Adherence to a Wellness Model and Perceptions of Psychological Well-Being

David A. Hermon and Richard J. Hazler

This study investigated the relationship between college students' perceived psychological wellness and the quality of their lives on 5 variables associated with a 5-factor holistic wellness model. The Wellness Evaluation of Lifestyle (Wilmer, Sweeney, & Myers, 1993) and Memorial University of Newfoundland Scale of Happiness (Kozma & Stones, 1994) were completed by 155 undergraduate college students. Multivariate regression analysis revealed a significant relationship between 5 dimensions of wellness and both short-term and long-term trait constructs of psychological well-being. Subsequent univariate analysis found that students' ability to self-regulate, identity with work, and friendships contributed the most to their psychological wellness. Implications for college counseling centers and student development professionals are presented.

The increasing creation of wellness programs in higher education are evidence of institutional efforts to improve the quality of life, psychological well-being and holistic development of students on campus (Hettler, 1980; Opatz, 1986; Svik, Butts, Moore, & Hyde, 1992). There has not been a matching increase in research studies on the overall effectiveness of these actions. The few studies that do exist focus primarily on physiological components of wellness (Barth & Johnson, 1983; Hall, 1992; Johnson & Wernig, 1986; Zimpher, 1992) and ignore most other aspects that would make up a holistic view of people's wellness.

RELATIONSHIPS BETWEEN ADHERENCE TO A WELLNESS MODEL AND PERCEPTIONS OF PSYCHOLOGICAL WELL-BEING

Theorists and college students seem to agree that wellness is more than just a physical issue (Ardell, 1985; Benjamin, 1994; Hettler, 1980, 1986; Svik et al., 1992; Wilmer & Sweeney, 1992). For example, two separate surveys found that college students believed emotional and social dimensions of wellness were just as important as the physical dimension (Archer, Probert, & Gage, 1987; Hybertson, Hulme, Smith, & Holton, 1992). A situation therefore exists in which institutions, theorists, and students believe in a holistic wellness model while research continues to primarily emphasize only the physiological dimensions. Svik et al. (1992) made a particularly strong call for filling this research gap with studies on the relationship between wellness and other constructs.

This study follows the directions of institutions, theorists, students, and some researchers in an attempt to fill the research gap between our knowledge of physiological aspects of wellness and other dimensions that currently rely on more theory than research and practice for their support. Specifically, it seeks to find whether college students who adhere (demonstrated through behaviors and their agreement with ideology) to a holistic wellness model report that they have a greater sense of psychological well-being (measured on affective and quality of experience scales) than those students who do not adhere.

HOLISTIC WELLNESS

Witmer, Sweeney, and Myers (1993) translated many of the wellness theoretical and research concepts into a holistic wellness model. Their original model consisted of 16 dimensions later categorized into five major life tasks based on Adler's theory of life tasks (Sweeney, 1989; Sweeney & Witmer, 1991): (a) spirituality (a profound depth of appreciation for life); (b) self-regulation (composite variable measuring effectiveness in coping with self); (c) work, recreation, and leisure (ability to integrate a lifestyle); (d) friendship; and (e) love (recognition of social interdependence). These five major life tasks formed the basis of the independent variables of this study.

The developmental underpinnings of this model came from theoretical constructs and empirical research in the fields of psychology, anthropology, sociology, religion, education, and behavioral medicine (Witmer & Sweeney, 1992).

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A major strength of the model is that it includes a wider range of factors contributing to holistic wellness than other models and provides a measurement instrument to assess these factors. Although some other models of wellness do incorporate multiple dimensions, the instruments used to measure those models are physiologically biased (Cooper, 1990). The Wellness Evaluation of Lifestyle (WEL; Witmer et al., 1993) was selected for this study because its design specifically gives more equal assessment recognition to each dimension of this model.

A basic assumption regarding the value of any wellness model is that those who adhere to the model somehow be noticeably better off than those who do not. One measurement of this practical value is a person’s perception of the quality of their subjective life experience (happiness, sadness). Psychological well-being is an internal focused method of attaching value to the quality of life and affective experience generally accepted as a scientific construct in the long-term (propensity or disposition) and short-term (mood) components similar in design to the trait/state distinction in anxiety (Diener, 1984; Kozma, Stone, Stone, Hannah, & McNeil, 1990). Short-term state and long-term trait components of the Memorial University of Newfoundland Scale of Happiness (MUNS; Kozma & Stone, 1994) were used in this study to measure psychological well-being and serve as dependent variables in this study.

