

The Mental Health Continuum: From Languishing to Flourishing in Life*

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This paper introduces and applies an operationalization of mental health as a syndrome of symptoms of positive feelings and positive functioning in life. Dimensions and scales of subjective well-being are reviewed and conceived of as mental health symptoms. A diagnosis of the presence of mental health, described as flourishing, and the absence of mental health, characterized as languishing, is applied to data from the 1995 Midlife in the United States study of adults between the ages of 25 and 74 (n = 3,032). Findings revealed that 17.2 percent fit the criteria for flourishing, 56.6 percent were moderately mentally healthy, 12.1 percent of adults fit the criteria for languishing, and 14.1 percent fit the criteria for DSM-III-R major depressive episode (12-month), of which 9.4 percent were not languishing and 4.7 percent were also languishing. The risk of a major depressive episode was two times more likely among languishing than moderately mentally healthy adults, and nearly six times greater among languishing than flourishing adults. Multivariate analyses revealed that languishing and depression were associated with significant psychosocial impairment in terms of perceived emotional health, limitations of activities of daily living, and workdays lost or cutback. Flourishing and moderate mental health were associated with superior profiles of psychosocial functioning. The descriptive epidemiology revealed that males, older adults, more educated individuals, and married adults were more likely to be mentally healthy. Implications for the conception of mental health and the treatment and prevention of mental illness are discussed.

There are grave reasons for concern about the prevalence and etiology of mental illness. Unipolar depression, for example, strikes many individuals annually and recurrently throughout life (Angst 1988; Gonzales, Lewinsohn, and Clarke 1985). Upwards of one-half of adults may experience a serious mental illness in their lifetime; between 10 percent and 14 percent of adults experience an

episode of major depression annually (Cross-National Collaborative Group 1992; Kessler et al. 1994; Robins and Regier 1991; U.S. Department of Health and Human Services 1999). As a persistent and substantial deviation from normal functioning, mental illness impairs the execution of social roles (e.g., employee) and it is associated with emotional suffering (Keyes 2001; Spitzer and Wilson 1975). Depression costs billions each year due to work absenteeism, diminished productivity, healthcare costs (Greenberg et al. 1993; Keyes and Lopez 2002; Murray and Lopez 1996; Mrazek and Haggerty 1994), and it accounts for at least one-third of completed suicides (Rebellion, Brown, and Keyes 2001; U.S. Department of Health and Human Services 1998).

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Yet about one-half of the adult population should remain free of serious mental illnesses over its lifespan, and as much as 90 percent should remain free of major depression annually. Are adults who remain free of mental illness annually and over a lifetime mentally healthy and productive? This is a pivotal question for proponents of the study of mental health (Keyes and Shapiro forthcoming), and it is the guiding question to this study. Mental health is, according to the Surgeon General (U.S. Department of Health and Human Services 1999), “. . . a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with people, and the ability to adapt to change and to cope with adversity” (p. 4). Social scientists have lobbied over 40 years for a definition of mental health as more than the absence of mental illness (Jahoda 1958). M. Brewster Smith (1958) lamented that “positive” mental health is a “slogan” and a “rallying call” rather than the empirical concept and variable it deserves to be. Despite the Surgeon General’s definition 41 years later, mental health remains the antonym of mental illness and a catchword of inert good intentions.

This paper introduces and applies an operationalization of mental health as a syndrome of symptoms of positive feelings and positive functioning in life. It summarizes the scales and dimensions of subjective well-being, which are symptoms of mental health. Whereas the presence of mental health is described as flourishing, the absence of mental health is characterized as languishing in life. Subsequently, this study addresses four research questions. First, what is the prevalence of flourishing, languishing, and moderate mental health in the United States? Second, what is the burden of languishing relative to major depression episode and to flourishing in life? Third, is mental health (flourishing) associated with better psychosocial functioning relative to major depression and languishing in life? Fourth, is mental health, like most mental illnesses, unequally distributed in the population; who, in other words, is mentally healthy?

MENTAL HEALTH AND ITS SYMPTOMS

Like mental illness, mental health is defined here as an emergent condition based on the concept of a syndrome. A state of health, like

illness, is indicated when a set of symptoms at a specific level are present for a specified duration and this constellation of symptoms coincides with distinctive cognitive and social functioning (cf. Keyes 2001; Mechanic 1999). Mental health may be operationalized as a syndrome of symptoms of an individual’s subjective well-being. During the last 40 years, social scientists have conceptualized, measured, and studied the measurement structure of mental health through the investigation of subjective well-being (e.g., Headey, Kelley, and Wearing 1993; Keyes Shmotkin, and Ryff forthcoming). Subjective well-being is individuals’ perceptions and evaluations of their own lives in terms of their affective states and their psychological and social functioning (Keyes and Waterman, forthcoming).

Emotional well-being is a cluster of symptoms reflecting the presence or absence of positive feelings about life. Symptoms of emotional well-being are ascertained from individuals’ responses to structured scales measuring the presence of positive affect (e.g., individuals is in good spirits), the absence of negative affect (e.g., individual is not hopeless), and perceived satisfaction with life. Measures of the expression of emotional well-being in terms of positive affect and negative affect are related but distinct dimensions (e.g., Bradburn 1969; Watson and Tellegen 1985). Last, measures of avowed (e.g., “I am satisfied with life”) and expressed (i.e., positive and negative affect) emotional well-being are related but distinct dimensions (Andrews and Withey 1976; Bryant and Veroff 1982; Diener 1984; Diener, Sandvik, and Pavot 1991; Diener et al. 1999).

Like mental illness (viz. depression), mental health is more than the presence and absence of emotional states. In addition, subjective well-being includes measures of the presence and absence of positive functioning in life. Since Ryff’s (1989) operationalization of clinical and personality theorists’ conceptions of positive functioning (Jahoda 1958), the field has moved toward a broader set of measures of well-being. Positive functioning consists of six dimensions of psychological well-being: self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy (see Keyes and Ryff’s 1999 review). That is, individuals are functioning well when they like most parts of themselves, have warm and trusting relationships,

see themselves developing into better people, have a direction in life, are able to shape their environments to satisfy their needs, and have a degree of self-determination. The psychological well-being scales are well-validated and reliable (Ryff 1989), and the six-factor structure has been confirmed in a large and representative sample of U.S. adults (Ryff and Keyes 1995).

