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Mental Health in Adolescence: Is America's Youth Flourishing?

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A continuous assessment and a categorical diagnosis of the presence of mental health, described as flourishing, and the absence of mental health, characterized as languishing, are proposed and applied to data from the second wave of the Child Development Supplement (CDS–II) of the Panel Study of Income Dynamics (PSID), in which a comprehensive set of subjective well-being items were administered to a sample of 1,234 youth ages 12–18. Flourishing was the most prevalent diagnosis among youth ages 12–14; moderate mental health was the most prevalent diagnosis among youth ages 15–18. Depressive symptoms decreased as mental health increased. Prevalence of conduct problems (arrested, skipped school, alcohol use, cigarette smoking, and marijuana use) also decreased and measures of psychosocial functioning (global self-concept, self-determination, closeness to others, and school integration) increased as mental health increased. Findings suggest the importance of positive mental health in future research on adolescent development.

Keywords: flourishing, mental health, subjective well-being, adolescence

Adolescence is a period of intensive development that roughly spans the ages of 12–18 years old. Because of the importance of developmental success during this period, with implications for adult development and health, there is keen interest in the mental health status of this important subpopulation in the United States. Depression—an exemplar of mental illness—is prevalent in childhood and adolescence. Nearly 1 in every 10 children has an episode of major depression before their 14th birthday (Garrison, Schluchter, Schoenbach, & Kaplan, 1989). By the time they can legally vote, drive a car, and drink alcohol in some states (i.e., roughly 16–17 years of age) as many as 20% of youth will have had some form of an anxiety or mood disorder or some form of a disruptive or substance use disorder (Lewinsohn, Hops, Roberts, & Seeley, 1993; Shaffer et al., 1996).

The onset of mental illness such as depression is routinely linked to downward spirals in behavior and quality of academic performance. That is, depressed youth are more likely to exhibit the markers of the "turbulent" adolescent than nondepressed youth. Depressed youth are more likely to smoke cigarettes, to report substance use and abuse, to exhibit conduct disorders, to experience academic problems, and to drop out of school (Angold & Costello, 1993; Berndt et al., 2000; Covey, Glassman, & Stetner, 1998; Nolen-Hoeksema, Girgus, & Seligman, 1992; Rohde, Lewinsohn, & Seeley, 1991).

Researchers aim to assess the mental health of America's children and youth by focusing on the measurement of mental illness. Although it is clear that children with depression are not mentally healthy, the assumption that children without a mental illness are mentally healthy is dubious. Despite proclamations about health as a complete state (e.g., World Health Organization, 1948), research has equated the health and well-being of children and youth, as well as adults, with the absence of disease, illness, disability, and malfunctioning. Measures of subjective well-being were developed to assess *positive mental health*, that is, mental health in terms of the presence of positive feelings toward one's life (Diener, Emmons, Larsen, & Griffin, 1985) and the level of functioning well in life (Keyes, 1998; Ryff, 1989). The purpose of this study is to investigate, using the positive mental health approach, the prevalence of positive mental health in youth and its association with important markers of adolescent developmental success.

Subjective Well-Being in Adolescence

Subjective well-being includes the evaluations and declarations that individuals make about the quality of their lives that are based on the review, weighting, and summation of the quality of experiences, accomplishments, relationships, and other culturally relevant and valued ways of functioning in life (Diener, Suh, Lucas, & Smith, 1999; Keyes, Shmotkin, & Ryff, 2002). Subjective well-being research has been adult-centric and hedonism-centric (e.g., Bradburn, 1969; Campbell, Converse, & Rodgers, 1976; Diener & Emmons, 1985; Diener et al., 1999; Kahneman, Diener, & Schwartz, 1999). Although mistakenly equated with happiness, subjective well-being consists of two compatible traditions: one that focuses on feelings toward life (hedonic well-being) and another that focuses on functioning in life (eudaimonic well-being; see Keyes et al., 2002; McGregor & Little, 1998; Ryan & Deci, 2001; Ryff, 1989; Waterman, 1993). Although both streams of well-being research have focused on adults, there is a growing call for a similarly inclusive approach to the study of the well-being of children and youth (Bornstein, Davison, Keyes, & Moore, 2003).

