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## Abstract

A survey of the cultural notions related to happiness and the existing empirical evidence indicate that some individuals endorse the belief that happiness, particularly an immoderate degree of it, should be avoided. These beliefs mainly involve the general notion that happiness may lead to bad things happening. Using multigroup confirmatory factor analysis and multilevel modeling, this study investigates the measurement invariance, cross-level isomorphism, predictive validity, and nomological network of the fear of happiness scale across 14 nations. The results show that this scale has good statistical properties at both individual and cultural levels. The findings also indicate that this scale has the potential to add to the knowledge about how people conceive of, and experience, happiness across cultures.

## Keywords

fear of happiness, subjective well-being, happiness, emotion, cross-cultural, religion

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## Introduction

Most of the Western research on happiness shares the assumption that personal happiness is a valuable goal that should be actively pursued. Indeed, it is an American cultural assumption that failing to appear happy is a cause of concern (Eid & Diener, 2001; Held, 2002; Lyubomirsky, 2000; Menon, 2012). In the United States, “failure to achieve happiness . . . can be seen as one of the greatest failures a person can experience” (Morris, 2012, p. 436). Western psychologists also typically assume that the search for, and achievement of, personal happiness are both universal and a basic human right (e.g., Myers, 1993). Richardson (2012) comments that, for Western psychologists, ideals such as happiness and well-being seem to be beyond doubt or question. Empirical findings confirm that North Americans highly value personal happiness (Triandis, Bontempo, Leung, & Hui, 1990), and they think about it at least once a day (Freedman, 1978).

A survey of the less studied aspects of various cultures, however, reveals that some individuals possess negative views of happiness and positive emotions, and not uncommonly treat the presence of happiness with caution or even fear. According to Joshanloo (2013), the fear of happiness is the belief that happiness may have negative consequences. People may have various reasons for endorsing fear of happiness beliefs. They may think that if they are happy, they will be more likely to be exposed to the evil eye, invite rivalry or envy (Lyubomirsky, 2000), or be punished in the afterlife. For example, Minami (1971) points out that, in Japanese culture, happiness can be considered hazardous in that it can cause suffering. It is prescribed in some Asian cultures that there should be a limit to one’s happiness or one will encounter mishap. A Chinese proverb says, “Extreme happiness begets tragedy” (Bryant & Veroff, 2007, p. 39). These cultures are under the influence of Taoism. In Taoism, all things in the world are seen to be in a state of constant change. Everything eventually reverts to its opposite (Peng, Spencer-Rodgers, & Nian, 2006). According to Taoism, happiness will ultimately revert to unhappiness and vice versa. From this point of view, the desirability and authenticity of happiness, which is going to lead to unhappiness sooner or later, can be readily questioned.

Reasons for fear of happiness are diverse across the globe. In the Islamic perspective, superficial or worldly happiness may be an indicator of distance from God (Joshanloo, 2013). In Malawi (particularly in rural areas), people regard successful individuals with suspicion. This is because of the prevalence of the cultural belief that success and happiness may have been achieved through unfair means, such as witchcraft (Hinks & Davies, 2012). This can lead to the social exclusion of the successful person or even their being forced to leave the village. Likewise, Lutz (1987) demonstrated that, in Ifaluk culture (located in the Caroline Islands of Micronesia), happiness is discouraged as being too individualistic for the communal good of the tribe. It is associated with showing off, overexcitement, and failure at doing one’s duties.

Empirical evidence suggests that there are individual differences in the way people regulate their positive and negative emotional experiences. While some people savor positive affect as much as possible, others are more inclined to dampen their positive mood and affect (e.g., excitement, joy, and happiness; see, for example, Bryant & Veroff, 2007; Quoidbach, Berry, Hansenne, & Mikolajczak, 2010; Wood, Heimpel, & Michela, 2003). This body of evidence suggests that people sometimes avoid the experience of happiness, and engage in some activities that would make them feel less happy or even sad (Erber & Erber, 2000). One reason for this might be that people are sometimes concerned that they may lose control over their positive emotions or of their behavioral reactions to these emotions (e.g., Berg, Shapiro, Chambless, & Ahrens, 1998; Melka, Lancaster, Bryant, Rodriguez, & Weston, 2011).

Culture also influences individuals’ attitudes toward positive experiences. Miyamoto and Ma (2011) showed that cultural scripts played an active role in shaping emotion regulation and emotional experiences. Their experiments with East Asians and Americans revealed that Americans were more inclined than Japanese to savor positive emotions. They also found that cultural differences in emotion regulation were mediated by dialectical beliefs about positive emotions.

Lindberg (2004, as cited in Bryant & Veroff, 2007) found that East Asians reported a lower capacity to take pleasure in positive experiences and to amplify their joy. In addition, in comparison to Americans, they were more inclined to dampen or curtail enjoyment.

In brief, the existing empirical evidence indicates that happiness is sometimes disfavored or even feared in some contexts. This evidence also indicates that these beliefs are generally more prevalent in East Asian cultures than Western cultures. This study uses the Fear of Happiness Scale (FHS) developed by Joshanloo (2013) to investigate this concept across 14 cultures. This scale measures the general belief that experiencing happiness, particularly to excess, may be perceived to have bad consequences, irrespective of the causes of fear of happiness, or what exactly the bad consequences might be. The main goal of this study was to investigate the statistical properties of this scale and to examine if this scale could be applied across a wide range of cultures. Toward this end, we examined the measurement invariance (Cheung & Rensvold, 2002; Horn & McArdle, 1992), cross-level isomorphism (Fischer et al., 2009; Fontaine & Fischer, 2011), nomological network, and predictive validity of the FHS.

