health personnel would be well advised to emphasize wellness culture rather than disease avoidance in campus programs.

A wellness approach may seem more palatable on an intuitive level, but much remains to be learned about wellness. In particular, little is known about some of the less studied dimensions of wellness, such as the spiritual and psychological aspects of health.

Since Halbert Dunn formally defined wellness in 1961, many others have conceptualized and illustrated this concept. Unfortunately, these conceptual foundations and models have not been used to shape research questions or influence program development, nor have they been empirically evaluated. Certainly, validation of wellness conceptual models should be an important prelude to integrating wellness principles into practice. Therefore, both the presentation and validation of a model of wellness has been needed. The model we present in this article includes both spiritual and psychological dimensions and was tested on a college population.

Wellness Model and Measure

The model and corresponding measure we present are based on perceptions of wellness. Because most wellness measures address clinical, physiological, or behavioral manifestations of disease or risk factors for disease, the Perceived Wellness Survey (PWS) is unique. The focus on perceptions is important for several reasons. First, very strong and consistent data indicate that subjective perceptions are valid indicators of future objective health, even after statistically controlling for confounding variables. Second,
perceptions serve as a filter through which information or stimuli must pass before they are interpreted. This principle is the basis of cognitive restructuring. That perceptions precede physical responses and behaviors is supported by the recognition that perceptions are at the core of several health theories and models. Finally, various research findings support the importance of perceptions. The social support literature indicates that perceived support rather than received support has the most powerful influence on health. Furthermore, the stress literature suggests that perceptions of internal resources enable individuals to survive and thrive under conditions of extreme stress.

In addition to being perceptually focused, the model and corresponding measure are founded on three principles common to all conceptualizations of wellness: (a) multidimensionality, (b) balance among dimensions, and (c) salutogenesis (defined as causing health rather than illness). First, the model and measure include the physical, social, emotional, intellectual, spiritual, and psychological dimensions of wellness. Second, the model is dynamically bidirectional, which incorporates balance among dimensions (see Figure 1).

The top of the model represents wellness because it is expanded to the fullest possible extent, whereas the tightly constricted bottom represents illness. Illness in this model is not as much a state of physiological disease as it is a perception of disconnection, poor self-esteem, poor physical health, pessimism, existential frustration, lack of intellectual stimulation, or any combination of the above. Any of these conditions could lead to physical disease. Between the wellness and illness poles of the model are innumerable fluctuations in each of the dimensions, with various states of balance among them. Thus, "dynamically bidirectional" suggests movement in the vertical plane between the wellness and illness poles and a constant, balance-seeking fluctuation in a horizontal plane. Finally, the PWS is salutogenically rather than pathogenically focused.

In this model, the spiritual dimension is defined as a positive sense of meaning and purpose in life. The psychological dimension is defined as the perception that one will experience positive outcomes to the events and circumstances of life. Because both of these dimensions are multifaceted, neither of the above definitions is intended to be comprehensive, but both are at the core of spiritual and psychological dimensions. When the terms spirituality or spiritual wellness are used, the above definitions are the intended interpretation, as they are for psychological wellness. For definitions of the other dimensions in the model, see Table 1. The following discussion provides an overview of the theoretical foundations of the spiritual and psychological dimensions.

**Spiritual Wellness**

Dunn stated that "we can no longer ignore the spirit . . . as a factor in our medical and health disciplines . . . which are designed as though the sum total of our concern is for the body and the mind . . . leaving to metaphysics and religion the affairs of the spirit." In this regard, it is important to note that spirituality and religion are related but are not synonymous. Developing spirituality, as defined above, can add meaning to the practice of religion, whereas the practice of religion can deepen spirituality. Therefore it is inappropriate to discount the spiritual importance of organized religion to millions of people, yet equally inappropriate to suggest that one must practice a specific religion if one is to develop spirituality. It is possible to promote and measure the development of spiritual wellness while remaining sensitive to individual values and belief systems. For example, Seaward presents an excellent simple model for the integration of spiritual principles into a variety of settings.