The study of subjective well-being has been divided into two streams of research. Both streams of subjective well-being research grew from deeply ingrained, philosophically ancient, and fertile viewpoints that have animated human thought and conduct

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throughout the centuries. The *hedonic stream* equates mental health with avowed happiness in life or the experience of positive emotions. The hedonic tradition embodies human concerns with maximizing the amount or duration of positive, pleasant feelings while minimizing the amount or duration of negative, unpleasant feelings. The hedonic tradition is reflected in the stream of research on *emotional* well-being, which consists of perceptions of avowed happiness and satisfaction with life and the balance of positive to negative affect over a period of time. Whereas happiness is based upon spontaneous reflections of pleasant and unpleasant affects in one's immediate experience, life satisfaction represents a long-term assessment of one's life.

The *eudaimonia stream* equates mental health with human potential that, when realized, results in positive functioning in life. This tradition of viewing mental health reflects the long-standing human concerns with developing nascent abilities and capacities toward becoming a more fully functioning person and citizen. This tradition has been measured in terms of *psychological* (Ryff, 1989) and *social* (Keyes, 1998) well-being that reflect how well individuals see themselves functioning in life. Ryff's (1989; Ryff & Keyes, 1995) multidimensional model includes six dimensions of psychological well-being indicating the challenges that individuals encounter as they strive to function fully and realize their unique talents: self-acceptance, personal growth, purpose in life, positive relations with others, autonomy, and environmental mastery. Keyes' (1998) multidimensional model of social well-being consists of five dimensions that indicate whether and to what degree individuals are functioning well in their social lives: social integration, social contribution, social coherence, social actualization, and social acceptance.

The items used to measure each facet of subjective well-being in adults were modified slightly to be appropriate for youth and included in the second wave of the Child Development Supplement (CDS–II). The correlations between the latent factors, as well as between the subjective well-being scales, were modest to high, ranging from .57 to .71 (Keyes, 2005b). However, as predicted, confirmatory factor analyses of the CDS–II subjective well-being items support the aforementioned threefold distinction. That is, the three-factor model was the best-fitting model to these data, suggesting that the items measuring emotional well-being, psychological well-being, and social well-being are reflections of three distinct, but correlated, latent factors (Keyes, 2005b).

The subjective well-being measures in the CDS–II exhibited good construct validity. The subjective well-being measures correlated relatively strongly and positively with the Marsh scale of global self-concept, with a scale that measured self-determination (a form of efficacy), and with a scale that measured the child's perceived integration into school. Each measure of subjective well-being also correlated modestly and negatively with the Kovacs child depression inventory and modestly and positively with a measure of the child's perceived closeness to significant others (i.e., adults, family and friends) and with the child's self-rated overall health. Each measure of subjective well-being correlated positively but weakly with perceived level of math skill and perceived level of reading skill.

Positive Mental Health in Adolescence

Although each dimension of subjective well-being represents an important domain of study in itself, Keyes (2002, 2003, 2004, 2005) has also proposed that these scales collectively measure the presence and absence of mental health. That is, mental health, like mental illness, is a syndrome of symptoms of subjective well-being. The diagnosis of states of mental health was modeled after the Diagnostic and Statistical Manual IV Text Revision (DSM–IV–TR) (American Psychiatric Association, 2000) approach to the diagnosis of major depressive episode. That is, a diagnosis of depression is made when an individual's report of symptoms meet a diagnostic threshold; that is, in this case, five of nine symptoms experienced all the time or most of the time for a period of at least 2 consecutive weeks, at least one symptom represents depressed affect (i.e., depressed mood or anhedonia) and the remaining represent malfunctioning.

The CDS–II subjective well-being items are used to replicate the mental health diagnosis proposed by Keyes (2002, 2005). Like the *DSM–IV–TR* diagnosis of an individual with major depression, a diagnosis of mental health (i.e., flourishing in life) is made when an individual exhibits a high level on at least one symptom of hedonia and just over half of the symptoms of eudaimonia, that is, positive functioning in life. Individuals are diagnosed as languishing in life when they exhibit a low level on at least one symptom of hedonia and low levels on just over half of the symptoms of positive functioning. Individuals who are neither flourishing nor languishing in life are diagnosed as moderately mentally healthy.