### *Predictions of the Present Study*

We expected that, at the individual level, the FHS would correlate negatively with life satisfaction. This prediction was based on the notion that those who are afraid of happiness (which consists of the feeling of satisfaction), or devalue these feelings, may actually experience it less frequently or less intensely (Diener, Oishi, & Ryan, 2013). This is also consistent with past lines of research that have studied the fear of emotions mainly as an antecedent of mental disorders, such as depression and anxiety (e.g., Berg et al., 1998; Gilbert et al., 2012; Melka et al., 2011). It was also predicted that the fear of happiness would be positively related to dampening, which is defined by Feldman, Joormann, and Johnson (2008) as “the tendency to respond to positive mood states with mental strategies to reduce the intensity and duration of the positive mood state” (p. 509).

At the cultural level, we predicted that nations’ scores on the FHS would correlate negatively with subjective well-being. Prior empirical findings suggest that people in some cultures avoid happiness to eliminate the possibility of hurting other people’s feelings (Miyamoto & Ma, 2011). Other evidence indicates that some cultures condemn the expression of personal happiness because this may limit an individual’s ability to perform his or her duties toward the collective (Lutz, 1987). Thus, it can be expected that fear of happiness will be higher in cultures that value conformity. The value of conformity involves “restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms” (Schwartz, 1994, p. 22). On this basis, it was hypothesized that the fear of happiness would be positively associated with conformity at the cultural level.

We also correlated the fear of happiness with verticality scores for nations. The verticality index, which is closely related to power distance (Hofstede, 1980), measures the level of reliance on the ideas of superiors rather than independent personal thinking (Smith, Peterson, & Schwartz, 2002). Higher scores show stronger reliance on hierarchical sources (e.g., formal rules and superiors’ opinions) in handling work events. It was predicted that cultures higher on fear of happiness would score higher on verticality.

The societal cynicism belief domain was used to further investigate the nomological network of fear of happiness at the cultural level. Societal cynicism refers to a culture’s “negative view of human nature, a view that life produces unhappiness, that people exploit others, and a mistrust of social institutions” (Bond et al., 2004, p. 553). Given that fear of happiness is likely to involve a gloomy expectation that unhappiness is always impending, and that one of the common reasons for the fear of happiness is fear of other people’s rivalry or envy (i.e., to be cynical), we expected that cultures with higher levels of fear of happiness would also score highly on societal cynicism.

We also predicted that dynamic externality (Leung & Bond, 2008) would correlate positively with the fear of happiness. Dynamic externality consists of the beliefs that life events are predetermined, but that there are some ways for people to influence the outcomes (i.e., fate control), and that the world and human behavior are complex (i.e., social complexity). That is, there are always alternative ways of achieving outcomes, and human behavior can be inconsistent. Dynamic externality also involves a general belief that effort, knowledge, and careful planning will lead to positive results and help avoid negative outcomes (i.e., reward for application; for more detail, see Leung & Bond, 2008). The fear of happiness involves a belief in the predetermined order of things (e.g., that happiness brings about disaster), which is consistent with the fatecontrol component of dynamic externality. The fear of happiness also involves a belief that we can influence the outcomes (e.g., we can avoid disasters through avoiding happiness and positive feelings), which is consistent with the fate control and reward for application components of dynamic externality. The fear of happiness also involves a dialectical and complex view on world phenomena (e.g., that happiness and unhappiness take turns), which is consistent with the social complexity component of dynamic externality. Therefore, we expected a positive relationship between dynamic externality and fear of happiness at the cultural level.

To establish the predictive validity of the FHS in this study, multilevel modeling (Nezlek, 2011; Welzel, 2010) was conducted to test if the fear of happiness would predict an important outcome over and above a set of recognized predictors. Using multilevel modeling for this purpose allowed us to use both individual-level and culture-level predictors. Individual-level autonomy, individual-level personal growth initiative (Robitschek, 1998), culture-level individualism, and culture-level wealth were used, along with the fear of happiness, as predictors of life satisfaction. Personal growth initiative is defined as “intentional involvement in changing and developing as a person” (Robitschek & Keyes, 2009, p. 322), that is, a person’s intentional involvement in the process of development toward personal growth. Personal growth initiative has been found to be a strong predictor of various aspects of well-being, including life satisfaction (Robitschek & Keyes, 2009). A sense of autonomy is considered as one of the main predictors of mental well-being (Iyengar & Lepper, 1999; Ryan, Huta, & Deci, 2008; Ryff, 1989). Although the positive role of autonomy in collectivistic cultures is less pronounced than in individualistic cultures, recent studies show that, in contemporary collectivistic cultures (e.g., China), individualistic values such as autonomy contribute positively to the mental well-being of individuals (e.g., Lu, 2006). Moreover, an overly collectivistic mind-set with less than optimal levels of personal autonomy may lead to lowered well-being in Eastern cultures (Suh, 2007). Individualistic cultures have been found to be generally happier than collectivistic ones (e.g., Diener, Diener, & Diener, 1995; Inglehart, 2009), partly because they provide their members with more personal freedom and autonomy. Finally, national wealth has been found to predict life satisfaction (Diener, Ng, Harter, & Arora, 2010; Diener et al., 2013). Higher income leads to higher satisfaction through the facilitation of basic need satisfaction (Diener, Harter, & Arora, 2010).

The final purpose of this study was to investigate the relationship between religious affiliation and fear of happiness. The teachings of some religions, such as Islam and East Asian religions (e.g., Taoism), are consistent with a fear of or hesitation toward happiness (Joshani, 2013; Minami, 1971). Therefore, we hypothesized that affiliation to some religious groups may lead to higher levels of fear of happiness. To investigate this possibility, we included major self-reported religious affiliations as potential predictors in a multilevel analysis.