However, there is more to functioning well in life than psychological well-being. Elsewhere (Keyes 1998) I have argued that positive functioning includes social challenges and tasks, and I proposed five dimensions of social well-being. Whereas psychological well-being represents more private and personal criteria for evaluation of one's functioning, social well-being epitomizes the more public and social criteria whereby people evaluate their functioning in life. These social dimensions consist of social coherence, social actualization, social integration, social acceptance, and social contribution. Individuals are functioning well when they see society as meaningful and understandable, when they see society as possessing potential for growth, when they feel they belong to and are accepted by their communities, when they accept most parts of society, and when they see themselves contributing to society. The social well-being scales have shown good construct validity and internal consistency, and the five-factor structure has been confirmed in two studies based on data from a nationally representative sample of adults (Keyes 1998).¹

It is probably less evident that the dimensions of social well-being, compared with emotional and psychological well-being, are indicative of an individual's mental health. However, the Surgeon General's definition of mental health included particular reference to criteria such as "productive activities," "fulfilling relationships," and "the ability to adapt to change," all of which imply the quality of an individual's complete engagement in society and life. Measures of emotional well-being often identify an individual's satisfaction or positive affect with "life overall," but rarely with facets of their social lives. The dimensions of psychological well-being are intrapersonal reflections of an individual's adjustment to and outlook on their life. Only one of the six scales of psychological well-being—positive relations with others—reflects the ability to build and maintain intimate and

trusting interpersonal relationships. I have argued elsewhere and have shown empirically (Keyes 1998) that an individual's adjustment to life includes the aforementioned facets of social well-being. That is, factor analyses showed that the mental health measures formed three correlated but distinct factors: emotional, psychological, and social well-being.

Last, some dimensions of social well-being (viz. social integration) are identical with theoretical explanations of interpersonal and societal level causes of mental health (e.g., social support and social networks). We have argued elsewhere (Keyes and Shapiro forthcoming) that constructs such as social integration exist at multiple levels of analysis (i.e., societal, interpersonal, and individual). However, I concur with Larson (1996), who said that "The key to deciding whether a measure of social well-being is part of an individual's health is whether the measure reflects *internal* responses to stimuli—feelings, thoughts and behaviors reflecting satisfaction or lack of satisfaction with the social environment" (p. 186). From this perspective, the measures of social well-being, like the measures of psychological and emotional well-being, should be viewed as indicators of an individual's mental health status.

TOWARD A DIAGNOSIS OF MENTAL HEALTH

Empirically, mental health and mental illness are not opposite ends of a single measurement continuum. Measures of symptoms of mental illness (viz. depression) correlate negatively and modestly with measures of subjective well-being. In two separate studies reviewed by Ryff and Keyes (1995), the measures of psychological well-being correlated, on average, $-.51$ with the Zung depression inventory and $-.55$ with the Center for Epidemiological Studies depression (CESD) scale. Indicators and scales of life satisfaction and happiness (i.e., emotional well-being) also tend to correlate around $-.40$ to $-.50$ with scales of depression symptoms (see Frisch et al. 1992).

Confirmatory factor analyses of the subscales of the CESD and the scales of psychological well-being scales in a sample of U.S. adults supported the two-factor theory (Keyes,

Ryff, and Lee 2001). That is, the best-fitting model was one where the CESD subscales were indicators of the latent factor that represented the presence and absence of mental illness (see also Headey et al. 1993). The psychological well-being scales were indicators of a second latent factor that represented the presence and absence of mental health. In short, mental health is not merely the absence of mental illness; it is not simply the presence of high levels of subjective well-being. Mental health is best viewed as a complete state consisting of the presence and the absence of mental illness and mental health symptoms.

The mental health continuum consists of complete and incomplete mental health. Adults with complete mental health are *flourishing* in life with high levels of well-being. To be flourishing, then, is to be filled with positive emotion and to be functioning well psychologically and socially. Adults with incomplete mental health are *languishing* in life with low well-being. Thus, languishing may be conceived of as emptiness and stagnation, constituting a life of quiet despair that parallels accounts of individuals who describe themselves and life as "hollow," "empty," "a shell," and "a void" (see Cushman 1990; Keyes forthcoming; Levy 1984; Singer 1977).

Conceptually and empirically, measures of subjective well-being fall into two clusters of symptoms: emotional and functional well-being. The measures of emotional well-being comprise a cluster that reflects emotional vitality. In turn, the measures of psychological well-being and social well-being reflect a multifaceted cluster of symptoms of positive functioning. These two clusters of mental health symptoms mirror the symptom clusters used in the DSM-III-R (American Psychiatric Association 1987) to diagnose major depression episode. Major depression consists of symptoms of depressed mood or anhedonia (e.g., loss of pleasure derived from activities) and a multifaceted cluster of symptoms (i.e., vegetative and hyperactive) of malfunctioning (e.g., insomnia or hypersomnia). Of the nine symptoms of major depression, a diagnosis of depression is warranted when a respondent reports five or more symptoms, with at least one symptom coming from the affective cluster.

The DSM approach to the diagnosis of major depression is employed as a theoretical guide for the diagnosis of mental health, whose

symptom clusters mirror theoretically and empirically the symptom clusters for depression. That is, mental health is best operationalized as syndrome that combines symptoms of emotional well-being with symptoms of psychological and social well-being. In the present study, respondents completed a structured scale of positive affect and a question about life satisfaction (i.e., emotional well-being). Respondents also completed the six scales of psychological well-being and the five scales of social well-being. Altogether, this study included two symptom scales of emotional vitality, and 11 symptom scales of positive functioning (i.e., six psychological and five social).

