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A MEASURE OF SUBJECTIVE HAPPINESS: PRELIMINARY RELIABILITY AND CONSTRUCT VALIDATION

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ABSTRACT. Using a "subjectivist" approach to the assessment of happiness, a new 4-item measure of global subjective happiness was developed and validated in 14 studies with a total of 2 732 participants. Data was collected in the United States from students on two college campuses and one high school campus, from community adults in two California cities, and from older adults. Students and community adults in Moscow, Russia also participated in this research. Results indicated that the Subjective Happiness Scale has high internal consistency, which was found to be stable across samples. Test-retest and self-peer correlations suggested good to excellent reliability, and construct validation studies of convergent and discriminant validity confirmed the use of this scale to measure the construct of subjective happiness. The rationale for developing a new measure of happiness, as well as advantages of this scale, are discussed.

> The happy man is not he who seems thus to others, but who seems thus to himself.
>
> Publilius Syrus

Western culture has embraced happiness as one of its most important goals – both at an individual level and for society at large (Veenhoven, 1994). From Aristotle and the writers of the American Declaration of Independence to present-day philosophers, politicians, novelists, and authors of popular psychology, the secret to happiness has remained a subject of tremendous interest, especially within the American intellectual tradition. Surveys reveal that most North Americans think about happiness, on average, at least once each day (Freedman, 1978; Lyubomirsky and Ross, 1990). Moreover, while the status of individual differences in personality historically has been a source of heated controversy (cf. Mischel, 1968; see also Bem and Allen, 1974; Epstein, 1979, 1983; Kenrick and Funder, 1988; Mischel, 1984; Ross and Nisbett, 1991), anecdotal evidence and everyday experience alike suggest that one of the

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most salient and important human dispositions is that of happiness of well-being. We can all identify people who are chronically happy, even in the face of adversity, or people who are consistently unhappy, despite the best of circumstances (Myers and Diener, 1995). Furthermore, although individuals vary widely in the sources of their personal happiness, there is considerable agreement as to what happiness means and whether it has been achieved (Freedman, 1978). Although some people feel that they have attained happiness once they are sufficiently wealthy, whereas others require true love or spiritual salvation or simply a rosy disposition, most people *know* that they are happy or that they are not.

The past several decades have witnessed an explosion of research on happiness (or more broadly defined as subjective well being, as it has been typically referred in the literature). Numerous theories have been proposed in an attempt to identify the causes of this seemingly elusive state (for reviews, see Argyle, 1987; Diener, 1984; Eysenck, 1990; Freedman, 1978; Myers, 1992; Myers and Diener, 1995; Veenhoven, 1994). Economic forces (Juster and Stafford, 1985), activity levels (Cummings and Henry, 1961; Lemon et al., 1972; see also Csikszentmihalyi, 1975, 1990), adaptation levels (Brickman and Campbell, 1971; see also Michalos, 1985; Parducci, 1984), goals (Emmons, 1986; Omodei and Wearing, 1990), life events (Headey and Wearing, 1989), and dispositional factors (Costa and McCrae, 1980, 1984) have each been viewed as important determinants of happiness. Although most studies have examined how particular objective variables influence well-being, almost a century of research suggests that objective circumstances, demographic variables, and life events are correlated with happiness less strongly than intuition, or everyday experience, tells us they ought to be (cf. Diener, 1984; Lyubomirsky and Ross, 1997a). For example, naturalistic studies reveal that even extreme events (e.g., winning a million dollars in a lottery or becoming paralyzed) exert surprisingly weak effects on subjective well-being (Brickman et al., 1978). Such findings lead us to consider the importance of *subjective* processes in happiness. Researchers within the subjectivist tradition are thus not surprised that some people consider themselves happy in spite of personal obstacles, tragedy, or lack of any great love or

wealth, while others perceive themselves as unhappy despite being surrounded by all of life's comforts and advantages.