Specifically, youth in the CDS–II indicated how frequently during the past month they experienced three symptoms of emotional well-being, four symptoms of psychological well-being, and five symptoms of social well-being. Youth were diagnosed as flourishing if they experienced at least one of the three symptoms of emotional well-being and at least five of the nine symptoms of positive functioning *almost every day* or *every day* during the past 30 days. Youth were diagnosed as languishing if they experienced at least one of the three symptoms of emotional well-being and at least five of the nine symptoms of positive functioning *once or twice* or *never* during the past 30 days. Youth who were neither languishing nor flourishing were diagnosed as moderately mentally healthy, meaning they experienced the symptoms of well-being *about once a week* or *two or three times a week* during the past 30 days.

In sum, using this model of positive mental health, the purpose of the present study is to (a) estimate the prevalence of mental health (i.e., flourishing) in the population of U.S. youth between the ages of 12 and 18, (b) investigate the associations of level of mental health with depressive symptoms and conduct problems, and (c) investigate the associations of level of mental health with level of psychosocial functioning.

Method

Sample

Data are from the CDS of the Panel Study of Income Dynamics (PSID), an ongoing national survey begun in 1968 that focuses on the transfer of social and economic capital within families. In 1997, all families participating in the PSID in 1997 with children between the ages of 0 and 12 years old were asked to complete the CDS, resulting in a sample of 3,563. Of all first wave (CDS–I) families, a total of 94% of the children had parents who had remained active in the PSID as of 2001 (n = 3,271), and these children were reinterviewed (i.e., CDS–II) during the fall of 2002 and spring of 2003, resulting in a sample of 2,907 children and youth ages 5–18. Thus, the data collection response rate for the CDS–II is estimated to be 91%.

The subjective well-being measures were administered for the first time in the CDS–II, and only to youth ages 12 or older, which resulted in a sample size of 1,234 youth between the ages of 12 and 18. The measures of subjective well-being were administered by audio-computer-assisted self-interview, whereby youth listened to each question on a headphone and responded directly into a computer laptop that displayed the question and the response options. Descriptive analyses used population weights for the child data, provided by the PSID, to more accurately represent the nation's children. All multivariate analyses were conducted twice, once with the sample weighted and once without the sample weighted. Because conclusions of the multivariate analyses were unchanged by the sample weight, only the nonweighted findings are reported.

Measures

The 12 subjective well-being items were adapted from the Midlife in the United States study of adults (Keyes & Magyar-Moe, 2003), which comprehensively assessed adult well-being in terms of emotional, psychological, and social well-being. Emotional well-being in the CDS–II was measured with three items that asked youth how often during the past month they had felt (a) happy, (b) interested in life, and (c) satisfied. The response options for emotional as well as psychological and social well-being items were as follows: *never, once or twice, about once a week, two or three times a week, almost every day,* and *every day*. The alpha reliability of the three items of emotional well-being is .84.

Four of the six theoretical dimensions of psychological well-being were measured in the CDS–II: environmental mastery, positive relations with others, personal growth, and autonomy. Purpose in life and self acceptance were not measured in the CDS–II because self-esteem, a closely related measure of self-acceptance was already part of the CDS, and purpose in life did not seem to be a pertinent question for pre-high school youth, and we wanted to obtain measures on all youth between the ages of 12 and 18. Environmental mastery was measured as "How often did you feel good at managing the responsibilities of your daily life?" in the past month. Positive relationships with others was measured as "How often did you feel that you have warm and trusting relationships with other kids?" in the past month. Personal growth was measured as "How often did you feel that you had experiences that challenged you to grow or become a better person?" in the past month. Autonomy was measured as "How often did you feel confident to think or express your own ideas and opinions?" in the past month. The alpha reliability of the four items of psychological well-being is .78.

The five dimensions of social well-being were measured in the CDS–II. However, as with the measurement of psychological well-being, only a single item deemed most representative of the construct was chosen to measure social well-being. Social contribution was measured as "How often did you feel that you had something important to contribute to society?" in the past month. Social integration was measured as "How often did you feel that you belonged to a community like a social group, your school, or your neighborhood?" in the past month. Social actualization was measured as "How often did you feel that our society is becoming a better place?" in the past month. Social acceptance was measured as "How often did you feel that people are basically good?" in the past month. Social coherence was measured as "How often did you feel that the way our society works made sense to you?" in the past month. The alpha reliability of the five items of social well-being is .80.