The diagnostic scheme for mental health parallels the scheme employed to diagnose major depression disorder wherein individuals must exhibit just over half of the total symptoms (i.e., at least five of nine). To be *languishing* in life, individuals must exhibit a low level (low = lower tertile) on one of the two measures of emotional well-being, and low levels on six of the 11 scales of positive functioning. To be *flourishing* in life, individuals must exhibit a high level (high = upper tertile) on one of the two measures of emotional well-being and high levels on six of the 11 scales of positive functioning. Adults who are *moderately mentally healthy* are neither flourishing nor languishing in life. In short, individuals who are languishing or flourishing must exhibit, respectively, low or high levels on at least seven or more of the 13 symptom scales. Thus, as with the diagnosis of major depression, symptoms of emotional vitality are essential for the diagnosis of mental health insofar as individuals must exhibit specific levels of satisfaction or positive affect (cf. Penninx et al. 1998). Moreover, as with depression, in which individuals must exhibit at least five of the nine (i.e., over 50 percent) of the symptoms, the diagnostic criteria for mental health require over 50 percent of the symptoms to be present at specific levels for a diagnosis. In the absence of a clear criterion for symptom level comparable to depression (i.e., symptom must be present "all" or "most" of the time for at least two weeks), this paper employs the scale tertile, which operationalizes symptom level somewhat arbitrarily and relative to the sample respondents.

This diagnosis is employed to investigate and compare the prevalence and psychosocial

functioning associated with the categories of mental health and with major depression. Moreover, this paper examines the descriptive epidemiology of mental health and major depression by gender, age, education, and marital status, which are variables that have been consistently linked with the risk of depression (see Horwitz and Scheid 1999).

METHODS

Sample

Data are from the MacArthur Foundation's Midlife in the United States survey. This survey was a random-digit-dialing sample of non-institutionalized English-speaking adults age 25 to 74 living in the 48 contiguous states, whose household included at least one telephone. In the first stage of the multistage sampling design, investigators selected households with equal probability via telephone numbers. At the second stage, they used disproportionate stratified sampling to select respondents. The sample was stratified by age and sex, and males between ages 65 and 74 were over-sampled.

Field procedures were initiated in January of 1995 and lasted 13 months. Respondents were contacted and interviewed by trained personnel, and those who agreed to participate in the entire study took part in a computer-assisted telephone interview lasting 30 minutes, on average. Respondents then were mailed two questionnaire booklets requiring 1.5 hours, on average, to complete. Respondents were offered \$20, a commemorative pen, periodic reports of study findings, and a copy of a monograph on the study.

The sample consists of 3,032 adults. With a 70 percent response rate for the telephone phase and an 87 percent response rate for the self-administered questionnaire phase, the combined response is 61 percent ($.70 \times .87 = .61$). Descriptive analyses are based on the weighted sample to correct for unequal probabilities of household and within household respondent selection. The sample weight post-stratifies the sample to match the proportions of adults according to age, gender, education, marital status, race, residence (i.e., metropolitan and non-metropolitan), and region (Northeast, Midwest, South, and West) based

on the October 1995 Current Population Survey.

Measures

Mental illness. The Midlife in the United States survey employed the Composite International Diagnostic Interview Short Form (CIDI-SF) scales (Kessler et al. 1998), which demonstrated excellent diagnostic sensitivity and specificity when compared with diagnoses based on the complete CIDI in the National Comorbidity Study (Kessler et al. 1999). During the telephone interview, the CIDI-SF was used to assess whether respondents exhibited symptoms indicative of major depression episode during the past 12 months. Respondents were classified as having had a major depressive episode based on the criteria established by the DSM-III-R (American Psychiatric Association 1987).

Emotional well-being. By self-administered questionnaire, respondents indicated how much of the time during the past 30 days—"all," "most," "some," "a little," or "none of the time"—they felt six symptoms of positive affect. The positive affect symptoms are (1) cheerful, (2) in good spirits, (3) extremely happy, (4) calm and peaceful, (5) satisfied, and (6) full of life. The internal reliability of the positive affect scale is .91 (see also Mroczek and Kolarz 1998). Respondents also evaluated their life satisfaction as follows: "rate their life overall these days" on a scale from 0 to 10, where 0 meant the "worst possible life overall" and 10 meant "the best possible life overall."

Psychological well-being. Ryff's (1989) measures of psychological well-being operationalize how much individuals see themselves thriving in their personal life. The scales represent distinctive dimensions (Ryff and Keyes 1995) of subjective well-being. The scales with a representative item in parenthesis are as follows: self-acceptance ("I like most parts of my personality"), positive relations with others ("maintaining close relationships has been difficult and frustrating for me"), personal growth ("For me, life has been a continual process of learning, changing, and growth"), purpose in life ("I sometimes feel as if I've done all there is to do in life"), environmental mastery ("I am good at managing the responsibilities of daily life"), and autonomy ("I tend to

be influenced by people with strong opinions”).

Each scale consisted of three items with a relative balance of positive and negative items self-administered via the questionnaire. On a scale from 1 to 7 (with 4 as a middle category of neither agree nor disagree), respondents indicated whether they agreed or disagreed strongly, moderately, or slightly that an item described how they functioned (i.e., thought or felt). Negative items were reverse-coded. The three-items scales have shown modest internal consistency (i.e., around .50; see Ryff and Keyes 1995), and the internal consistency of the combined 18 items is .81.

Social well-being. Keyes' (1998) measures of social well-being operationalize how much individuals see themselves thriving in their social life. The scales with a representative item in parentheses are as follows: social-acceptance (“People do not care about other peoples’ problems”), social actualization (“Society isn’t improving for people like me”), social contribution (“My daily activities do not create anything worthwhile for my community”), social coherence (“I cannot make sense of what’s going on in the world”), and social integration (“I feel close to other people in my community”).

Each scale consisted of three items with a relative balance of positive and negative items and was self-administered. On a scale from 1 to 7 (with 4 as a middle category of neither agree nor disagree), respondents indicated whether they agreed or disagreed strongly, moderately, or slightly that an item described how they functioned (i.e., thought or felt). Negative items were reverse-coded. The three-item scales have shown modest-to-excellent internal consistency (Keyes 1998), and the internal consistency of the social well-being scale with all items combined is .81.

To diagnose mental health, all scales of well-being were divided by the number of constituent items, standardized, and tertiles were computed for each scale. Individuals with scores in the upper tertiles of one of the two emotional well-being scales and six of the 11 scales of psychological and social well-being were classified as flourishing. Individuals with scores in the lower tertiles of one of the two emotional well-being scales and six of the 11 scales of psychological and social well-being were classified as languishing.² Adults who

were neither flourishing nor languishing were classified as moderately mentally healthy.