How does one discern then if someone is a happy or an unhappy person? Every student of happiness and well-being has had to tackle the problem of how to measure levels of individual happiness. Because no appropriate happiness "thermometer" exists (and even state-of-the-art psychophysiological measures or brain techniques are still inadequate for the task (e.g., Zajonc and McIntosh, 1992)), researchers have generally relied on self-reports, which are sometimes coupled with informant data, interviews by trained clinicians, unobtrusive observations of nonverbal expressions, and physiological assessments (see Diener, 1994). The most widely used measure of happiness is Bradburn's (1969) Affect Balance Scale, which assesses the balance of positive and negative affect experienced during the past four weeks. The Affect Balance Scale is presumably a measure of the affective component of subjective well-being. The cognitive component of subjective well-being, by contrast, has been assessed with life satisfaction inventories, including the Satisfaction With Life Scale (Diener et al., 1985) and the single-item Delighted-Terrible Scale (Andrews and Withey, 1976). Other measures of well-being include single-item scales, such as Cantril's (1965) Self-Anchoring Scale, Bradburn's (1969) Global Happiness Item, and the Gurin Scale (Gurin et al., 1960); instruments developed to measure happiness in geriatric populations (e.g., MUNSH; Kozma and Stones, 1980); and scales that tap various aspects of psychological functioning in addition to well-being (e.g., General Well-Being Scale; Dupuy, 1978).

The current measures of subjective well-being either assess one of its two components (affective or cognitive) or are single-item global evaluations, which are not conducive to testing psychometric properties. Thus, respondents typically are asked to rate their levels of positive and negative affect over a particular period of time or to make a judgment of their overall life quality. What is missing in the literature is a measure of overall "subjective happiness" – that is, a global, subjective assessment of whether one is a happy or an unhappy person. Such a measure would reflect a broader and more molar category of well-being and tap into more global psychological phenomena (Diener, 1994). As noted, most individuals are capable

of reporting on the extent to which they are a happy person (or an unhappy one), and this judgment is likely not equivalent to a simple sum of their recent levels of affect and their satisfaction with life. For instance, one may conceivably appraise oneself as a very happy *person*, despite having only a somewhat happy *life*.[1] Conversely, one may identify oneself as a generally *un*happy person, despite having felt "pleased," "proud," and "particularly excited" in the previous month (as items on the Affect Balance Scale would suggest).

This paper describes a 4-item scale of global subjective happiness and presents studies examining its reliability and validity. Two items ask respondents to characterize themselves using both absolute ratings and ratings relative to peers, while the other two items offer brief descriptions of happy and unhappy individuals and ask respondents the extent to which each characterization describes *them*. Thus, the Subjective Happiness Scale consists of multiple items, allowing for an assessment of internal consistency. However, it is designed not to overburden respondents or threaten its unidimensional structure with numerous items.

Although the Subjective Happiness Scale is short, we provide evidence that it meets, and exceeds, minimum psychometric criteria for measurement accuracy. Data are presented on internal consistency, test-retest reliability, convergent and discriminant validity, and informant reports. Close to three thousand participants from 14 separate samples, composed of different age, occupational, and cultural groups, participated in the reported research.

METHOD

Scale Development

The 4-item Subjective Happiness Scale was derived from an original pool of 13 self-report items. These items were administered to a college student sample ($N = 97$) in a pilot study. From these original items, six were discarded from further testing based upon high semantic similarity. An additional three items were dropped because they did not load onto a single interpretable factor in a principal component analysis performed on the items.

The final four items and their response formats (7-point Likert scales) are presented in the Appendix (in English). This English

version was translated into Russian and then back-translated into English by a second translator to ensure comparability and equivalence in meaning (Brislin, 1970).[2] A single composite score for global subjective happiness is computed by averaging responses to the four items (the fourth reverse-coded). Thus, the possible range of scores on the Subjective Happiness Scale is from 1.0 to 7.0, with higher scores reflecting greater happiness.