This study investigated the nature and strength of relationships between college students’ adherence to a five-factor (spirituality, work, recreation, and leisure, self-regulation, friendship, and love) holistic wellness model and their self-reported levels of psychological well-being.

METHOD

Sample

The sample consisted of 155 undergraduate students (94 women and 61 men) at a large midwestern United States university. The traditional undergraduate college age group (ages 18–23) accounted for 49% of the entire sample. The other 51% of the participants fell into a nontraditional age group (24–51) for undergraduate college students. The majority of participants were single (71%), whereas 24% were married, 5% divorced, and less than 1% widowed. The cultural background of participants consisted of 113 (73%) Caucasians, 20 African Americans (13%), 18 Asian or Pacific Islanders (12%), 3 (2%) Hispanics, and 1 Native American.

Variables

Wellness Evaluation of Lifestyle (WEL). The WEL (Witmer et al., 1993) was used to assess the five life tasks that were the independent variables in this study. The five tasks were conceptualized from research in psychology (personality, social, clinical, health, and developmental), anthropology, sociology, religion, behavioral medicine and education (Witmer & Sweeney, 1992). The WEL consists of 114 statements (both positively and negatively weighted). Responses are made on 5-point Likert scales (strongly agree, agree, undecided, disagree, strongly disagree).

The following are sample items from each dimension of the WEL: "Prayer, meditation, or individual spiritual study is a regular part of my life" and "I have had an experience in which I felt a sense of oneness with nature, the universe, or a higher power." These items are used to assess spirituality. "I am appreciated by those with whom I work" and "I engage in a leisure time activity in which I lose myself and feel like time stands still" are items used to assess work, recreation, and leisure. "I get a sufficient amount of sleep" and "I usually achieve the goals I set for myself" are items used to assess self-regulation. "I am comfortable with the social skills I have for interacting with others" and "I have at least one person with whom I can 'be myself' in bad moments as well as good" are items used to assess friendship. "I have at least one intimate relationship that is secure and lasting" and "When the going gets tough, my family or friends pull together to meet the challenge" are items used to assess love.

The WEL's content validity was supported by results of experts' ratings of the items for appropriateness in measuring their intended wellness dimensions (Witmer, 1995). Witmer also found that the WEL effectively distinguished clinical samples (i.e., persons diagnosed with mental or emotional disorders) from nonclinical samples.

The WEL's five dimensions have demonstrated solid internal consistency and test-retest reliability (time interval for test–retest was 2 weeks) based on a sample size of 552 (mostly college students). Internal consistency reliabilities of the individual scales ranged from .76 on the Work, Recreation, and Leisure scale to .87 on the Love scale. Test–retest reliability ranged from .82 on the Work, Recreation, and Leisure scale to .87 on Self-Regulation (F. E. Myers, Witmer, & Sweeney, 1995). Memorial University of Newfoundland Scale of Happiness (MUNS). The MUNS (Kozma & Stone, 1994) is a 24-item dichotomous response format instrument that measures both state (10 items) and trait (14 items) aspects of psychological well-being. The MUNS served as the measure of the dependent variables in this study. Sample items that measure the affective state dependent variable ask participants if, in the past month, they have felt "particularly content with [their] life" and "depressed or very unhappy." "Life is hard for me most of the time" and "the things I do are as interesting to me as they ever were" are examples of the general life experience, trait, dependent variable used in this study.

The MUNS has been widely used in Canada and the United States since 1975 with college students, adults, and in gerontological studies. Kozma and Stone (1988) illustrated the effectiveness of the MUNS in a study exploring the relationship between psychological well-being and social desirability in three age groups (21–40, 41–60, and 61–80). The researchers found that the psychometric properties of the MUNS are consistent across age groups. Studies have repeatedly shown the MUNS to be a highly reliable and effectively discriminating instrument when testing
clinical and nonclinical populations for both younger and older adults (Kozma & Stones, 1988; Kozma, Stones, & Kozma, 1985; Stones & Kozma, 1994; Stones, Kozma, Hannah, & McKim, 1991). The MUNSH’s internal consistency and reliability alphas with undergraduate college student subjects exceeded .85.

**Procedure**

Packets containing both the WEL and the MUNSH inventories were distributed to 155 students enrolled in three 200-level communications courses and three 300-level organizational behavior courses. Identification numbers were assigned to the instruments for the purpose of analyzing the data. The students received verbal instructions with their instruments informing them that they are not required to complete the instruments and may stop at any time without penalty. The participants’ confidentiality and anonymity were assured by the first author. All students completed the instruments in full.