## **Method**

### *Participants and Procedure*

Since fear of happiness seems to be more or less present in almost all cultures, an attempt was made to include as many cultures from all continents as possible. Although we failed to collect

**Table 1.** Demographic Details of the Samples and Internal Consistencies of Individual-Level Variables.

	N	M age	SD age	% of females	Questionnaire language	M FHS	SD FHS	$\alpha$				
								FHS	SWLS	DAM	Auto.	PGI
NZ	169	22.03	5.54	63.3	English	2.39	1.07	.786	.882	.807	.778	.893
Iran	220	23.18	4.15	54.5	Persian	2.47	1.47	.879	.873	.786	.840	.871
Singapore	221	21.51	1.48	50.7	English	3.39	1.18	.795	.865	.816	.847	.885
Hong Kong	85	21.48	1.16	62.4	English	3.74	1.07	.757	.790	.834	.770	.771
Malaysia	219	19.44	2.36	44.3	English	3.32	1.40	.791	.844	.815	.817	.889
Japan	270	19.31	0.67	41.9	Japanese	3.17	1.19	.790	.835	.844	.832	.856
Korea	150	22.05	2.82	39.3	Korean	2.65	1.19	.848	.830	.789	.862	.870
Taiwan	207	20.48	2.32	63.8	Chinese	3.76	1.11	.743	.801	.769	.820	.836
India	150	20.42	1.73	58.7	English	3.88	0.93	.514	.713	.757	.754	.756
Russia	150	20.28	3.01	67.3	Russian	2.84	1.14	.773	.878	.791	.816	.855
Brazil	136	30.40	10.16	64.0	Portuguese	1.98	1.01	.790	.828	.785	.874	.856
Kenya	109	23.07	3.93	50.5	English	3.56	1.40	.650	.700	.690	.821	.881
Pakistan	208	21.93	2.58	57.2	English	3.80	1.45	.746	.755	.740	.851	.872
Kuwait	104	28.00	7.69	58.7	English	3.55	1.41	.734	—	.777	.814	.857
Total	2,398	22.00	4.88	54.4		3.16	1.36					

Note. FHS = fear of happiness scale; SWLS = satisfaction with life scale; DAM = dampening scale; Auto = autonomy; PGI = personal growth initiative scale. SWLS was not included in Kuwait.

data in Western Europe and North America, New Zealand was included as a representative of countries in these regions. Previous research indicates that New Zealand scores very similarly to Western European and other English speaking nations in terms of socioeconomic indicators, values, and cultural beliefs (e.g., Bond et al., 2004; Inglehart & Baker, 2000). We also tried to include cultures which are relatively understudied in the psychological literature, such as Middle Eastern and South Asian cultures.

A total of 2,398 participants in 14 nations took part in this study. All participants were university students. Sample sizes ranged from 85 (Hong Kong) to 270 (Japan). The demographic characteristics of the samples are summarized in Table 1. Participants responded to the survey voluntarily or in exchange for course credit. Participants in eight nations answered an English version of the questionnaire. However, participants in Iran, Japan, Korea, Taiwan, Russia, and Brazil completed the survey in their own languages, namely, Persian, Japanese, Korean, Chinese, Russian, and Portuguese. In these cultures, the items were translated from English into other languages using the method of back-translation.

### Individual-Level Measures

**Fear of happiness.** The FHS was used to assess this construct (Joshanloo, 2013). The items are (a) “I prefer not to be too joyful, because usually joy is followed by sadness”; (b) “I believe the more cheerful and happy I am, the more I should expect bad things to occur in my life”; (c) “Disasters often follow good fortune”; (d) “Having lots of joy and fun causes bad things to happen”; and (e) “Excessive joy has some bad consequences.” Each item is rated on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). Internal consistencies of all individual-level scales are shown in Table 1 separately for each culture. Country scores for fear of happiness are shown in Table 1.

*Life satisfaction.* The Satisfaction With Life Scale (SWLS) was used to measure this construct. This scale is a widely used measure of global life satisfaction, consisting of five items (Diener, Emmons, Larsen, & Griffin, 1985; e.g., “the conditions of my life are excellent”). Each item is rated on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). This scale was not included in Kuwait.

*Dampening.* The eight items of the Dampening subscale of the Responses to Positive Affect scale (Feldman et al., 2008) were used to measure dampening. The participants were asked to indicate how often they did certain things when happy, excited, or enthused (e.g., “Think ‘I don’t deserve this’”). Each item is rated on a 4-point scale ranging from *almost never* (1) to *almost always* (4).

*Personal growth initiative.* The Personal Growth Initiative scale (Robitschek, 1998; 1999) was used to assess individuals’ intentional involvement in the process of personal growth (e.g., “I know what I need to do to get started toward reaching my goals”). Each of the nine items is rated on a 6-point scale ranging from *definitely disagree* (1) to *definitely agree* (6).

*Autonomy.* The autonomy subscale of the individualism scale (Realo, Koido, Ceulemans, & Allik, 2002) was used to assess autonomy (e.g., “I want to decide myself about things related to my life”). Autonomy “refers to a person’s capacity for independent thinking, judgment, and survival. According to this aspect, a person defines himself or herself as an autonomous and largely independent agent without reference to other people, groups, or institutions” (Realo et al., 2002, p. 167). Each of the 10 items is rated on a 6-point scale ranging from *definitely false* (1) to *definitely true* (6).