Samples

The assessment of reliability and validity of the Subjective Happiness Scale was obtained through 14 samples, collected at different times and locations (see Table I). The total number of respondents was 2 732 (1 754 women, 962 men, 16 unknown). Nine of the samples were recruited from three different college campuses and one sample from a high school campus. The remaining four samples were recruited from the community (three of working adults and one of retired adults). Student participants ranged in age from 14 to 28 years (M = 19.2 for the nine college samples and 17.3 for the high school sample), whereas community adult participants ranged in age from 20 to 94 years (M's = 55.0, 38.8, and 24.3, for the three working adult samples listed in Table I, respectively; and M = 69.5 for the retired sample). Furthermore, two of the 14 samples were recruited in Russia – one from a public university and one from a community of working adults.

Respondents completed the measures of interest in a variety of settings (e.g., as part of a group-administered questionnaire, individually in a laboratory setting, or individually at home). Table I describes each of the samples, their respective locales, and the means, standard deviations, and alpha reliabilities of the Subjective Happiness Scale.

Materials

All the measures used to validate the Subjective Happiness Scale were derived from the literature, and all have demonstrated reliability and validity. Each of the validation measures is described briefly below.

Five measures of happiness and well-being were used to validate the Subjective Happiness Scale. The Affect Balance Scale (Brad-

TABLE I

Sample descriptions

Sample name (N)	Location	Alpha	Mean (SD)
U.S. college sample #1 ($N = 551$)	Public college campus	0.85	4.89 (1.11)
U.S. college sample #2 ($N = 372$)	Public college campus	0.88	4.99 (1.07)
U.S. college sample #3 ($N = 156$)	Public college campus	0.86	5.07 (1.14)
U.S. college sample #4 ($N = 242$)	Private college campus	0.89	4.94 (1.18)
U.S. college sample #5 ($N = 74$)	Private college campus	0.91	4.79 (1.21)
U.S. college sample #6 ($N = 551$)	Private college campus	0.94	4.63 (1.72)
U.S. college sample #7 ($N = 135$)	Private college campus	0.92	4.96 (1.19)
U.S. college sample #8 ($N = 43$)	Private college campus	0.84	4.88 (1.04)
Russian college sample ($N = 67$)	Public college campus	0.80	4.84 (1.13)
U.S. high school sample ($N = 36$)	Private school	0.81	5.13 (0.98)
U.S. adult community sample ($N = 198$)	City community	0.86	5.62 (0.96)
Russian adult community sample ($N = 63$)	City community	0.79	4.02 (0.93)
U.S. adult female community sample ($N = 92$)	Town community	0.85	4.80 (1.12)
U.S. retired community sample ($N = 622$)	City community	0.86	5.62 (0.96)

burn, 1969) assesses the level of balance between positive affect (5 items) and negative affect (5 items) that the individual has experienced "during the past few weeks." The Delighted-Terrible Scale (Andrews and Withey, 1976) is a single item measuring how an individual feels about life at the present time (its 7-point response format is anchored at "terrible" and "delighted"). The Global Happiness Item (Bradburn, 1969) is a single item with response options of "not too happy," "pretty happy," and "very happy," and the Recent Happiness Item (Stewart et al., 1992) measures how much of the time the individual has been happy during the previous month. Finally, the Satisfaction With Life Scale (Diener et al., 1985) is a 5-item general measure of satisfaction with the quality of one's life. With the exception of two of our validation samples, which did not complete the

Recent Happiness Item, these five measures were always distributed together (see Table III).

Five dispositional measures theoretically related to happiness were also administered. As shown in Table IV, each of the relevant validation samples completed from one to four of these measures. The Self-Esteem Scale (Rosenberg, 1965) is a 10-item instrument measuring on individual's global feelings of self-worth. The Life Orientation Test (Scheier and Carver, 1985) is an 8-item measure of dispositional optimism – that is, an individual's tendency to view the world and the future in positive ways. Positive Emotionality and Negative Emotionality were assessed with two subscales (15-item and 16-item, respectively) of the Differential Personality Questionnaire (Tellegen, 1985), and Extraversion and Neuroticism were measured using two 10-item subscales from the Eysenck Personality Questionnaire (Eysenck and Eysenck, 1975). These four scales assess an individual's level of traits related to positive and negative experiences and emotions. Finally, the 21-item Beck Depression Inventory (Beck, 1967) measures cognitive, motivational, affective, and behavioral symptoms of mild depression or dysphoria, rated for the past week.