Many observers have suggested that the public interest in spirituality is a symptom of increasing levels of isolation, disconnection, and existential frustration in our society. Interestingly, a noticeable emphasis on spirituality has been evident in some of the best selling books of the 1970s, 1980s, and 1990s. In addition, medicine has begun to recognize the influence of spirituality on illness. Concurrently, the absence of spiritual health initiatives has been frequently noted in the literature. As a result, spiri-
Over the past 2 decades, several theorists have included spirituality as a dimension of wellness. Although conceptualizations of the spiritual dimension vary among theorists, some common threads exist. These include a sense of meaning and purpose in life, connectedness to self, the environment, or a higher power, and a belief in a unifying life force. These common conceptual threads serve as support for efforts to measure spiritual wellness and to enhance understanding of the relation between spiritual wellness and overall wellness. For this study, we selected a measure of life purpose to represent the spiritual dimension of wellness, which is congruent with the definition in the model of perceived wellness.

**Psychological Wellness**

The core of the psychological dimension of wellness in our model is optimism, defined as the perception that one will experience positive outcomes to the events and circumstances of life. We selected measures of dispositional optimism and sense of coherence to represent the psychological dimension of wellness.

Psychologists have produced much scientific evidence in the last decade that links dispositional optimism to good health and pessimism to poor health. Carver and associates studied the adjustment of 70 patients with early stage breast cancer and found that optimism was significantly related to subjective well-being before surgery and at 3 months, 6 months, and 12 months postsurgery. Similarly, Scheier and associates reported a strong positive correlation between optimism and quality of life in coronary artery bypass surgery patients initially and at 6 months postsurgery. The optimistic men in that study were more likely than those who were less optimistic to exercise vigorously, return to work, and resume their normal social and sexual activities.

In examining the relation between dispositional optimism and frequency of physical symptoms during the 4 weeks before final examinations in a group of university students, Scheier and Carver demonstrated that students who were optimistic reported fewer physical symptoms than pessimistic students during the study period. These researchers concluded that dispositional optimism was a significant predictor of reporting symptoms and, thus, of physical health. O'Brien and colleagues also found that optimists reported less stress and fewer physical symptoms than nonoptimists did. Optimists were generally ill less often, made fewer visits to the doctor, had better stress resistance and stronger immune systems, and lived longer. However, we know of little evidence linking indicators of optimism and perceived wellness.

Sense of coherence is defined as "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected." A person who possesses a strong sense of coherence would be described as resilient and optimistic. Sense of coherence has been shown to have a strong connection with health. In predictive studies, the sense of coherence construct significantly predicted psychological symptoms, influence in the workplace, and perceptions of assistance available from others. Correlational studies have also reported that a sense of coherence is positively related to hardness, multidimensional health locus of control, and indices of social support, and is negatively associated with perceived stress and depression, anxiety, and a tendency toward alcoholism. In a prospective study using an elderly population, R.B. Flannery and G.J. Flannery found that a strong sense of coherence was negatively associated with life stress and psychological symptoms.

In this study, we evaluated the relationship of the spiritual and psychological dimensions to each other and to the overall model of perceived wellness. First, we hypothesized that a significant positive relationship would exist between the perceived wellness (PW), the dependent variable, and the determinants of life purpose (LP), optimism (O) and sense of coherence (SC). Second, we hypothesized that the effect of LP on PW would be largely, if not completely, mediated by O and SC (see Figure 2) and would reflect the view that a sense of meaning and purpose in life becomes more developed as the individual ages from late adolescence to older adulthood, and that character dispositions, such as optimism and resilience, are typically manifested much earlier in life than life purpose.

Because the sample in this study consisted of undergraduate college students, we expected that the participants' sense of purpose in life would not be as acutely developed and that

**TABLE 1**

<table>
<thead>
<tr>
<th>Component</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Emotional centeredness</td>
<td>A secure self-identity and a positive sense of self-regard</td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>Perception of being internally energized by an optimal amount of intellectually stimulating activity</td>
</tr>
<tr>
<td>Physical resilience</td>
<td>A positive perception and expectation of physical health</td>
</tr>
<tr>
<td>Psychological optimism</td>
<td>Perception that one will experience positive outcomes to the events and circumstances of life</td>
</tr>
<tr>
<td>Social connectedness</td>
<td>Perception of having support available from family or friends . . . and perception of being a valued support provider</td>
</tr>
<tr>
<td>Spiritual life purpose</td>
<td>A positive sense of meaning and purpose in life</td>
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the effect of spiritual wellness on perceived wellness would therefore be mediated by psychological wellness. We also examined an alternative model—that the effect of psychological wellness on perceived wellness would be mediated by spiritual wellness. In that model, the effect of optimism and sense of control on perceived wellness would be largely, if not completely, mediated by life purpose (see Figure 2).