Depression and conduct problems. Youth completed the Child Depression Inventory (CDI; Kovacs, 1992), a self-report instrument that is an extension of the Beck Depression Inventory (Kovacs & Beck, 1977) is designed to assess depression in youth ages 8 or older. The CDI contains 27 items, only 10 of which were used in the CDS–II. The 10-item CDI consists of items that have been shown to measure the latent factors of dysphoria, self-deprecation, and social problems in adolescents ages 13–17 (see, e.g., Craighead, Smucker, Craighead, & Ilardi, 1998). Each CDI item consists of three statements that are graded in severity and are assigned numerical values from 0 to 2, and the scale is scored in the direction of more severe depressive symptoms. The 27-item CDI usually demonstrates high internal consistency (.80 or higher), and the internal (alpha) reliability of the 10-item CDI in the CDS–II is .89. Conduct problems were measured with single items based on self-reports. Youth reported either the number of times or whether they had ever skipped school, been arrested, smoked cigarettes, drank alcohol, smoked marijuana, or used inhalants to get high.

Psychosocial functioning. The global self-concept scale (Marsh, 1990) is a 6-item scale involving items that measure the amount of time youth feel good about themselves. The six self-descriptive statements are (a) "I have a lot to be proud of," (b) "I can do things as well as most people," (c) "I'm as good as most other people," (d) "Other people think I am a good person," (e) "When I do something, I do it well," and (f) "A lot of things about me are good." Youth indicate how much of the time—*never, rarely, sometimes, most of the time,* or *always*—each statement applies to them. The internal (alpha) reliability of the self-concept scale is .84. Using the same response options, five items were used to measure youth's self-determination. The self-descriptive statements are (a) "I stay with a task until I solve it," (b) "Even when a task is difficult, I want to solve it anyway," (c) "I keep my things orderly," (d) "I try to do my best on all my work," and (e) "When I start something, I follow it through to the end." The internal (alpha) reliability of the self-determination scale is .77.

Youth also were asked how close they felt toward six individuals: mother (or stepmother), father (or stepfather), sibling, friends, teacher, or other adults outside of school. Respondents indicated whether they felt *extremely close, quite close, fairly close,* or *not very close* to each of the six individuals. A total score was constructed by measuring the number of individuals of the six toward which a youth felt either quite close or extremely close. A higher score on this variable indicates a higher number of individuals toward whom a youth feels close. In turn, a 4-item scale, with an internal (alpha) reliability of .70, measured perceived school integration and quality. The items measured how often youth felt (a) part of their school, (b) close to people at their school, (c) happy to be at their school, and (d) safe at their school. The response options included *never, once or twice in the last month, about once a week, two or three times a week, almost every day,* and *every day.*

Results

The first research question measures the prevalence of mental health among youth between the ages of 12 and 18 to investigate whether adolescents, on the whole, are flourishing. The categorical diagnosis and the continuous assessment yield very similar estimates of the prevalence of mental health; using the cut point of an average score of 5 or 6 on the continuous assessment yields an estimate of 38.3%, compared with the categorical diagnostic estimate of 37.9%. In turn, the categorical diagnosis and the continuous assessment also yield very similar estimates of the prevalence of moderately mentally healthy; using the cut point of an average score of 3 or 4 on the continuous assessment yields an estimate of 55.4%, compared with the categorical diagnostic estimate of 55.9%. Similarly, the categorical diagnosis and the continuous assessment yield almost identical estimates of the prevalence of languishing; using the cut point of an average score of 1 or 2 on the continuous assessment yields an estimate of 6.3%, compared with the categorical diagnostic estimate of 6.2%. Thus, findings suggest that more youth, that is, about one half, are moderately mentally healthy than are mentally healthy (i.e., about 4 in 10 are flourishing), whereas a small portion (i.e., 6%) are languishing.