**RESULTS**

Data were analyzed through a multivariate regression analysis using simultaneous entry of variables into the regression equation of the five wellness predictor variables with the two psychological well-being dependent variables. A key advantage of multivariate regression is protection from inflated errors of statistical inference from separate univariate analyses run for each dependent variable (Kalaian & Raudenbush, 1996; Stevens, 1992). However, if the aspects of psychological well-being (state and trait) are not highly correlated, this type of separation of one construct would not fit this analysis. The two dependent variables state and trait aspects of psychological well-being were highly correlated at .71. Hence, this “bedifferentiation” of psychological well-being is appropriate for multivariate regression.

Multivariate analysis revealed a Wilk’s Lambda of .35 (multivariate $F = 10.42, p < .01, df = 10, 296$). Therefore the null hypothesis was rejected because a positive multivariate relationship did seem to exist, attributable to both dependent variables’ relationship with the five predictors. A histogram of the standardized residual confirmed that the error was distributed normally, and no violations of assumptions for multivariate regression analysis were apparent.

Table 1 reports the univariate findings of the five predictor variables on the affective, state, component of psychological well-being ($F = 16.26, p < .001, df = 5, 149$). The simultaneous regression betas revealed that self-regulation ($\beta = .28$) and work, recreation, and leisure ($\beta = .27$) had the greatest influence on the overall significance of this test.

A significant relationship was found between the predictor variables on the quality of life, trait, component of psychological well-being ($F = 19.84, p < .001, df = 5, 149$). Self-regulation ($\beta = .27$), friendship ($\beta = .26$); and work, recreation and leisure ($\beta = .17$) contributed the most to the significance of this regression equation (see Table 2).

**TABLE 1**  
Summary of Simultaneous Regression Analysis for Variables Predicting the State Dimension of Subjective Well-Being

<table>
<thead>
<tr>
<th>Covariate</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirituality</td>
<td>.01</td>
<td>.04</td>
<td>.03</td>
</tr>
<tr>
<td>Work, Recreation, and Leisure</td>
<td>.20</td>
<td>.06</td>
<td>.27</td>
</tr>
<tr>
<td>Friendship</td>
<td>.07</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Love</td>
<td>.00</td>
<td>.07</td>
<td>.00</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>.06</td>
<td>.03</td>
<td>.18</td>
</tr>
</tbody>
</table>

Note. $R^2 = .35$.  
*p < .05.  **p < .01.

**DISCUSSION**

This study revealed a significant relationship between reported adherence to a holistic wellness model (as measured by engagement in wellness behaviors and agreement with wellness ideology) and state (affective component) and trait (quality of life) aspects of psychological well-being. The multivariate results indicated that in combination the five wellness variables are significantly related to the two psychological well-being variables. The nature of this significant relationship was further examined by using betas from univariate analyses on each dependent variable separately to reveal which wellness tasks contributed most to the significance of this relationship.

The variables self-regulation and work, recreation, and leisure of the wellness model seem to be the best predictors of a college students’ psychological well-being (state and trait). The strong relationship between self-regulation and psychological well-being is supportive of Lightsey’s (1996) comprehensive review of research studies that found consistently positive relationships between generalized self-efficacy and psychological well-being. Apparently, students in the current study who experienced success in tasks that

**TABLE 2**  
Summary of Simultaneous Regression Analysis for Variables Predicting the Trait Dimension of Subjective Well-Being

<table>
<thead>
<tr>
<th>Covariate</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
</tr>
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<tbody>
<tr>
<td>Spirituality</td>
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<td>.05</td>
<td>.09</td>
</tr>
<tr>
<td>Work, Recreation, and Leisure</td>
<td>.16</td>
<td>.09</td>
<td>.17</td>
</tr>
<tr>
<td>Friendship</td>
<td>.26</td>
<td>.11</td>
<td>.26</td>
</tr>
<tr>
<td>Love</td>
<td>.05</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>.07</td>
<td>.03</td>
<td>.27</td>
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Note. $R^2 = .40$.  *p < .05.
constitute the self-regulation variable (managing stress, sense of worth, control, emotional responsiveness and management, intellectual challenge, nutrition, exercise, sense of gender, and cultural identity) were also the students who felt positive about the way their lives were going. Experiencing success in these self-regulating tasks seems to be associated with higher levels of psychological well-being.

Strong relationships found between the work, recreation, and leisure variable and psychological well-being seemed to support and expand previous findings that work satisfaction is a good predictor of longevity (Bortz, 1991; Pelletier, 1981). The WEL's comprehensive definition of this variable is evaluated by the amount the person is engaging in meaningful activity, regardless of the absence or presence of monetary gain.