### Culture-Level Measures

*Subjective well-being.* The aggregated subjective well-being scores for cultures were obtained from Fischer and Van de Vliert (2011). This index has been created using data from three sources: the World Happiness Database (Veenhoven, 2009), Minkov (2009), and the World Values Survey.

*Sources of guidance.* The Verticality index was used to measure levels of reliance on the ideas of superiors rather than independent thinking (Smith et al., 2002). This index measures reliance on formal rules, superiors, personal experience, and subordinates in handling work events in each culture. Higher scores show that members of a culture rely more strongly on hierarchical sources (e.g., formal rules and superiors’ opinions). Verticality indices were not available for Taiwan, Russia, and Kuwait.

*Conformity.* Country-level scores for conformity were obtained from Schwartz (1994, 2006). Higher scores indicate a greater level of harmony orientation in a culture. Since this source did not contain harmony scores for Taiwan and Pakistan, scores for these two cultures were obtained from Ralston et al. (2011). Kuwait and Kenya’s scores were not available in these sources.

*Social axioms.* Country-level scores for two social belief domains of societal cynicism and dynamic externality were obtained from Bond et al. (2004). These scores were not available for Kenya and Kuwait.

*Individualism.* The aggregated individualism scores for cultures were obtained from Fischer and Van de Vliert (2011). This index is calculated by averaging normalized scores for Inglehart’s

(1997) survival versus expression values, Hofstede's (1980) individualism index, and Schwartz's (1994, 2006) autonomy versus embeddedness values for teachers and students.

*National wealth.* The aggregated wealth scores for cultures were obtained from Fischer and Van de Vliert (2011). This index shows gross national income expressed in product purchase parity per head between 1980 and 2005 (UNDP, 2007).

## Results

### *Measurement Invariance at the Individual Level*

Measurement invariance is defined as whether "under different conditions of observing and studying phenomena, measurements yield measures of the same attributes" (Horn & McArdle, 1992, p. 117). If measurement invariance of a scale is not tested, cross-cultural findings cannot be meaningfully interpreted. Multigroup confirmatory factor analysis (MGCFA; Jöreskog, 1971; Little, 1997) is the most frequently used (Chen, 2008) and "the most powerful and versatile approach" (Steenkamp & Baumgartner, 1998 p. 78) for establishing measurement invariance across cultures. For testing measurement invariance in MGCFA, first, each group is individually tested for the goodness-of-fit. Then a series of increasingly restrictive measurement invariance tests are performed. The most important tests are for configural, metric, and scalar invariance (e.g., Chen, 2008; Cheung & Rensvold, 2002), which are reported below.

*Single-group CFAs.* Using Mplus 6 (Muthén & Muthén, 2010) and maximum likelihood estimation, we first tested the most parsimonious and substantively meaningful measurement model separately in each culture. In this model, all five items were allowed to load on the latent variable of fear of happiness. The results are summarized in Table 2. The fit of the model to the data was excellent in Singapore, Hong Kong, Malaysia, Japan, Kenya, and Pakistan. However, in New Zealand, Iran, India, Brazil, Russia, Taiwan, and Kuwait, modification indices suggested that freely estimating an item residual covariance could improve the fit significantly. After specifying the residual covariances, the baseline models in these cultures yielded excellent fit with the exception of India. We decided to exclude India from further analyses of measurement invariance because adding one residual covariance did not improve the model fit to an acceptable level in this culture. Plus, the FHS yielded an unacceptable alpha in India (as shown in Table 1). Therefore, we continued the measurement invariance analyses with 13 cultures.

*Configural invariance.* The next step was to test the hypothesis of configural invariance using the MGCFA procedure. At this stage, a model with no equality constraint on factor loadings and item intercepts is simultaneously tested across all cultures. As can be seen in Table 3 (M1), this model's fit to the data was very well. Therefore, it can be concluded that the configural invariance of the FHS across these 13 cultures is established.

*Metric invariance.* The next step was to establish metric invariance. Equality constraints were imposed on all factor loadings. As shown in Table 3 (M2), the model fitted the data very well. This indicates invariance of all factor loadings across all cultures.

*Scalar invariance.* The next step was to establish scalar invariance of the measure. Imposing equality constraints on all item intercepts resulted in a model with poor goodness-of-fit indices (M3). Therefore, full scalar invariance is not consistent with the data. Inspection of the modification indices reported by Mplus indicated that freeing the intercepts for Items 2, 3, and 5 would improve the fit of the model substantially. As can be seen in Table 3 (M4), the model achieved

**Table 2.** Single-Group Confirmatory Factor Analyses.

	Error terms allowed to covary	$\chi^2$	df	CFI	TLI	RMSEA
New Zealand	Item 3 with Item 2	3.072	4	1.000	1.009	0.000
Iran	Item 5 with Item 4	4.013	4	1.000	1.000	0.004
Singapore	—	8.825	5	0.988	0.975	0.059
Hong Kong	—	6.636	5	0.981	0.963	0.062
Malaysia	—	5.407	5	0.998	0.997	0.020
Japan	—	4.101	5	1.000	1.005	0.000
Korea	—	14.381	5	0.970	0.940	0.112
India	Item 2 with Item 1	12.847	4	0.869	0.672	0.121
Russia	Item 3 with Item 2	3.866	4	1.000	1.002	0.000
Brazil	Item 3 with Item 2	5.348	4	0.994	0.984	0.050
Kenya	—	6.231	5	0.982	0.964	0.048
Pakistan	—	9.605	5	0.980	0.960	0.067
Taiwan	Item 3 with Item 2	3.994	4	1.000	1.000	0.000
Kuwait	Item 5 with Item 2	6.534	4	0.979	0.948	0.080

Note. CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation.