Further analyses revealed that mental health status varies by age. The correlation of age with the continuous assessment of mental health was $r = -.07$ ($p < .02$), revealing that the level of mental

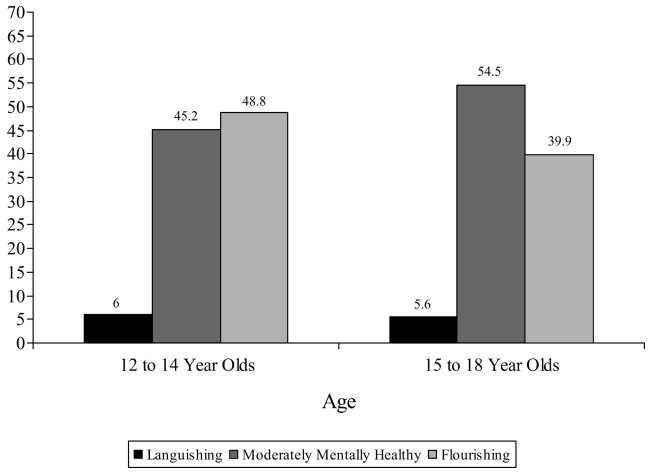

Figure 1. Prevalence of mental health status by age group.

health declines between the ages of 12 and 18. Figure 1 shows the cross-tabulation of the categorical diagnoses with two age groups, 12- to 14-year-olds (i.e., middle school ages) and 15- to 18-year-olds (i.e., high school ages). The chi-square value of $\chi^2 = 10.0$ ($df = 2$) was statistically significant ($p < .007$). Whereas nearly 10% more middle school youth than high school youth are flourishing, nearly 10% more high school youth than middle school youth are moderately mentally healthy. The prevalence of languishing in both age groups is almost identical. Findings in Figure 1 also suggest that middle school youth, or those in early adolescence, are on the whole flourishing, but high school youth, or those in late adolescence, are not. That is, the most prevalent category of mental health in youth ages 12–14 is flourishing, whereas the most prevalent category of mental health in youth ages 15–18 is moderate mental health.

To shed more light on whether America's youth is flourishing, I investigated the association of depression, conduct problems, and psychosocial functioning with positive mental health. Are youth diagnosed as flourishing also more likely to be "flourishing in life" with less depression, fewer conduct problems, and better psychosocial functioning? Figure 2 shows the mean level of depressive symptoms as measured with the CDI by the three levels of mental health as operationalized by the categorical diagnosis criteria and the continuous assessment criteria (i.e., flourishing youth averaged 5 or 6 on all items, languishing youth averaged 1 or 2 on all items, and moderately mentally healthy youth averaged 3 or 4 on all items). As Figure 2 reveals, the conclusions are the same regardless of which criteria are used for the assessment of level of mental health. Focusing on the categorical criteria, languishing youth reported an average of 10.4 ($SD = 13.6$) symptoms of depression, moderately mentally healthy youth reported an average of 3.9 ($SD = 10.1$) symptoms, and flourishing youth reported on average 1.4 ($SD = 3.1$) depressive symptoms. Pairwise contrasts using Tukey's honestly significant difference test revealed that all possible comparisons of mean-level depressive symptoms by mental health category were statistically significant at the $p < .001$ level. Thus, languishing youth reported 2.7 times as many depressive symptoms as moderately mentally healthy youth, and 7.4 times as many depressive symptoms as flourishing youth. Moreover, moderately mentally healthy youth reported 2.8 times as many depressive symptoms as flourishing youth.

Table 1 shows the association of conduct problems with the categorical diagnosis and continuous assessment of mental health. Findings indicate a linear relationship between conduct problems and level of mental health. All conduct problems—arrest, skipped school, smoking cigarettes or marijuana, and alcohol or inhalant use—are more prevalent among languishing youth than among moderately mentally healthy youth. In turn, all conduct problems other than the use of inhalants are more prevalent among moderately mentally healthy youth than among youth diagnosed or assessed as flourishing. Moreover, one quarter of languishing