Psychosocial functioning and impairment. Respondents evaluated their emotional, mental health as “poor,” “fair,” “good,” “very good,” or “excellent.” Respondents also indicated whether their health limited them “a lot,” “some,” “a little,” or “not at all” from doing any of nine instrumental activities of daily life. The activities included lifting and carrying groceries, bathing or dressing oneself, climbing several flights of stairs, bending (kneeling or stooping), walking more than a mile, walking several blocks, walking one block, vigorous activity (running, lifting heavy objects), and moderate activity (bowling or vacuuming). The internal consistency of the limitation of activity of daily living scale was .91.

Respondents also indicated the number of workdays lost and workdays cut back during the past 30 days. Specifically, of the past 30 days, respondents were asked, “how many days were you totally unable to go to work or carry out your normal household work activities because of your physical health or mental health?” Subsequently, of the past 30 days, and aside from those days they were totally unable to work, respondents were asked, “how many of the other days did you have to cut back on work or how much you got done because of your physical health or mental health?” Follow-up questions inquired whether the work cutbacks and lost days of work were due to physical health, to mental health, or to a combination of mental and physical health. This study focuses on only those cutback days and lost days of work due exclusively or partially (i.e., mental and physical health) to mental health.

Sociodemographic and control variables. Chronological age was coded into four dummy variables—ages 25 to 34, 35 to 44, 45 to 54, and ages 55 to 64—and aged 65 to 74 was the reference category. Sex, race (white versus minority), marital status (currently married versus all other), and employment status (part- or full-time versus unemployed) were coded dichotomously. Education, measured as the highest grade or year or schooling completed at the time of the interview, was coded into three dummy variables: 11 or fewer years, 13 to 15 years, and respondents with 16 or more years of education (respondents with 12 years or its equivalent [e.g., GED] were in the reference category).

RESULTS

Prevalence

Table 1 presents the prevalence estimates of major depression episode and mental health status, as well as the cross-classification of mental health status with major depression. Most adults, 85.9 percent, did not have a depressive episode. Only 17.2 percent of adults who did not have depression were flourishing in life, 12.1 percent were languishing in life, and just over one-half were moderately mentally healthy. Of the 14.1 percent of adults who had a depressive episode during the past year, only 0.9 percent were flourishing, 8.5 percent had moderate mental health, and 4.7 percent were also languishing.

Exactly 28 percent of languishing adults had major depression, while 13.1 percent of adults with moderate mental health, and 4.9 percent of flourishing adults, had a major depressive episode during the past year. Thus, compared with flourishing adults, moderately well adults were about 2.1 times more likely to have had major depression during the past year, while languishing adults were 5.7 times more likely. These findings, though cross-sectional, suggest that the absence of mental health (languishing) may be a risk factor for episodes of major depression.

Is pure languishing confounded with sub-threshold depression? Studies have consistently shown that depressive symptoms that do not meet the criteria for major depression are associated with physical disease and functional impairments at levels sometimes comparable

to that of major depression (see Pincus, Davis, and McQueen 1999). Thus, it would be unclear whether any association of languishing with functional impairment is due to the absence of mental health or the presence of some symptoms of depression. However, the mean number of symptoms of depression (range = 0–9) among adults with pure languishing (i.e., not depressed) was .13 (SD = .58). Thus, nearly all adults with pure languishing had no symptom of depression and therefore did not fit the criteria for any form of subthreshold depression (e.g., minor depression or dysthymia).³

Psychosocial Functioning and Impairment

Table 2 presents the bivariate association of the prevalence of indicators of levels of impairment with the combined diagnosis of major depression episode and mental health. About 18 percent of languishing adults, and 22 percent of adults with depression, said their emotional health was poor or fair; over twice as many, 55 percent, of languishing adults who had depression during the past year said their emotional health was poor or fair. Only 6 percent of moderately well and 1 percent of flourishing adults said their emotional health was poor or fair. In contrast, about 61 percent of moderately well and 81 percent of flourishing adults said their emotional health was very good or excellent. About 34 percent of languishing adults, 35 percent of adults with pure depression, and only 15 percent of languishing adults with major depression said their emotional health was very good or excellent.

TABLE 1. The Prevalence of Mental Health and Major Depression among Adults between the Ages of 25 and 74 in the 1995 Midlife in the United States Study

| | Mental Health Status | | | Total N % |
|--------------------------|--------------------------------------|--|------------------------|-----------------|
| | Languishing N % | Moderately Mentally Healthy N % | Flourishing N % | |
| Major Depressive Episode | | | | |
| No | 368 12.1 | 1,715 56.6 | 520 17.2 | 2,603 85.9 |
| | <i>Pure Languishing</i> | <i>Moderately Mentally Healthy</i> | <i>Flourishing</i> | |
| Yes | 143 4.7 | 259 8.5 | 27 0.9 | 429 14.1 |
| | <i>Depressed and Languishing</i> | <i>Pure Depression</i> | <i>Pure Depression</i> | |
| Total | 511 16.8% | 1,974 65.1% | 547 18.1% | 3032 100% |

Note: $\chi^2 = 120.5, p < .001$ (two-tailed)

TABLE 2. Prevalence of Psychosocial Impairment by Mental Illness and Mental Health Status

| Impairment Indicator | Mental Illness and Mental Health Status | | | | | χ^2 |
|--|---|-----------------|------------------|-----------------------------|-------------|--------------------|
| | Languishing and Depression | Pure Depression | Pure Languishing | Moderately Mentally Healthy | Flourishing | |
| Emotional Health | | | | | | 660.1*** df = 8 |
| Poor or Fair | 55.2 | 22.2 | 17.7 | 5.7 | 0.6 | |
| Good | 29.4 | 43.3 | 48.2 | 33.9 | 18.1 | |
| Very Good or Excellent | 15.4 | 34.5 | 34.1 | 60.5 | 81.3 | |
| One or More Severe ^a | 69.4 | 54.7 | 64.0 | 54.7 | 42.0 | 59.1*** df = 4 |
| Limitation of Daily Activities of Living | | | | | | |
| Six or More Work Days Lost ^b | 11.9 | 2.5 | 2.2 | 0.5 | 0 | 144.1*** df = 4 |
| Six or More Work Days Cutback ^c | 16.8 | 7.0 | 1.6 | 0.4 | 0 | 243.0*** df = 4 |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed)

^a Defined as any activity in which respondent perceived "a lot" of limitation.