**METHOD**

**Sample**

Participants (N = 112) were a convenience sample of undergraduate students enrolled in a health education class at The University of Texas at Austin. Eighty-one percent were women (n = 91), 19% were men (n = 21), and a majority (81%) were White. The participants ranged in age from 16 to 58 years (M = 23.2, SD = 5.4). In accordance with Internal Review Board procedures of the sponsoring institution, we informed all of the participants about the confidential nature and purpose of the study. We also told them that participation in the study would not influence their class grades. Five of the students did not complete the survey; thus, the participation rate was 96%. Testing occurred in a quiet classroom environment, and the students were allowed 20 minutes to complete the survey, which included four different scales. None of the students needed the full amount of time.

**Measures**

**Life Attitude Profile**

We used the Life Purpose subscale from the Life Attitude Profile\(^6^9\) (designed to measure the multidimensional nature of attitudes toward life). Life purpose (LP) is defined as a measure of zest for life, fulfillment, contentment, and satisfaction.\(^6^9\) The subscale contains 9 items scored from 1 (strongly disagree) to 7 (strongly agree). Total scores range from 9 to 63, with higher scores indicating a greater life purpose. Sample items include “Basically, I am living the kind of life I want to live,” and “I have discovered a satisfying life purpose.” In the initial psychometric study of the Life Attitude Profile, the internal consistency for the LP subscale was alpha = .83,\(^6^9\) which compares favorably to the internal consistency found in the current study (α = .87).

**Life Orientation Test**

This scale possesses 8 items (plus 4 filler items) designed to measure dispositional optimism. Scheier and Carver defined optimists as individuals who “generally believe that good rather than bad things will happen to them.”\(^5^0\) We used 8 of the original 12 items in the study, omitting the 4 filler items designed to disguise the content of the scale because of space limitations. This may have inflated internal consistency values, although such inflation is unlikely because the 8 items were integrated with other psychometric scales that would have had a similar masking effect. Responses range from 0 (strongly disagree) to 4 (strongly agree). Total scores range from 0 to 32, with higher scores indicating greater optimism. Sample items include “In uncertain times, I usually expect the best,” and “If something can go wrong for me, it will.” The Life Orientation Test has been shown to possess adequate internal consistency (α = .76) and has a test-retest reliability coefficient of .79.\(^5^9\) Internal consistency of the test for the current study was alpha = .82.
Sense of Coherence Scale

In our study, we used the 13-item short version of the SC scale. Each item is scored on a 7-point differential scale, with variable response options. Scores range from 13 to 91, and higher scores indicate a greater sense of coherence. Among the items included are “Do you have the feeling that you don’t really care about what goes on around you?” “Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?” and “How often do you have the feeling that there’s little meaning in the things you do in your daily life?” The SC has been shown to have high reliability (α = .84–.93) and construct validity estimates (r = .27–.50). The internal consistency of SC for the current study was alpha = .85.

Perceived Wellness Survey

The PWS, which has been described in greater detail elsewhere, was developed to fill a void in wellness measurement. Clearly, the conceptual notion of wellness as defined by Dunn and others has not been adequately measured (nor will it ever be) by commonly used body-centered evaluation techniques. Although these techniques are important, such objective measures of health will probably reveal little about spiritual or psychological wellness. Yet understanding how both are related to overall wellness would be important for counselors and health-enhancement professionals alike. Thus, we selected perceived wellness, rather than commonly used types of wellness indicators, as the dependent variable in this study.

We defined perceived wellness as the sense that one is living in a manner that permits the experience of consistent, balanced growth in the emotional, intellectual, physical, psychological, social, and spiritual dimensions of human existence. Sample items from each dimension are, respectively, “In general, I feel confident about my abilities,” “In the past, I have expected the best,” “My life purpose is important,” and “How often do you have the feeling that you don’t really care about what goes on around you?” “Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?” “How often do you have the feeling that there’s little meaning in the things you do in your daily life?” These items have been shown to have high reliability (α = .84–.93) and construct validity estimates (r = .27–.50). The internal consistency of SC for the current study was alpha = .85.