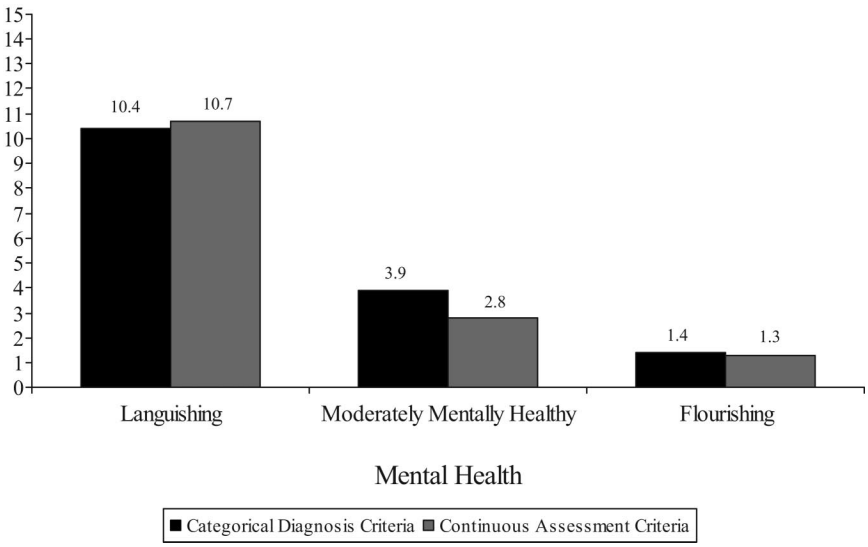

Figure 2. Mean depressive symptoms (10-item Child Depression Inventory) by mental health status.

Table 1
Prevalence and Association of Level of Mental Health with Conduct Problems

Variable	Categorical diagnosis			Continuous assessment					
	Mentally unhealthy, languishing (6.2%, $n = 79$)	Moderately mentally healthy (55.9%, $n = 718$)	Mentally healthy, flourishing (37.9%, $n = 487$)	1: *Never* (1.3%, $n = 16$)	2: *Once or twice* (5.0%, $n = 62$)	3: *About once a week* (19.8%, $n = 244$)	4: *Two or three times a week* (35.6%, $n = 440$)	5: *Almost every day* (33.8%, $n = 417$)	6: *Every day* (4.5%, $n = 56$)	Total ($N = 1,234$)
Ever arrested	12.7 (10)	6.6 (46)	1.4 (7)	12.5 (2)	11.5 (7)	11.9 (29)	4.1 (18)	1.5 (6)	1.8 (1)	5.1 (63)
Ever skipped school	29.3 (24)	21.0 (153)	11.2 (55)	29.4 (5)	27.7 (18)	24.6 (60)	18.8 (83)	11.9 (50)	7.0 (4)	17.7 (220)
Smoked cigarettes past month	26.8 (22)	16.3 (119)	8.5 (42)	0 (0)	37.5 (24)	29.5 (72)	10.2 (45)	7.9 (33)	10.5 (6)	14.5 (180)
Drank alcohol past month	47.6 (39)	48.7 (354)	36.8 (181)	25.0 (4)	57.8 (37)	58.2 (142)	43.7 (193)	40.0 (168)	32.1 (18)	45.2 (562)
Smoked marijuana past month	19.5 (16)	10.9 (79)	6.1 (30)	0 (0)	21.9 (14)	18.9 (46)	7.9 (35)	6.0 (25)	7.0 (4)	10.0 (124)
Used inhalants past month	7.3 (6)	0.3 (2)	0 (0)	0 (0)	9.4 (6)	0.4 (1)	0 (0)	0 (0)	0 (0)	0.6 (7)
Three or more conduct problems	25.3 (21)	12.9 (94)	6.5 (32)	0 (0)	26.2 (17)	23.4 (57)	9.0 (40)	6.4 (27)	7.1 (4)	11.7 (145)

Note. Sample weighted. Data are percents (n). All χ^2 $p < .001$ (two-tailed).

youth reported three or more of the conduct problems, compared with 12.9% of moderately mentally healthy youth, and only 6.5% of flourishing youth reported three or more conduct problems. Figure 3 shows the mean number of conduct problems by age group and categorical mental health status. A 2 (Age) × 3 (Mental Health Status) ANOVA revealed a main effect of age group, $F(1, 1151) = 73.7$, $p < .001$, and a main effect of Mental Health Status, $F(2, 1151) = 15.2$, $p < .001$, but no interaction of Age and Mental Health Status, on number of conduct problems. Conduct problems increase with age, which is consistent with a large body of delinquency research (see, e.g., Agnew, 2005), and as mental health declines. However, in both age groups, flourishing adolescents report the lowest number and languishing adolescents report the highest number of conduct problems.