^b Number days of past 30 in which respondent was completely unable to work due to reasons of mental health or to combination of mental and physical health.

^c Number days of past 30 in which respondent had to reduce or cutback on amount of work completed due to reasons of mental health or to combination of mental and physical health.

Next, the analysis focused on severe activity limitation, operationalized as the report of "a lot" of limitation in one or more activities of daily living. About 64 percent of languishers, 55 percent of depressed only adults, and 69 percent of the languishing adults who also had major depression, reported a severe activity limitation. Moreover, 55 percent of moderately mentally healthy adults, compared with 42 percent of flourishing adults, reported a severe limitation of daily living in at least one activity. Last, the analysis focused on severe loss of workdays and severe cutbacks, where severe was operationalized as a loss or cutback of six or more days during the past 30 days. About 2 percent of languishing, 2.5 percent of depressed, and 12 percent of the languishing adults with an episode of major depression had a severe level of workdays lost due to mental health. Only .5 percent of moderately mentally healthy, and none of the flourishing adults, had a severe level of workdays lost due to mental health. In terms of work cutback, 1.6 percent of languishing, 7 percent of depressed only, and 17 percent of languishing adults with and episode of major depression had a severe level of work cutback due to mental health. Only .4 percent of the moderately mentally healthy and none of the flourishing adults had a severe level of workdays cut back due to mental health.

Next, multivariate logistic and ordinary least

squares regression models were used to estimate the psychosocial impairment associated with depression net of the sociodemographic variables. Two perceived emotional health variables were created: adults who said their emotional health was poor or fair were combined and coded 1, and all others 0; adults who said their emotional health was very good or excellent were combined and coded 1, and all others 0. These two outcomes were then regressed onto dummy variables indicating each mental health status, with moderately mentally healthy adults as the reference group.⁴ Table 3 reports the adjusted odds ratios and 95 percent confidence intervals for the mental illness and health variables.

Compared with moderately well adults, languishing adults were 3.5 times more likely, and depressed adults were 5 times more likely to say their emotional health was poor or fair. Adults who were languishing and had a depressive episode were 19 times more likely than moderately well adults to report poor or fair emotional health. Flourishing adults, however, were 85 percent less likely than moderately well adults to say their emotional health was poor or fair.

Flourishing adults were nearly 3 times more likely than moderately well adults to report very good or excellent emotional health. While languishing adults were 78 percent less likely and depressed adults were 78 percent less like-

TABLE 3. Simple Logistic Regression of Perceived Mental and Emotional Health (N = 3,031; sample unweighted)

| Predictor | Poor or Fair | | Very Good or Excellent | |
|--------------------------------|--------------|-----------|------------------------|-----------|
| | OR | (95% CI) | OR | (95% CI) |
| Males | 1.0 | (—) | 1.0 | (—) |
| Females | 1.0 | (.59–1.0) | .99 | (.83–1.2) |
| Minority Status | 1.0 | (—) | 1.0 | (—) |
| Caucasians | .65** | (.45–.92) | 1.4** | (1.1–1.8) |
| Age 25 to 34 | .66 | (.40–1.1) | 1.8*** | (1.4–2.6) |
| Age 35 to 44 | .98 | (.62–1.6) | 1.4* | (1.0–1.9) |
| Age 45 to 54 | 1.3 | (.81–2.0) | 1.2 | (.78–1.4) |
| Age 55 to 64 | .90 | (.56–1.5) | .94 | (.65–1.1) |
| Age 65 to 74 | 1.0 | (—) | 1.0 | (—) |
| 0 to 11 Years of Education | .36 | (.94–2.2) | .53*** | (.39–.71) |
| 12 Years of Education or GED | 1.0 | (—) | 1.0 | (—) |
| 13 to 15 Years of Education | .26 | (.58–1.2) | 1.2* | (1.0–1.5) |
| 16 or More Years of Education | .64 | (.40–.89) | 1.7** | (1.4–2.1) |
| Unmarried (includes Separated) | 1.0 | (—) | 1.0 | (—) |
| Married | .98 | (.72–1.3) | 1.2** | (1.0–1.4) |
| Unemployed | 1.0 | (—) | 1.0 | (—) |
| Employed (part- or full-time) | .41*** | (.30–.56) | 1.2 | (1.1–1.6) |
| Languishing and Depressed | 19.2*** | (12.5–29) | .11*** | (.07–.18) |
| Pure Major Depression Episode | 5.0*** | (3.4–7.3) | .32*** | (.25–.42) |
| Pure Languishing | 3.5*** | (2.4–5.1) | .32*** | (.25–.42) |
| Moderately Mentally Healthy | 1.0 | (—) | 1.0 | (—) |
| Flourishing | .15*** | (.05–.41) | 2.7*** | (2.2–3.5) |
| Nagelkerke's R ² | .28 | | .22 | |
| Model χ^2 | 409.7*** | | 546.3*** | |

Note: **p* < .05 ***p* < .01 ****p* < .001 (two-tailed)

ly to have very good or excellent emotional health, adults who were languishing and had major depression were 89 percent less likely than moderately well adults to report very good or excellent emotional health.

Table 4 reports the regressions of the total limitations of activities of daily life and the number of activities with severe limitations (defined as “a lot” of limitation due to health). Compared with moderately mentally healthy adults, flourishing individuals reported less activity limitation and fewer activities with severe limitation. However, adults who were languishing and individuals who were languishing and had a major depressive episode reported more overall limitations of daily living and had more activities with severe limitation. Although adults with depression only had more limitation of daily living than moderately well adults, depressed only adults did not have more activities with severe limitation than moderately mentally healthy adults.

Table 5 reports the regressions of the number of workdays lost and the log-odds of severe (6 or more days) loss of work. Languishing adults and adults with pure depression lost just under a half of a workday more than adults

who were moderately mentally healthy. However, adults who were languishing and had a major depressive episode missed an average of 2.6 more days of work than moderately well adults. Flourishing and moderately well adults had the fewest number of workdays lost. In turn, languishing adults were 4.5 times more likely than moderately well adults to have missed six or more days of work, while depressed only adults were 3.8 times more likely. Individuals who were languishing but also had a major depressive episode were 17 times more likely than moderately well individuals to have had a severe number of workdays lost due to mental health. Flourishing and moderately well adults had the same number of workdays lost and the same probability of severe loss of work.