Analysis

To test the first hypothesis, we calculated Pearson product–moment correlation coefficients between perceived wellness and life purpose and optimism and sense of coherence. To test the second hypothesis, we used path analysis to examine the proposed and alternative models of the relationship between perceived wellness and the set of determinants, including life purpose, optimism, and sense of coherence (see Figure 2). In this article, we report implied correlations for each model and comparisons with the “original” (ie, Pearson product–moment) correlations.

To examine goodness-of-fit indices (GOF) of the two models, we used the chi-square test, the normed-fit index (NFI), the comparative-fit index (CFI), and the Tucker-Lewis index (TLI). The chi-square statistic provided a test of the null hypothesis that the reproduced covariance matrix had the specified model structure (ie, that the model fit the data). The NFI ranges from 0 to 1, where 0 represents the GOF associated with a null model (one specifying that all the variables are uncorrelated) and 1 represents the GOF associated with a “saturated” model (one with 0 degrees of freedom that perfectly reproduces the original covariance matrix). The CFI and TLI are similar to the NFI. Values greater than .95 on the NFI, CFI, and TLI indicate a good fit between model and data.

Results

Mean scores and standard deviations for all variables are shown in Table 2, and Pearson product–moment correlations among the variables are shown in Table 3. The first hypothesis was supported because higher scores on perceived wellness were significantly related to higher scores on life purpose, optimism, and sense of coherence.

Results of the path analysis for the second hypothesis supported the proposed model, as presented in Figure 2. Estimation of this model revealed a nonsignificant chi-square value, χ²(1, N = 112) = 2.22, p = .136, indicating that the model fit the data well. We report the implied correlations in Table 3 and suggest that the model-based covariances closely reproduce the actual data-based covariances, lending further support to the claim that the model fit the data well. All values of the descriptive GOF tests exceeded .95, which shows a very good fit between the model and the data (see Table 4).

Path coefficients for the proposed model appear in Table 5. Estimation of the alternative model revealed a significant chi-square value, χ²(1, N = 112) = 35.21, p = .000, indicating that the model does not fit the data well. The proposed model (see Figure 2) accounts for a much greater portion of

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**TABLE 2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>Life purpose</td>
<td>47.8</td>
<td>8.12</td>
</tr>
<tr>
<td>Optimism</td>
<td>23.9</td>
<td>4.51</td>
</tr>
<tr>
<td>Sense of coherence</td>
<td>62.4</td>
<td>10.89</td>
</tr>
<tr>
<td>Perceived wellness</td>
<td>16.5</td>
<td>3.14</td>
</tr>
</tbody>
</table>
Many spiritual teachers have emphasized the importance of having a purpose in life. Rinpoche\textsuperscript{73} suggested that life purpose results from undertaking a spiritual journey with all the intelligence and courage for transformation we can muster. This view is also reflected in the following quotation from Viktor Frankl:

Everyone has his own specific vocation or mission in life to carry out a concrete assignment which demands fulfillment. Therein he cannot be replaced, nor can his life be repeated. Thus, everyone’s task is as unique as is his specific opportunity to implement it.\textsuperscript{73,77}

Discovering, then honoring one’s unique purpose in life is difficult, given that we live in a culture preoccupied with the notion that success and power will produce happiness and well-being. Paradoxically, according to some theorists, the pursuit of success and power typically results in hollow satisfaction and, in the long term, produces feelings of bewilderment, anger, and confusion.\textsuperscript{73,75} If these presumptions are true, to exist in this type of environment and maintain a sense of meaning and purpose in life would require strong internal resources. Optimism and a sense of coherence are perhaps types of internal resources that enable people to fulfill their own true nature or life purpose. Thus, it was not surprising that the effects of life purpose on perceived wellness in our study were mediated by psychological constructs, such as optimism and sense of coherence.

In the psychological dimension, both optimism and sense of coherence have been positively associated with health.\textsuperscript{23,53-57,70} We found that optimism and sense of coherence were significant predictors of perceived wellness. Interestingly, a common characteristic of individuals with high levels of optimism and a strong sense of coherence is an enduring sense of personal control.\textsuperscript{23,55} Such individuals are confident that they have the resources and abilities to meet the demands arising from both their internal and external environments and recognize that the demands of life are challenging and worthy of personal investment. The link between personal control and health also has been supported in several studies using various designs.