Table 2 shows the mean levels of measures of psychosocial functioning by level of mental health. Focusing again on the categorical diagnosis, the findings support the hypothesis that flourishing youth are functioning better than moderately mentally healthy or languishing youth. Youth diagnosed as flourishing report a higher level of global self-concept (representative item: "A lot of things about me are good") than moderately mentally healthy youth, who report a higher level of global self-concept than languishing youth. Self-determination (representative item: "I try to do my best on all my work") is highest among flourishing youth, followed by moderately mentally healthy youth, and lowest among youth diagnosed as languishing. Flourishing youth report feeling close (i.e., quite close or extremely close) to more people ($M = 4.2$; $SD = 1.4$) than moderately mentally healthy youth ($M = 3.3$; $SD = 1.4$), who felt close to more people than languishing youth ($M = 2.6$; $SD = 1.4$). Youth diagnosed as flourishing report a higher level of school integration (i.e., feel more a part of their school, close to people at their school, happy to be at their school, and safe at their school) than moderately mentally healthy youth, who report a higher level of school integration than languishing youth. In sum, flourishing youth report the highest levels on all four measures of psychosocial functioning,

*arrested, skipped school, smoked cigarettes, drank alcohol, smoked marijuana, or sniffed inhalants.

Figure 3. Mean number of conduct problems by age and mental health status.

Table 2
Mean Levels of Psychosocial Functioning by Level of Mental Health

Variable	Categorical diagnosis			Continuous assessment					Total ($N = 1,234$)
	Mentally unhealthy, languishing ($n = 79$)	Moderately mentally healthy ($n = 718$)	Mentally healthy, flourishing ($n = 487$)	1: *Never* ($n = 16$)	2: *Once or twice* ($n = 62$)	3: *About once a week* ($n = 244$)	4: *Two or three times a week* ($n = 440$)	5: *Almost every day* ($n = 417$)	6: *Every day* ($n = 56$)	
Global self-concept	18.8 (4.2)	22.9 (3.5)	26.3 (2.7)	17.1 (4.8)	18.7 (3.8)	21.4 (3.3)	23.9 (3.1)	26.1 (2.6)	28.3 (2.0)	24.0 (3.8)
Self-determination	15.6 (3.7)	18.1 (3.1)	20.4 (2.7)	15.1 (3.8)	15.8 (3.6)	17.1 (3.2)	18.7 (2.8)	20.2 (2.7)	21.9 (2.1)	18.8 (3.3)
Closeness to others	2.6 (1.4)	3.3 (1.4)	4.2 (1.4)	1.5 (1.5)	2.6 (1.1)	3.0 (1.4)	3.6 (1.3)	4.2 (1.4)	4.3 (1.3)	3.6 (1.5)
School integration and quality	12.1 (5.7)	16.2 (5.3)	19.9 (4.6)	9.2 (5.1)	12.4 (5.0)	14.4 (6.0)	17.4 (4.8)	20.0 (4.4)	20.5 (5.0)	17.5 (5.6)

Note. Sample weighted. Standard deviations appear in parentheses. All F tests $p < .001$ (two-tailed). All possible contrasts using Tukey's honestly significant difference test between the categorical diagnoses were statistically significant at $p < .01$.

whereas languishing youth report the lowest levels on all four measures.

Discussion

Before the age of 18, the best estimate is that 2 of every 10 children and youth will have had some form of mental illness (Shaffer et al., 1996). Not only is mental illness common in youth, it is debilitating and hinders the social, emotional, and academic development of youth. Although the focus on mental illness is unassailable, the presumption that children and youth who are not mentally ill are thereby mentally healthy is tenuous. Studies show that measures of common mental disorders such as depression and anxiety load on separate latent factors than measures of subjective well-being (Headey, Kelley, & Wearing, 1993; Keyes, 2005a). Moreover, correlations among the measures of subjective well-being in the CDS–II and the CDI short-form scale of depression were modest, ranging from −.23 to −.33 (Keyes, 2005b). In short, the absence of mental illness does not imply the presence of mental health.

The purpose of this study was to operationalize the diagnosis and assessment of the mental health continuum to CDS–II data to investigate whether America's adolescent population is flourishing. To that end, three descriptive research questions were investigated. First, how many youth are mentally healthy, or flourishing, and how many are mentally unhealthy, or languishing (i.e., prevalence)? Second, do flourishing youth report fewer depressive symptoms and fewer conduct problems than moderately mentally healthy or languishing youth? Third, are levels of psychosocial function better in flourishing youth than moderately mentally healthy or languishing youth?