Table 6 reports the regressions of the number of days of work cut back and the log-odds of severe (6 or more days) work cutbacks. Adults with pure depression cut back an average of 1 day of work, while languishing adults who had a major depressive episode cut back an average of 2.6 days of work, compared with moderately mental healthy individuals. Languishing only, flourishing, and moderately

TABLE 4. Ordinary Least Squares Regression of Limitations of Instrumental Activities of Daily Life (N = 3,001; sample unweighted)

| Predictor | Overall Limitation of Daily Activities | | Number Activities "A Lot" of Limitation | |
|--------------------------------|--|---------|---|---------|
| | b | β | b | β |
| Males | — | — | — | — |
| Females | .50*** | .09 | .18*** | .06 |
| Minority Status | — | — | — | — |
| Caucasians | -.58*** | -.07 | .05 | .01 |
| Age 25 to 34 | -1.9*** | -.28 | -.86*** | -.23 |
| Age 35 to 44 | -1.4*** | -.21 | -.65*** | -.18 |
| Age 45 to 54 | -1.0*** | -.16 | -.52*** | -.15 |
| Age 55 to 64 | -.27 | -.04 | -.29** | -.08 |
| Age 65 to 74 | — | — | — | — |
| 0 to 11 Years of Education | .42* | .04 | -.25* | -.05 |
| 12 Years of Education or GED | — | — | — | — |
| 13 to 15 Years of Education | -.43*** | -.07 | -.26*** | -.08 |
| 16 or More Years of Education | -.64*** | -.11 | -.32*** | -.10 |
| Unmarried (includes Separated) | — | — | — | — |
| Married | -.21* | -.03 | -.08 | -.03 |
| Unemployed | — | — | — | — |
| Employed (part- or full-time) | -1.0*** | -.16 | .05 | .02 |
| Languishing and Depressed | 1.7*** | .12 | .50*** | .08 |
| Pure Major Depression Episode | .69*** | .07 | .17 | .03 |
| Pure Languishing | 1.1*** | .13 | .36*** | .08 |
| Moderately Mentally Healthy | — | — | — | — |
| Flourishing | -.88*** | -.13 | -.39*** | -.11 |
| α | 4.9 | | 1.8 | |
| R ² | .21 | | .06 | |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed)

well adults had the same number of work cut-back days. In turn, depressed only adults were 11 times more likely than moderately well individuals to have cut back on six or more days of work due to their mental health, while individuals who were languishing and had a major depressive episode were nearly 26 times more likely. Languishing adults were 3 times more likely than moderately well adults to have severe cutbacks in work. Flourishing and moderately well adults had the same probability of severe work cutbacks.

Who is mentally healthy? Table 7 presents the descriptive epidemiology of the mental health diagnosis by gender, age, education, and marital status. Consistent with prior research, this study finds a higher prevalence of poor mental health among females, younger adults, less educated individuals, and unmarried adults. Pure depression is more prevalent among females, among adults between the ages of 25 to 54, and among separated and divorced individuals. Pure depression is about equally prevalent across the educational categories. The most dysfunctional category of languishing with an episode of depression is more prevalent among females, among adults

between the ages of 25 and 54, among individuals with 11 or fewer years of education, and among divorced individuals. Pure languishing is more prevalent among younger adults between the ages of 25 and 64, among adults with a high school degree (or equivalent) or less, and among adults who are separated from their spouse; pure languishing is about equally prevalent for males and females. Mental health, or flourishing in particular, is more prevalent among males, older adults between the ages of 45 and 74, individuals with 16 or more years of education, and among married adults. The findings are therefore consistent with and extend past research showing a higher rate of depression among females, younger adults, less educated individuals, and unmarried adults. Males, older adults (which stopped at the age of 74 in this study), more educated individuals, and married adults were more mentally healthy.

DISCUSSION

Many individuals remain free of mental illness each year and over their lifetimes.

TABLE 5. Ordinary Least Squares and Simple Logistic Regressions of Work Days Lost During Past 30 Days Due to Reasons of Mental Health (N = 3,013; sample unweighted)

| Predictor | Number Work Days Lost | | 6 or More Work Days Lost | |
|--------------------------------|-----------------------|---------|--------------------------|------------|
| | b | β | OR | (95% CI) |
| Males | — | — | 1.0 | (—) |
| Females | -.04 | -.01 | .45 | (.33–1.2) |
| Minority Status | — | — | 1.0 | (—) |
| Caucasians | -.09 | -.03 | .45 | (.21–.97) |
| Age 25 to 34 | .37* | .06 | .30 | (.20–3.3) |
| Age 35 to 44 | .43** | .08 | .81 | (.26–2.6) |
| Age 45 to 54 | .56*** | .10 | 3.3* | (1.0–10.4) |
| Age 55 to 64 | .32* | .05 | 1.1 | (.37–3.2) |
| Age 65 to 74 | — | — | 1.0 | (—) |
| 0 to 11 Years of Education | .70*** | .08 | 3.9** | (1.6–9.9) |
| 12 Years of Education or GED | — | — | 1.0 | (—) |
| 13 to 15 Years of Education | -.10 | -.01 | 1.3 | (.52–3.1) |
| 16 or More Years of Education | -.03 | -.02 | .21 | (.03–1.7) |
| Unmarried (includes Separated) | — | — | 1.0 | (—) |
| Married | -.31*** | -.06 | .37** | (.18–.75) |
| Unemployed | — | — | 1.0 | (—) |
| Employed (part- or full-time) | -.82*** | -.15 | .10*** | (.04–.23) |
| Languishing and Depressed | 2.6*** | .22 | 16.9*** | (6.7–42.4) |
| Pure Major Depression Episode | .36** | .04 | 3.8** | (1.3–11) |
| Pure Languishing | .39** | .06 | 4.5** | (1.8–12) |
| Moderately Mentally Healthy | — | — | 1.0 | (—) |
| Flourishing | -.02 | -.01 | .01 | (.01–.03) |
| α | .67 | | | |
| R ² | .09 | | .37 ^a | |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed)
^aNagelkerke's R²; Model $\chi^2 = 160.7$ ($p < .001$).