For example, Visintainer and colleagues\textsuperscript{76} investigated the phenomenon of personal control and helplessness in a laboratory setting with three groups of rats that had been implanted with sarcoma cells. The researchers gave the first group a mild escapable shock, the second group a mild inescapable shock, and the third group no shock at all. Within a month, 50\% of the rats that received no shock died and 50\% rejected the tumor, which was considered normal. However, 70\% of the rats who were able to escape the shock because of their own efforts rejected the tumor, whereas only 27\% of the rats with no control over the shock rejected the tumor.

Visintainer and colleagues’ results were supported in a set of classic human studies that demonstrated that elderly people living in a nursing home who were given more choice and responsibility for their lives were happier\textsuperscript{77} and lived longer than those given few choices.\textsuperscript{78} Seligman, who discussed the previous three studies in his work, suggested

\begin{table}[h]
\centering
\caption{Pearson Product-Moment Correlation Coefficients Among Variables}
\begin{tabular}{lccc}
\hline
Variable & 1 & 2 & 3 \\
\hline
1. Life purpose & --- & --- & --- \\
2. Optimism & .55 & --- & --- \\
3. Sense of coherence & .60 & .59 & --- \\
4. Perceived wellness & .53 & .55 & .66 \\
\hline
\end{tabular}
\end{table}

\begin{table}[h]
\centering
\caption{Goodness-of-Fit Indices for the Proposed and Alternative Models}
\begin{tabular}{lcccccc}
\hline
Model & $\chi^2$ & DF & $p$ & NFI & CFI & TLI \\
\hline
Proposed & 2.22 & 1 & .136 & .999 & .999 & .993 \\
Alternative & 35.2 & 2 & .000 & .979 & .980 & .990 \\
\hline
\end{tabular}
\end{table}

variance in perceived wellness ($R^2 = .48$) than the alternative model ($R^2 = .29$). Even though the alternative model was not supported, we nevertheless report the implied correlations (Table 3) values for the descriptive GOF tests (Table 4) and path coefficients (Table 5).

\section*{COMMENT}

In summary, life purpose, optimism, and sense of coherence were related to perceived wellness. However, the effect of life purpose on perceived wellness was mediated by optimism and sense of coherence, which had independent effects on life purpose. Overall, the results support the proposed model and not the alternative model. In addition, the results add further insight into the relationship between the spiritual and psychological dimensions of wellness in the college student population.
that these findings illustrate that “choice and control could save lives and, perhaps, that helplessness could kill.”

These classic studies illustrate the link between psychological health and overall well-being. Our current study provides additional support for the importance of optimism and a sense of coherence as components of psychological wellness. With respect to the relationship between the psychological variables, a greater sense of coherence or resilience leads to a more optimistic outlook on life.

In light of these findings, four possible limitations of this study warrant consideration. First, it is important to acknowledge the difficulty in trying to quantify spiritual and psychological wellness because these constructs are subjective. However, attempting to quantify these constructs is an important prelude to understanding them better.

Second, the use of a convenience sample that was largely made up of female students limits the generalizability of our findings. To assess the impact of potentially confounding variables that we measured but did not report here, we performed t-tests and found no gender differences in measures of free-floating anxiety, global self-concept, or physical self-esteem. The relationship of these and other variables to perceived wellness is more completely described elsewhere. Certainly, further research with larger and more demographically diverse populations would strengthen the findings of this study.

Third, because this study is one of the first data-based attempts to investigate spirituality in the college student population, the results are clearly preliminary. Much more remains to be done. Further work using path analysis and structural equation modeling to examine various conceptual models is needed. Finally, the design of our study is cross-sectional, thereby limiting the conclusions that can be drawn. Using a longitudinal design in future investigations would enable researchers to examine the effects of targeted interventions on spiritual and psychological wellness and, subsequently, on perceived wellness.

Despite these limitations, several important implications are noteworthy. Optimism and sense of coherence directly affect overall wellness. The cultivation of a meaningful purpose in life is a worthy goal that may enhance overall wellness. On the basis of our findings in this study, however, we believe that an optimistic outlook and strong sense of coherence are essential for a meaningful life purpose to enhance overall wellness. We therefore recommend that health professionals who develop and deliver spiritual wellness programs to college students also focus on mobilizing internal resources, such as optimism and a sense of coherence.

NOTE

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