Friendship reached statistical significance in the univariate analysis with the trait dimension of psychological well-being but not with the state dimension. This finding is consistent with research that supports the importance of social relationships and quality of life. The fact that it did not reach statistical significance on both dimensions may stem from the dynamic nature of the state aspect of psychological well-being. The fact that one enjoys quality relationships with peers may not be critical to the fluctuating short-term affective state experiences one has in life.

The nature of the constructs used in this study has been difficult to define and capture through paper-and-pencil test items, which gives all such studies inherent limitations. The results also need to be generalized only so far as one recognizes the population was volunteers only from six classes at a large midwestern university. Finally, consideration should be given to the fact that the measures were given consecutively, which creates the possibility of overlap in participant answers from one instrument to the other. Although all these limitations are common for this type of study, they deserve attention when considering outcomes and additional research steps.

Implication for Counseling in Higher Education

This analysis of relationships between wellness and psychological well-being has repercussions for institutions of higher education that are increasingly pressed to find more effective ways of supporting students. Most current retention goals are predicated on involving students in curricular activities to enhance their psychological experience of the campus environment (Noel, Lovitz, & Saluri, 1985). The results of this study combined with previous research should point college directors and campus leaders to additional actions and formative means for evaluating outcomes.

The importance of implementing activities that help students develop self-regulating behaviors gives specificity to the role institutions of higher education must play. Activities that help students gain control of stress levels, intellectual challenges, nutritional needs, and a sense of self-worth, including gender and cultural identities, seem to go a long way toward increasing satisfaction with personal and academic experiences. Counseling centers, career counseling centers, and health services on campus can educate and increase students' self-regulating behaviors through psycho-educational programs directed at these key components (e.g., managing stress, managing time, nutrition, and development of cultural and gender awareness).

Identification of vocational and avocational meaningful pursuits is a challenge faced by every student. Colleges' efforts to assist individuals in identifying and pursuing these personally meaningful activities may increase satisfaction with experiences on campus. Career counseling and campus programming efforts directed at student exploration of meaningful pursuits should aid the quality of student life on campus and satisfaction with personal and academic experiences.

Research on psychological well-being, happiness, and life satisfaction quintupled in the 1980s (D. G. Myers & Diener, 1995). This area has clearly become a major factor in the assessment of quality of student life (Presser & Terenzini, 1991) and can be used as a marker for university administrators evaluating the impact of efforts to improve student life. Holistic wellness activities that are initiated to improve the experience of college students can be expected to result in higher levels of student psychological well-being. Using psychological well-being as a measure of success in this way adds an important formative dimension to the use of student retention rates. Although it is true that retention rates offer clear numerical outcome data, they have little value in the ongoing assessment of what needs to be changed, when, how, and for whom. Once students have not returned to school, they will show up in retention rate data, but there is little that can be done to help them at that point. On the other hand, psychological well-being can be used in formative evaluations to identify a program's weaknesses and strengths. These areas can then be given attention before individuals or groups of students might choose to leave college.

The utility of the holistic wellness model and psychological well-being can also be linked to evaluation, assessment, and accreditation. The model is not simply a low priority—do it if you have time—activity. It is a viable method for evaluating, assessing, and predicting outcomes in college counseling centers around the country (Howard, Loeger, Maling, & Martinovich, 1993). Kiracofe et al. (1994) noted that for university and college counseling centers to become accredited, they should provide "programming focused on the developmental needs of students that maximizes their potential to benefit from an academic experience" (p. 39). The findings in this study underscore the importance of using proactive strategies that result in students moving in a positive direction toward the less spoken Jeffersonian ideals of striving for the ultimate goal—happiness and well-being.

In summary, the results of this research demonstrate a significant positive relationship between adherence to a holistic wellness model and one psychological construct,
psychological well-being, and supports Sivik et al.'s (1992) theoretical position that wellness goes beyond the current focus on physiology. Future studies should examine other psychological constructs and their relationships with wellness adherence. These studies could incorporate physiological measures and observational measures in addition to paper-and-pencil self-reports. Regardless of method of assessing the effects of wellness adherence, psychological constructs, although less obvious, may hold equal or possibly even greater significance to our understanding of the wellness of the whole person.

REFERENCES


Kozma, A., & Stones, M. J. (1984). The Memorial University of Newfoundland Scale of Happiness (MUNSH). *Newfoundland, Canada: Memorial University*