However, is the absence of mental illness reflective of genuine mental health? The Midlife in the United States study provides a rare opportunity to investigate the costs and benefits associated with the absence (i.e., languishing) and the presence (i.e., flourishing) of mental health as well as mental illnesses such as major depression. The results of this paper suggest there are two grave reasons to be as concerned about pure languishing in life (i.e., the absence of mental health and mental illness) as the presence major depression. First, pure languishing is associated with substantial psychosocial impairment at levels comparable to an episode of pure depression. Second, pure languishing is as prevalent as pure episodes of major depression in this study.

Languishing is associated with poor emotional health, with high limitations of daily living, and with a high likelihood of a severe number (i.e., 6 or more) of lost days of work and work cutback that respondents attribute to their mental health. Although it was not associated with more days of work cutback, languishing was predictive of a severe number of

workdays cut back. Pure depression, too, was a burden. A major depressive episode was associated with poor emotional health, high limitations of activities of daily living, and a high likelihood of severe work cut back. However, relative to moderately mentally healthy adults, those with pure depression were not more likely to have a severe number of days lost of work.

Functioning is considerably worse when languishing and major depressive episode are comorbid during the past year. Languishing adults who had a major depressive episode in the past year reported the worst emotional health, the most limitation of activities of daily living, the most days of work lost and cut back, and the highest probability of having severe levels of workdays lost and workdays cut back by half. In contrast, functioning is markedly improved among mentally healthy adults. That is, moderately mentally healthy and flourishing adults reported the best emotional health, the fewest days of work loss, and the fewest days of work cutbacks. Moreover, flourishing adults reported even fewer limitations of activ-

TABLE 6. Ordinary Least Squares and Simple Logistic Regressions of Work Days Cutback During Past 30 Days Due to Reasons of Mental Health (N = 3,013; sample unweighted)

| Predictor | Number Work Days Cutback | | 6 or More Work Days Cutback | |
|--------------------------------|--------------------------|---------|-----------------------------|------------|
| | b | β | OR | (95% CI) |
| Males | — | — | 1.0 | (—) |
| Females | .05 | .01 | 1.2 | (.67–2.3) |
| Minority Status | — | — | 1.0 | (—) |
| Caucasians | -1.9 | -.04 | 1.1 | (.50–2.5) |
| Age 25 to 34 | .46** | .09 | 1.9 | (.28–2.7) |
| Age 35 to 44 | .47*** | .09 | 3.2 | (.32–11.9) |
| Age 45 to 54 | .55*** | .11 | 4.5* | (1.2–16.6) |
| Age 55 to 64 | .29* | .05 | .59 | (.44–7.4) |
| Age 65 to 74 | — | — | 1.0 | (—) |
| 0 to 11 Years of Education | .14 | .04 | .76 | (.30–1.9) |
| 12 Years of Education or GED | — | — | 1.0 | (—) |
| 13 to 15 Years of Education | -.08 | -.01 | .72 | (.33–1.6) |
| 16 or More Years of Education | -.07 | -.01 | 1.0 | (.41–2.4) |
| Unmarried (includes Separated) | — | — | 1.0 | (—) |
| Married | -.30 | -.01 | .56 | (.30–1.1) |
| Unemployed | — | — | 1.0 | (—) |
| Employed (part- or full-time) | -.46*** | -.10 | .29*** | (.16–.54) |
| Languishing and Depressed | 2.6*** | .24 | 25.6*** | (11.0–59) |
| Pure Major Depression Episode | 1.1*** | .15 | 10.9*** | (4.8–25) |
| Pure Languishing | .24 | .03 | 3.0* | (1.0–8.5) |
| Moderately Mentally Healthy | — | — | 1.0 | (—) |
| Flourishing | -.15 | -.02 | .01 | (.00–.08) |
| α | -.007 | | | |
| R ² | .09 | | .29 ^a | |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed)

^aNagelkerke's R²; Model $\chi^2 = 147.9$ ($p < .001$).

ities of daily living than adults who were moderately mentally healthy.

Languishing was as prevalent as having an episode of major depression. Nearly 5 percent of the sample had the most debilitating condition of languishing combined with an episode of major depression. Less than one-quarter of adults were flourishing; one-half of adults had a moderate level of mental health. When extrapolated to the target population,⁵ the prevalence estimates suggest that a combined total of 45 million adults were either languishing, depressed, or both (which constituted 29 percent of the sample). By comparison, about 32 million adults were mentally healthy based on the prevalence of flourishing in life. The bulk of the population is neither mentally ill nor mentally healthy, i.e., about 77 million are moderately mentally healthy. In sum, about 5 in 10 adults between the ages of 25 and 74 in 1995 were moderately well, another 2 in 10 were mentally healthy, and 3 in 10 were mentally unhealthy.

There are two important study limitations that suggest directions for future research. First, the data are cross-sectional. The ability

to collect data from the Midlife in the United States survey respondents in successive waves would permit investigation of whether languishing causes work impairments and physical disability or whether work cutbacks and the onset of physical disability cause languishing. That said, cross-sectional studies of the burden of depression have been followed-up with longitudinal studies showing that depression caused physical disability and diminished work productivity (Broadhead et al. 1990; Bruce et al. 1994). Languishing, too, may precede many forms of psychosocial impairment. Moreover, flourishing in life, and perhaps moderate mental health, could be a source of resilience, acting as a stress buffer against stressful life events and life transitions.