**Table 3.** Testing for Measurement Invariance Across 13 Cultures.

	$\chi^2$	df (p)	CFI	TLI	RMSEA	90% CI for RMSEA	
						LL	UL
M1. Factorial invariance	82.018	59 (0.025)	0.993	0.984	0.048	0.018	0.071
M2. Full metric invariance	236.971	107 (0.000)	0.960	0.951	0.085	0.070	0.099
M3. Full scalar invariance	944.050	155 (0.000)	0.757	0.796	0.173	0.163	0.184
M4. Invariant intercepts for items 1 and 4	267.243	119 (0.000)	0.954	0.950	0.086	0.072	0.099

Note. M = model; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; CI = confidence interval; LL = lower limit; UL = upper limit.

excellent fit indices after doing so. Therefore, it can be concluded that partial scalar invariance is established for the FHS. Considering that the intercepts for two items (i.e., the referent indicator and Item 4) were invariant across the cultures, we can compare latent means across cultures with confidence (Byrne, Shavelson, & Muthén, 1989; Steenkamp & Baumgartner, 1998; Steenkamp, Benedict, & Baumgartner, 1998; Steinmetz, 2011). When we repeated the invariance analyses including India, there was little change in the fit indices (detailed results are available from the first author).

### Individual-Level Correlations

As shown in Table 4, as expected, higher fear of happiness was significantly correlated both with lower life satisfaction and more dampening. However, the effect sizes were substantially different, with a moderately high correlation produced with dampening, but a low correlation with life satisfaction.

**Table 4.** Descriptive Statistics for the Scales and Intercorrelations.

	<i>M</i>	<i>SD</i>	FHS	SWLS	DAM
FHS	3.16	1.36	1		
SWLS	4.25	1.25	-.143	1	
DAM	7.00	4.25	.461	-.123	1

Note. All Correlations are significant at  $p < 0.01$ . FHS = fear of happiness scale; SWLS = satisfaction with life scale; DAM = dampening scale.

**Table 5.** Multigroup Analyses Across All Cultures.

	$\chi^2$	<i>df</i> ( <i>p</i> )	CFI	TLI	RMSEA	90% CI for RMSEA	
						LL	UL
M1. Baseline model	65.159	10 (0.000)	0.981	0.961	0.049	0.038	0.060
M2. Baseline model with cross-level constraints on factor loadings	72.642	14 (0.000)	0.979	0.971	0.042	0.033	0.052

Note. CFI = Comparative Fit Index; TLI = Tucker–Lewis Index; RMSEA = root mean square error of approximation; CI = confidence interval; LL = lower limit; UL = upper limit.

### Cross-Level Isomorphism

Fischer et al. (2009) observe that for a concept to be considered a culture-level (or collective) construct, it is necessary to establish that the structure of the concept holds at the cultural level. If the structure that characterizes individuals can also be applied to cultures, multilevel isomorphism is established (Fischer et al., 2009; Fontaine & Fischer, 2011). To address these issues, we ran a multilevel CFA, specifying the basic model (i.e., one latent factor and five indicators) at both individual and national levels. Muthen's limited information estimator (MUML) was used. The resulting fit indices are shown in Table 5. As can be seen in the table (M1), the fit of this model is excellent. This indicates that the unidimensional structure of fear of happiness concept at the individual level was replicated at the cultural level. We then constrained the factor loadings to be equal across levels (M2). The resulting model fitted the data very well. These results collectively indicate that multilevel isomorphism holds for the FHS.

### Culture-Level Correlations

The findings related to culture-level correlations should be interpreted with caution considering that the sample size is so small (ranging from 10 to 13). With these sample sizes, it is most appropriate to evaluate the correlations in terms of size and direction rather than significance (Owe et al., 2013). Culture-level correlations are presented in Table 6. As expected, and consistent with the individual-level findings, the fear of happiness was negatively correlated with subjective well-being. In line with the predictions, the fear of happiness was positively correlated with verticality, conformity, societal cynicism, and dynamic externality.

### Predictive Validity

Multilevel analysis was used to examine whether the fear of happiness could contribute to the prediction of life satisfaction over and above a set of recognized predictors of life satisfaction. Individual-level autonomy, individual-level personal growth initiative, culture-level individualism, and

**Table 6.** Intercorrelations at the Cultural Level.

	1	2	3	4	5
1. FHS	1				
2. SWB	-.132 (12)	1			
3. Verticality	.572 (10)	-.446 (11)	1		
4. Conformity	.603* (11)	-.460 (12)	.770** (11)	1	
5. Societal cynicism	.663* (11)	-.730** (12)	.389 (11)	.333 (13)	1
6. Dynamic externality	.280 (11)	-.648* (12)	.716* (11)	.789** (13)	.211 (13)

Note. Numbers in parentheses indicate the number of cultures used in the correlation analyses. FHS = fear of happiness scale; SWB = subjective well-being.

\* $p < 0.05$ . \*\* $p < .01$ .

culture-level wealth were entered along with the fear of happiness as predictors of life satisfaction. India was excluded from this analysis because the fear of happiness items functioned differently from other cultures in this nation. Malaysia and Kuwait were also excluded because culture-level scores for the former and life satisfaction scores for the latter were not available. Multilevel analyses were conducted using SPSS 19. Considering that none of the slopes of the individual-level variables were significantly variable across the nations (detailed results available from the first author), we proceeded with a random intercepts model excluding random slopes. All the individual-level variables were group-mean centered, and the two country-level variables were grand-mean centered (Nezlek, 2011; Welzel, 2010).