For purposes of assessing discriminant validity, two samples of students were asked to report their grade point average (GPA) and one sample of students reported their verbal and quantitative SAT scores. Two tests from the Educational Testing Service (ETS) were administered to measure verbal ability and mathematical ability, respectively. Finally, the number of stressful life events experienced within the last six months was assessed with the Social Readjustment Rating Scale (Holmes and Rahe, 1967).

RESULTS AND DISCUSSION

No significant sex or age differences were observed for the Subjective Happiness Scale.

Internal Consistency

The internal consistency among the four items comprising the Subjective Happiness Scale was tested using Cronbach's alpha reliability. In all samples, the four items showed good to excellent

TABLE II

Stability coefficients for the Subjective Happiness Scale

Sample name (N)	Time lag	Pearson's *r*
U.S. college sample #5 ($N = 86$)	1 month	0.85
U.S. college sample #6 ($N = 81$)	1 month	0.90
U.S. college sample #8 ($N = 43$)	3 weeks	0.61
U.S. high school sample ($N = 36$)	3 months	0.71
U.S. adult community sample ($N = 198$)	1 year	0.55

Note: All correlations are significant at the $p < 0.0001$ level.

internal consistency, demonstrating comparability across samples of varying ages, occupations, languages, and cultures. The alpha's ranged from 0.79 to 0.94 ($M = 0.86$). Only one of the 14 coefficients fell below the conventional minimum of 0.80 (0.79 was observed within the Russian adult community sample). Furthermore, principal component analyses performed separately for each sample showed that the four items of the Subjective Happiness Scale load onto a single factor. Table I displays the reliability coefficients obtained for each sample, as well as the means and standard deviations of the composite scale scores.

Test-Retest Reliability

Longitudinal data was collected in five separate samples, and the Subjective Happiness Scale demonstrated stability over time. As shown in Table II, the time lag between testing sessions ranged from 3 weeks to 1 year, and the test-retest reliability ranged from 0.55 to 0.90 ($M = 0.72$).[3] The lowest temporal stability coefficient ($r = 0.55$) was observed in the U.S. adult community sample, which was tested 1 year apart.

Convergent Validity

To assess convergent validity, our scale was first correlated with published measures of happiness and well-being. This analysis was performed using three college student samples (two in the U.S. and one in Russia) and a sample of retired adults in the U.S. Table III presents the findings, which revealed substantial correlations, rang-

ing from 0.52 to 0.72 ($M = 0.62$), between the Subjective Happiness Scale and other happiness measures. These correlations were similar across the four different samples.

Second, convergent validity was tested using a number of dispositional constructs with which happiness has been theoretically and empirically associated in previous research (e.g., Costa and McCrae, 1980, 1984; Diener, 1996; Myers and Diener, 1995) – namely, self-esteem (Rosenberg, 1965), optimism (Scheier and Carver, 1985), positive emotionality and negative emotionality (Tellegen, 1985), extraversion and neuroticism (Eysenck and Eysenck, 1975), and dysphoria (Beck, 1967). Table IV describes the six samples and the specific measures that were used, as well as the results of the analyses. Correlations with related constructs were moderate, ranging from 0.36 to 0.60 ($M = 0.51$). In support of previous research (e.g., Costa and McCrae, 1980; Myers and Diener, 1995), our findings indicated that individuals who perceive themselves as happy also think well of themselves, are optimistic about their futures, experience a predominance of positive emotions, and are extraverted. In addition, happy individuals did not appear to be inclined towards depression or neuroticism. The correlations between the Subjective Happiness Scale and these constructs, however, were not as high as those found for the other happiness measures, providing further support for the construct validity of our new scale.