Second, the diagnosis of mental illness (viz. major depression) and languishing and flourishing were not comparable. That is, major depressive episode was diagnosed with the CIDI-SF; mental health was diagnosed with multi-item scales employing somewhat arbitrary thresholds for symptom level. The mental health symptom scales did not stipulate the duration (e.g., 2 weeks or more) of symptom

TABLE 7. The Prevalence of Mental Health and Illness by Select Sociodemographic Characteristics (Sample Weighted).

| Sociodemographics | Mental Illness and Mental Health Status | | | | | χ^2 |
|-----------------------|---|-----------------|------------------|-----------------------------|-------------|---------------------|
| | Languishing and Depression | Pure Depression | Pure Languishing | Moderately Mentally Healthy | Flourishing | |
| | N % | N % | N % | N % | N % | |
| Gender | | | | | | |
| Males | 40 3.0 | 93 7.1 | 158 12.0 | 763 57.9 | 264 20.0 | 40.4*** df = 4 |
| Females | 104 6.1 | 193 11.3 | 210 12.2 | 952 55.5 | 256 14.9 | |
| Age | | | | | | |
| 25 to 34 | 44 5.6 | 93 11.9 | 85 10.8 | 44 57.0 | 115 14.7 | 72.2*** df = 16 |
| 35 to 44 | 53 6.4 | 92 11.0 | 129 15.5 | 437 52.4 | 123 14.7 | |
| 45 to 54 | 26 4.5 | 52 9.1 | 66 11.5 | 307 53.5 | 123 21.4 | |
| 55 to 64 | 11 2.4 | 29 6.3 | 49 10.7 | 273 59.7 | 95 20.8 | |
| 65 to 74 | 8 2.3 | 19 5.4 | 33 9.3 | 237 66.8 | 58 16.3 | |
| 16 years or more | 15 2.2 | 67 9.6 | 37 5.3 | 390 56.0 | 188 27.0 | |
| Education | | | | | | |
| 0 to 11 years | 38 9.5 | 36 9.0 | 53 13.3 | 227 56.9 | 45 11.3 | 122.4*** df = 16 |
| 12 years or GED | 51 4.4 | 100 8.6 | 178 15.3 | 659 56.8 | 173 14.9 | |
| 13 to 15 years | 39 5.0 | 82 10.6 | 989 12.7 | 440 56.9 | 114 14.7 | |
| 16 years or more | 15 2.2 | 67 9.6 | 37 5.3 | 390 56.0 | 188 27.0 | |
| 13 to 15 years | 39 5.0 | 82 10.6 | 989 12.7 | 440 56.9 | 114 14.7 | |
| 16 years or more | 15 2.2 | 67 9.6 | 37 5.3 | 390 56.0 | 188 27.0 | |
| Marital Status | | | | | | |
| Married | 74 3.6 | 167 8.1 | 234 11.3 | 1,187 57.5 | 404 19.6 | 84.1*** df = 16 |
| Separated | 5 6.0 | 15 18.1 | 17 20.5 | 36 43.4 | 10 12.0 | |
| Divorced | 38 9.6 | 53 13.4 | 59 14.9 | 204 51.6 | 41 10.4 | |
| Widowed | 5 3.6 | 14 10.0 | 12 8.6 | 88 62.9 | 21 15.0 | |
| Never Married | 21 6.0 | 37 10.6 | 46 13.1 | 201 57.4 | 45 12.9 | |
| Never Married | 21 6.0 | 37 10.6 | 46 13.1 | 201 57.4 | 45 12.9 | |

Note: * $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed)

level or whether this represented a change in functioning.

Moreover, the DSM lingua franca, the affective disorder of major depression, and diagnosis were used as theoretical guides for the conception and determination of the mental health categories. The DSM has its detractors and supporters; still others such as myself are agnostic regarding the DSM and choose to utilize it as a tool and guide. The designation of caseness through diagnosis has advantages (e.g., ability to study age of onset) and disadvantages (e.g., somewhat arbitrary thresholds for clinical significance). Although it may medicalize the domain of mental health, the

use of terms such as “syndrome” and “symptoms” was viewed as germane and was an attempt to place the domain of mental health on equal footing with mental illness.

Despite this study’s limitation, its findings have implications for the conception of mental health and the treatment and prevention of mental illness. The National Institute of Mental Health (NIMH) periodically convenes scholars to identify research priorities. The first sentence in the 1995 report (U.S. Department of Health and Human Services 1995) states that the mission of the NIMH is “To improve this nation’s mental health . . .” by supporting “. . . a wide range of research

related to the etiology, diagnosis, treatment, and prevention of mental disorders" (p. 1) (emphasis added). Based on the present study, the question is whether the NIMH can "get there (i.e., to mental health) from here (i.e., mental disorders)."

Proponents of the study of mental health, and the implications of this study, would suggest that the mission of the NIMH is incomplete. Mental illness and mental health are highly correlated but belong to separate continua, and therefore the prevention and treatment of mental illnesses will not necessarily result in more mentally healthy individuals. Moreover, there appears to be a Pandora's box of economic and social burdens associated with the absence (i.e., languishing) of mental health, which is completely ignored by current programs in the NIMH and elsewhere (e.g., World Health Organization). The promotion of this nation's mental health will require programmatic infrastructure and funding for a wide range of research related to the etiology, diagnosis, treatment, prevention, and promotion of the absence and presence of mental health.

Moreover, treatment objectives for mental illness are symptom reduction and prevention of relapse (Gladis et al. 1999; U.S. Department of Health and Human Services 1999). However, findings from this study suggest mental health promotion should be the preeminent treatment objective. Moreover, interventions to prevent mental illness are based on findings of the study of risk and protective factors for mental illness. Future research should also investigate whether and how languishing adults are at risk for depression. Another source of prevention knowledge may be gleaned from the study of the life course and social contexts of mentally healthy youth and adults. Understanding the nature and etiology of the strengths and competencies of flourishing individuals may provide therapeutic insights for promoting strengths and competencies in mentally ill patients (see e.g., Fava 1999). It is time, in short, to retire the slogan of mental health and to invigorate the study and promotion of mental health.

NOTES

1. To date, there is no published research on the measurement properties of the psycho-

logical and social well-being scales in samples other than North America. Future research must investigate the measurement properties of these scales in additional continents and countries.

2. There were only four cases where individuals scored high on only the six scales of psychological well-being, and only two cases where individuals score low on only the six scales of psychological well-being. Thus, literally all diagnosed cases of languishing and flourishing are combinations of high and low levels of the symptoms from both dimensions (social as well as psychological) of positive functioning.
3. Only 21 adults with pure languishing had one or more depressive symptoms but did not fit the criteria for major depression. Analyses omitting the languishers with sub-threshold depression did not affect the conclusions of this study and are therefore retained in the languishing category for this study.
4. All regressions were run on the weighted and unweighted sample. Conclusions were unchanged by sample weighting, and the results therefore report findings from the unweighted sample.
5. Data from the Census Bureau suggested that the target population of adults between the ages of 25 and 74 in 1995 was approximately 154 million.

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