We first tested an unconditional means model (Peugh & Enders, 2005) excluding all the predictors. An unconditional means model is identical to a one-way ANOVA with random effects (Peugh & Enders, 2005). The results of this analysis reveal the proportion of variability in life satisfaction that exists at the individual and cultural levels before adding covariates. The results showed that there was statistically significant variability both at the within-culture,  $b = 1.47$ , Wald  $Z = 30.57$ ,  $p$  (one-sided)  $< .001$ , and between-culture levels,  $b = 0.090$ , Wald  $Z = 2.05$ ,  $p$  (one-sided)  $< .05$ . Therefore, it is justifiable to add predictors to the model to explain the existing unexplained variance at both levels.

In a second analysis, we added the five predictors to the model. The results are shown in Table 7. As can be seen in the table, personal growth initiative and fear of happiness were the main predictors of life satisfaction. Wealth was also a negative predictor but its significance was marginal. Comparing the covariance parameters of the current model with those of the unconditional means model yields useful information about the amount of variance explained by the predictors. Adding these predictors to the model reduced the unexplained within-culture variability by  $(1.47 - 1.15 = 0.32)$ , meaning the covariates explained about 22% of the variability in the individual-level scores of life satisfaction. However, this amount of unexplained variance is still significantly different from zero,  $b = 1.15$ , Wald  $Z = 30.31$ ,  $p$  (one-sided)  $< .001$ . Adding these predictors to the model reduced the unexplained between-culture variability by  $(0.09 - 0.06 = 0.03)$ , meaning the covariates explained about 33% of the variability in the culture-level scores of life satisfaction. A significant amount of variance remains to be explained by additional covariates,  $b = 0.06$ , Wald  $Z = 1.82$ ,  $p$  (one-sided)  $= .032$ . These results support the predictive validity of the fear of happiness construct over a relatively comprehensive set of recognized predictors of life satisfaction.

### Relationship With Religious Affiliation

Multilevel analysis was used to examine whether religious affiliation could contribute to the prediction of fear of happiness. Dummy variables were created for major self-reported religions

**Table 7.** Multilevel Model Predicting Individual-Level Life Satisfaction.

	<i>b</i>	Standard error	<i>t</i>	<i>p</i>
Intercept	4.20	.082	50.84	.000
Individual-level autonomy	0.006	.035	0.187	.852
Individual-level PGI	0.659	.033	19.697	.000
Individual-level FHS	-0.135	.020	-6.575	.000
Culture-level wealth	-0.00002	.00009	-2.318	.049
Culture-level individualism	0.030	.103	0.290	.779

Note. PGI = Personal Growth Initiative Scale; FHS = Fear of Happiness Scale.

**Table 8.** Multilevel Model Predicting Individual-Level Fear of Happiness.

	<i>b</i>	Standard error	<i>t</i>	<i>p</i>
Intercept	3.120	.158	19.655	.000
Christian	-0.196	.081	-2.396	.017
Muslim	0.254	.144	1.767	.078
Hindu	0.445	.517	0.860	.390
Taoist	0.034	.209	0.164	.870
Buddhist	-0.076	.106	-0.721	.471

in the sample, namely, Islam, Christianity, Buddhism, Taoism, and Hinduism. The category against which these variables are assessed includes all other answers to the religious affiliation question, including, atheist, agnostic, other minor religions, and those who did not self-report their religious affiliation. India was excluded from this analysis.

We found that there was statistically significant variability both at the within-culture,  $b = 1.58$ , Wald  $Z = 32.90$ ,  $p$  (one-sided)  $< .001$ , and between-culture levels,  $b = 0.32$ , Wald  $Z = 2.46$ ,  $p$  (one-sided)  $< .01$ . In a second analysis, we added the five dummy variables to the model. The results are shown in Table 8. As can be seen in the table, only being a Christian predicted the fear of happiness. Adding these predictors to the model reduced the unexplained within-culture variability by  $(1.58 - 1.57 = 0.01)$ , meaning the covariates explained about 0.7% of the variability in the individual-level scores of fear of happiness. However, the amount of unexplained variance is highly significant,  $b = 1.57$ , Wald  $Z = 32.90$ ,  $p$  (one-sided)  $< .001$ . Adding these predictors to the model reduced the unexplained between-culture variability by  $(0.32 - 0.29 = 0.03)$ , meaning the covariates explained about 10% of the variability in the culture-level scores of fear of happiness. A significant amount of variance remained to be explained by additional covariates,  $b = 0.29$ , Wald  $Z = 2.45$ ,  $p$  (one-sided)  $< .01$ .

Considering that, unlike the majority of Christians in our sample, Russian participants are largely influenced by the Orthodox tradition, we repeated the analysis excluding the Russian participants. The results showed that Christian affiliation remained a significant negative predictor ( $b = -0.23$ ,  $t = -2.59$ ,  $p = .010$ ). Considering that Iranians' version of Islam (Shiite Islam) is different from mainstream Islam (Sunni Islam), and given that Iranians scored lower than other Muslim samples (e.g., Kuwait and Pakistan) on fear of happiness (see Table 1), we repeated the analysis excluding Iranians. This time, the results showed that Islamic affiliation was a significant positive predictor of fear of happiness ( $b = 0.39$ ,  $t = 2.58$ ,  $p = .010$ ). Finally, we repeated the last analysis (excluding Iran), adding culture-level wealth and individualism as covariates. The results showed that Christianity (negative) and Islam (positive) remained significant predictors of fear of happiness. These results indicate that religious affiliation is associated with the fear of

happiness; however, this association is weak and limited to Islam as practiced outside Iran (positively) and Christianity (negatively).