Discriminant Validity

Although discriminant analyses are not generally conducted in the course of developing and validating a new psychological inventory, we employed this technique to provide an additional test for the robustness of the Subjective Happiness Scale. According to the subjectivist approach, constructs that theoretically should not be related to happiness include college grade point average, math and verbal ability, and stressful life events (Lyubomirsky and Ross, 1997a; see also Diener, 1984). The correlations among these academic and stress markers are presented in Table V. Confirming expectations, all but one of the correlations failed to reach levels of statistical significance. The only significant correlation was observed between our happiness measure and the verbal score on

TABLE III

Convergent validity among happiness measures

Sample name (N)	Affect-Balance Scale	Delighted-Terrible Scale	Global happiness item	Recent happiness item	Satisfaction with Life Scale
U.S. college sample #2 ($N = 372$)	0.59	0.59	0.52	0.69	0.61
U.S. college sample #3 ($N = 156$)	0.52	0.70	0.59	–	0.61
Russian college sample ($N = 67$)	0.59	0.65	0.63	–	0.72
U.S. retired community sample ($N = 622$)	0.64	0.67	0.59	0.57	0.69

Note: All r's are significant at the $p < 0.0001$ level. "–" = Data are not available.

TABLE IV

Convergent validity among related constructs

Sample name (N)	SE	LOT	PEM	NEM	EV	NR	BDI
U.S. college sample #1 ($N = 551$)	0.53	0.53	–	–	–	–	0.49
U.S. college sample #2 ($N = 372$)	–	–	–	–	–	–	0.49
U.S. college sample #7 ($N = 135$)	–	–	0.48	0.39	–	–	–
U.S. college sample #8 ($N = 43$)	0.53	0.47	–	–	–	–	–
U.S. adult female community sample ($N = 92$)	0.58	0.60	–	–	–	–	0.54
U.S. retired community sample ($N = 622$)	0.58	0.59	–	–	0.36	0.50	–

All r's are significant at the $p < 0.0001$ level. "–" = Data are not available. SE = Rosenberg Self-Esteem Scale. LOT = Life Orientation Test. PEM = Positive Emotionality. NEM = Negative Emotionality. EV = Extraversion. NR = Neuroticism. BDI = Beck Depression Inventory.

the Scholastic Aptitude Test (SAT) (r = 0.14), which represents a very small effect given the large sample size (Cohen, 1977).

Informant Reports

The purpose of examining correlations between self-reports and other-reports is to provide a validation check on the self-ratings. Informant reports, which are not subject to the same sources of bias as self-reports, allow researchers to detect possible self-report biases, including social desirability, positive (or negative) illusions, scaling artifacts, and effects of present mood states or circumstances (e.g., see Diener, 1994). Furthermore, convergence between self-reports and peer-reports provides evidence for the long-term nature of happiness (Pavot et al., 1991). Thus, collateral data were obtained in four samples (three comprised of undergraduates and one comprised of retired adults), and the "informants" providing the report ranged from roommates to spouses. As shown in Table VI, the results of these analyses indicate that there is substantial agreement between the self-other ratings on the Subjective Happiness Scale, with the correlations ranging from 0.41 to 0.66 (M = 0.54).

GENERAL DISCUSSION

Our findings suggest that the Subjective Happiness Scale shows excellent psychometric properties. Despite its brevity and composition of broadly stated items, this new measure is characterized by high internal consistency, a unitary structure, and stability over time and across 14 different samples. Examination of the scale's construct validity indicated that it correlates highly with other happiness measures and moderately with constructs theoretically and empirically related to happiness and well-being. These correlations do not generally exceed 0.70, suggesting that the scale is not equivalent to these other measures. Evidence of discriminant validity was further obtained from very low correlations with theoretically *un*related constructs, such as academic success and stressful events. Finally, the new measure demonstrated temporal stability coefficients and self-peer correlations comparable to those reported for other well-being instruments (cf. Diener, 1994; Pavot et al., 1991). The moderate found between self-reports and other reports suggest