Findings suggests that fewer adolescents are mentally healthy—nearly 40%—than would be implied by taking the obverse of the best estimate (i.e., Shaffer et al., 1996) of any mental disorder in youth, which would imply that about 80% of youth are free of a mental illness and therefore mentally healthy. Over one half—that is, 55%—of adolescents fit the criteria for moderate mental health, whereas 6% were mentally unhealthy, as they fit the criteria for languishing. Moreover, findings here suggest that flourishing may decline, whereas moderate mental health increases, during adolescence. Nearly one half of the middle school youth, ages 12–14, were flourishing. Flourishing was the most prevalent mental health status among adolescents aged 12–14; moderate mental health was the most prevalent mental health status among adolescents aged 15–18. These data suggest, although causality cannot be inferred from them, that there is an ~10% loss of flourishing between middle school and high-school.

Findings support the descriptive hypotheses that flourishing youth function better than moderately mentally healthy youth, who in turn function better than languishing youth. Flourishing youth had the fewest depressive symptoms and conduct problems, and the highest levels of global self-concept, self-determination, closeness to other people, and school integration. Languishing youth had the highest number of depressive symptoms and conduct problems and the lowest levels of global self-concept, self-determination, closeness to other people, and school integration. Conduct problems were higher in the older, rather than younger, adolescents. However, flourishing in both age groups was associated with the lowest level of conduct problems; languishing (i.e.,

the absence of mental health) was associated with the highest level of conduct problems in both age groups.

Although the results of this study suggest a promising line for future research on the mental health continuum in children and youth, caution is warranted in placing too much credence on the current prevalence estimates. Although the measures of subjective well-being exhibited construct validity and the diagnostic thresholds mirror the criteria established by American Psychiatric Association via the *DSM–IV–TR,* the data reported here are nonetheless self-reports, and the mental health diagnoses have not been corroborated by expert clinical judgments. Future researchers should investigate convergence of the child's and youth's reports of subjective well-being with parent's and teacher's reports of the child's and youth's well-being. Moreover, researchers should investigate the degree of correspondence of the diagnoses with school counselor and clinical, psychiatric workups of mental health.

Although more clinical research is needed to examine the nosology of mental health, continued research on the epidemiology of children's mental health in the CDS–II can point toward new directions for prevention of mental illness and for the study of resilience. Findings from the present study indicate that flourishing in adolescence is associated with developmentally desirable outcomes (e.g., low depression, few conduct problems, and high psychosocial functioning). Because these data are cross-sectional, future research is needed to determine the important question of whether positive mental health is a cause or consequence (or both) of conduct problems and psychosocial functioning. What youth are most likely to be flourishing and what factors (intrapersonal, familial, educational, and community) explain how youth come to flourish over time, could provide new insights for promoting positive development and resilience in youth and their transition into adulthood.

I hope that the choice of psychiatric terminology to characterize items measuring facets of subjective well-being as *symptoms* does not detract from the conclusions of this paper. Scholars who wish to promote the study of positive mental health in youth may feel uncomfortable, and even rankled, with my approach, because it "medicalizes" the issue of positive mental health. Symptoms, like items on any questionnaire, are merely outward signs of an underlying condition or state. In the absence of specific diagnostic tests, underlying conditions must be inferred from symptoms (or items). Mental health and mental illnesses lack specific diagnostic tests and remain identifiable only as collections of symptoms and outwards signs (i.e., syndromes) of the underlying state or condition. The fact that we associate symptoms with illness may be the result of our species' historical struggle against acute and infectious diseases and illness that hastened premature death until last century in the United States (not that symptoms need only refer to underlying illness conditions).

Moreover, the diagnostic criteria offered here are rational and statistical in the same sense as the criteria adopted in the *DSM–IV–TR*. Of course, the *DSM–IV–TR* is not without its critics, and this research is not meant to defend or criticize it. Complex statistical techniques have been developed (e.g., latent taxometric analysis) that promise the identification of thresholds and whether a condition is categorical or continuous. However, all statistics require a host of imperfect, sometimes untenable, assumptions (e.g., distribution of the error term). Moreover, all statistics are applied to data collected from imperfect sampling of rare and highly specialized populations (i.e., clinical populations in the case of taxometrics). The use of taxometric and cluster-type analyses has hardly solved the debate over diagnosis and assessment in psychopathology research, leading many experts (e.g., Kessler, 2002) to argue for the inclusion of both categorical and continuous approaches. This sensible solution, too, should be the approach to positive mental health, especially because the findings reported here suggest that both approaches yield the same conclusions and each approach provides valuable information (see Kessler, 2002).

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