## Discussion

The results of this study show that the FHS has a unidimensional factor structure in 13 out of the 14 cultures involved. The results of confirmatory factor analysis (CFA) revealed that the fit of the model is excellent in almost all of the cultures. The only culture for which we failed to replicate the unidimensional factor structure of the scale was India. Results regarding the reliability of the scale were also promising. Apart from India and Kenya, in all other cultures, the FHS yielded alphas ranging between .70 and .87, which is an acceptable range for internal consistency.

### *Measurement Invariance*

In this study, we established configural and full metric invariance as well as partial scalar invariance in 13 cultures. The findings regarding configural invariance indicate that, in all 13 cultures involved in the MGCFA, the concept of fear of happiness can be assessed using these five items. These results also indicate that these five items can be best represented by a single latent variable. Therefore, the concept of fear of happiness as described and assessed in this study has a uniform meaning in the 13 cultures included in the analyses. The results pertaining to metric invariance showed that all items displayed similar factor loadings across cultures. Therefore, the items are interpreted and responded to similarly. Our analyses, however, failed to establish full scalar invariance for the FHS. Partial scalar invariance was established by relaxing the equality constraints on the intercepts of three of the items. Many researchers believe that full measurement invariance is scientifically unrealistic, in particular when the number of groups exceeds two, and the groups are from highly diverse national backgrounds (De Beuckelaer & Swinnen, 2011; Horn, 1991; Torsheim et al., 2012). When the instrument is translated into several languages, full measurement invariance is unlikely (Schmitt & Kuljanin, 2008; Lvina et al., 2012). Given all these commonly faced difficulties in practical research, the invariance literature has recently agreed that “*partial invariance* is a more realistic and sufficient condition” (Steinmetz, 2011, p. 89, italics in original). Since the present study used a diverse multinational sample, the partial scalar invariance is impressive. Furthermore, it was found that two of the items were scalar invariant. This allows us to reliably compare latent factor means across cultures (Byrne et al. 1989; Steenkamp & Baumgartner, 1998; Steinmetz, 2011).

### *Correlations at the Individual Level*

Consistent with the predictions, it was found that the scale was significantly correlated with dampening. This finding is important because it suggests that to be afraid of happiness may lead people to develop practical strategies to deal with their emotions: namely, emotional dampening strategies. To date, the explanation for why some people dampen their positive emotions has rarely been studied. This study contributes to the literature by showing that the fear of happiness may set the stage for the use of dampening strategies in dealing with positive emotions. We also found as predicted that fear of happiness was related to decreased levels of life satisfaction. This finding supports our reasoning that those who think that positive states of mind (such as happiness, cheerfulness, and satisfaction) have bad consequences may downregulate their sense of happiness (Diener et al., 2013).

### *Isomorphism*

Another series of analyses that we conducted investigated the hierarchical structure of the concept of fear of happiness across the individual and cultural levels using multilevel CFA. It was

found that, with respect to its structure, the FHS was isomorphic (Byrne, 2012; Fontaine & Fischer, 2011; Van de Vijver & Leung, 2000). In other words, the same measurement structure of the scale held across the individual and cultural levels, indicating that this scale has an invariant meaning regardless of whether it is used to assess individuals within cultures or the cultures themselves. We also imposed equality constraints on all factor loadings of the multilevel factor structure, and found that the model fitted the data very well. This indicates that the specified factor loadings are invariant across levels.

### *Correlations at the Cultural Level*

At the cultural level, as predicted, national scores on the FHS correlated negatively with subjective well-being. This is consistent with the finding at the individual level which shows that the fear of happiness is negatively correlated with life satisfaction. However, it should also be noted that the association between fear of happiness and subjective well-being was rather weak (not exceeding .15) at both the individual and cultural levels. Although these findings are preliminary, they deserve further study. For example, East Asian cultures (e.g., Japan and South Korea) score lower than might be expected on subjective well-being scales (Inglehart, 2009). In contrast, Latin American cultures that are less developed in terms of economy and infrastructure than East Asian cultures score surprisingly high on happiness (Inglehart, 2009; Selin & Davey, 2012). This might be partly accounted for by the fact that, whereas East Asian cultures are cautious about happiness, Latin American cultures (such as Brazil) strongly value personal happiness (Selin & Davey, 2012). Thus, cultures that are high on the fear of happiness may score lower on subjective well-being scales, to some extent independently of their objective conditions. This shows that part of the variability in well-being scores might be explained by cultural beliefs. This fact should not be ignored in future studies, particularly when the subjective well-being scores are used to evaluate the functioning of nations.

As expected, cultures with higher fear of happiness were also high on conformity and verticality. Consistent with these findings, in a large multinational study, Matsumoto, Nezlek, and Koopmann (2007) found that power distance (a concept closely related to verticality) was negatively associated with the expression of joy in individuals. Finally, as predicted, higher fear of happiness across cultures was associated with higher levels of societal cynicism and dynamic externality. All these findings are intuitively plausible. Fear of happiness beliefs emphasize that unhappiness is always impending, and happiness is fragile. Cultures with such a mind-set are more conformist, vertical, and cynical about success, believe that social institutions are unjust, and also embody a dialectical and complex view of world phenomena (e.g., that happiness and unhappiness take turns). These cultural beliefs, of course, may well be functional, reflecting features of the social and economic environment that render such beliefs “rational” in some wider sense.