TABLE V

Correlations between the subject happiness scale and discriminant constructs

Sample name (N)	GPA	VSAT	QSAT	Verbal ability	Math ability	Stressful life events
U.S. college sample #2 ($N = 372$)	0.08	0.14*	0.06	0.08	0.05	0.07
U.S. adult female community sample ($N = 92$)	−0.03	–	–	–	–	−0.19

Note: With the one exception, no *r*'s are significant at the $p < 0.05$ level. "–" = Data are not available. GPA = grade point average. VSAT = verbal score on the SAT. QSAT = quantitative score on the SAT. Verbal ability = score on the ETS verbal ability test. Math ability = score on the ETS mathematical ability test. Stressful life event = score on the Social Readjustment Rating Scale.

* $p < 0.05$.

TABLE VI

Correlations among self-reports and informant reports on the Subjective Happiness Scale

Sample name (sample size)	Relationship of informant to target	Pearson's *r*
U.S. college sample #6 ($N = 59$)	Roommate	0.66***
U.S. college sample #7 ($N = 68$)	Friend	0.65***
U.S. college sample #8 ($N = 43$)	Roommate	0.41**
U.S. retired community sample ($N = 528$)	Spouse or close relative	0.44***

Note: ** $p < 0.01$; *** $p < 0.001$

that this scale is used similarly by respondents and informants, providing evidence against the operation of scaling artifacts and indicating that self-ratings are not substantially more positive than peer-ratings. However, in future research, it will be important to further validate this scale using cross-methodological designs – that is, assessing physiological responses, facial expressions, voice characteristics, cognitive processes, clinician's reports, and adaptive versus maladaptive behaviors (see Lyubomirsky and Ross, 1997a, 1997b, for preliminary work).

Unlike many studies in personality and social psychology, we did not rely exclusively on U.S. or Western European college undergraduates for our samples (cf. Sears, 1968). Preliminary evidence suggests that the Subjective Happiness Scale is thus suited for different age, occupational, linguistic, and cultural groups. This scale is easy to implement and its short form possesses measurement accuracy, while posing minimal financial or respondent burden. Furthermore, the moderate correlations of this scale with various dispositional characteristics suggest that it might also be useful in clinical settings.

The development of this new scale was based on a subjectivist approach (e.g., Brickman et al., 1978; Diener, 1996; Lyubomirsky, 1994; Lyubomirsky and Ross, 1997a), which considers happiness from the respondent's own perspective. Accordingly, individuals are asked to make an overall, "molar" judgment of the extent to which

they are happy or unhappy people. Given that we are concerned with *global* and *subjective* happiness, it seems reasonable and appropriate that the ultimate judge of happiness should be "whoever lives inside a person's skin" (Myers and Diener, 1995, p. 11; see also Diener, 1994).

APPENDIX

Subjective Happiness Scale

Instructions to participants: For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself:

1	2	3	4	5	6	7
not a very happy person						a very happy person

2. Compared to most of my peers, I consider myself:

1	2	3	4	5	6	7
less happy						more happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

1	2	3	4	5	6	7
not at all						a great deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extend does this characterization describe you?

1	2	3	4	5	6	7
not at all						a great deal

NOTES

[1] The perception of whether one has had a "happy life" arguably is powerfully driven by cultural expectations. For example, in the United States, a happy life is

said to consist of good health, a good marriage, raising children, having a satisfying career, and owning a home, preferably with a dog and a "white picket fence." Although a life characterized by these things might be "happy," its protagonist might not.

[2] A Russian translation of the scale is available from the first author.

[3] It is worth noting that the stability coefficients for the one-item measures of positive and negative mood (1 = *not at all*; 7 = *extremely*), collected in four of the five studies, ranged from 0.00 to 0.43 ($M = 0.22$) – much lower than the stability coefficients observed for the happiness scale. This finding suggests that responses to the happiness measure cannot be attributed to respondents' current mood.

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