### *Predictive Validity*

As predicted, when the collective contribution of autonomy, personal growth initiative, culture-level individualism, and culture-level wealth was controlled for, the contribution of fear of happiness in the prediction of life satisfaction remained significant. Interestingly, the contribution of autonomy and culture-level individualism, which are well-known predictors of life satisfaction, was not significant over and above the fear of happiness and personal growth initiative. Wealth was negatively and marginally associated with life satisfaction. These results, however, should be interpreted with caution, because highly individualistic and wealthy nations (such as the United States and Western European nations) have not been included in this study. Moreover, the

association among individualistic variables such as autonomy and subjective well-being has been found to be stronger in Euro-American samples.

### *Relationship With Religious Affiliation*

Finally, we investigated the relationship between religious affiliation and fear of happiness. The findings indicate that being a non-Iranian Muslim increases the chance of being afraid of happiness. In contrast, being a Christian decreases the chance of being afraid of happiness. Considering that the cultures included in this study are highly diverse in terms of wealth and cultural values, we controlled for wealth and individualism to ensure these factors do not function as confounders. It was found that the relationship between religious affiliation and the fear of happiness remained significant when controlling for these possible confounders. Findings regarding the East Asian religions, however, should be interpreted with caution. Confucianism, Taoism, Hinduism, and Buddhism form the foundation of East Asian culture (e.g., Kim, Yang, & Hwang, 2006), and even if a person is not affiliated to these religions, he or she is strongly influenced by them. That the correlation between the fear of happiness and being a Muslim is weaker in Iran than in other nations (mainly Kuwait and Pakistan) may be because Iranian students are more westernized and less religious than Muslim students from other countries (Joshi, 2012).

Caution must also be exercised when interpreting our findings regarding Christianity, because for most of the countries included in this study, Christianity is not the initial religion of the country, and has become influential in recent centuries. Christians in Asian countries are also influenced by indigenous Asian cultures. Moreover, apart from New Zealand and Russia, Western nations that are strongly influenced by Christianity were not included in this study. That Christianity is negatively associated with the fear of happiness is perhaps understandable in light of the recent history of this religion, particularly recent developments in Protestantism (McMahon, 2006, 2010). These new religious trends emphasize the parts of the Gospels calling for rejoicing and gladness in this world and the hereafter. Indeed, McMahon (2006, 2010) argues that the modern emphasis on the pursuit of happiness in the West stems in part from these new developments in Christianity. Therefore, it is perhaps not surprising that, in the modern world, Christian affiliation is negatively correlated with the fear of happiness. However, for firmer conclusions to be drawn, future research should examine more specifically the relationship between religious affiliation and the fear of happiness at the sect level (e.g., Orthodox, Catholic, and Protestant) including a more representative sample of nations.

### *Limitations and Future Studies*

Although the findings of this study are promising, and the FHS showed acceptable statistical properties in almost all cultures, the study inevitably had limitations. The study was exploratory in nature and provided a snapshot of the concept of fear of happiness and its nomological network. As mentioned earlier in the discussion of the findings, some regions of the world are underrepresented. In addition, India, one of the most populous countries in the world, was excluded from the analyses. Future studies should include more cultures from Europe, North America, and other parts of India. Moreover, some of the national samples included in this study may not be representative of the whole nation. All samples were university student samples, and caution should be used in generalizing these findings to adult populations. Some cultural samples were also different from the general populations from which they were drawn in other ways. For example, in the Malaysian sample, only 7.8% of the participants were Muslims, whereas Muslims make up 60.4% of the population of Malaysia (CIA, 2012). Moreover, the sample sizes in some countries (e.g., Kenya and Hong Kong) were relatively small. Larger and more heterogeneous samples from diverse areas of the world are needed to draw firmer conclusions.

In this study, we investigated a number of correlates of fear of happiness. However, much remains to be done to further establish the nomological network of fear of happiness. Although we speculated about the cultural roots of the variable in various cultures, future studies need to empirically examine these possibilities. In particular, we do not know much about the behavioral consequences of fear of happiness. Future research should investigate how this belief domain is translated into actual behavior in different life domains. For example, are individuals with high fear of happiness less willing to attend parties where people try to get extremely happy and express their feelings? Considering that various sorts of music may invoke various states of mind, what sorts of music do high fear of happiness individuals like to listen to or avoid? Given that drinking alcohol may lead to heightened merriment, what are the drinking habits of these individuals?

Besides its exploratory role in understanding cultural and individual differences in subjective well-being and dampening, the fear of happiness construct may help us understand cultural and individual differences in other important psychological variables such as ideal affect. Ideal affect refers to positive affective states that individuals or cultures would ideally like to experience (Tsai, Knutson, & Fung, 2006; Tsai, 2007). Previous research shows that Western cultures generally favor high arousal positive emotions (e.g., excitement and euphoria), whereas East Asians emphasize low arousal positive states such as relaxation and peacefulness (Tsai, 2007; Tsai, Miao, & Seppala, 2007). Not surprisingly, in the current study, we found that East Asian cultures (e.g., Singapore and Malaysia) scored higher on the fear of happiness than Western cultures (i.e., New Zealand). It can be argued that the fear of happiness is one of the factors setting the stage for a preference for low arousal rather than high arousal emotions. In other words, one of the reasons for preferring emotional moderation may be that the person regards immoderate happiness as hazardous. Low arousal emotions may be considered safe for those who score highly on the fear of happiness. Similarly, fear of happiness may help us explain cultural and individual differences in emotion regulation (Gross & John, 2003). For example, the fear of happiness may partly explain why individuals in collectivistic and harmony-oriented cultures (e.g., East Asian cultures) tend more frequently to inhibit expressions of positive emotions than those in individualistic cultures (Matsumoto et al., 2008). Future studies along these lines can facilitate the development of a more sophisticated understanding of the way cultural beliefs come to influence emotion regulation.

In conclusion, this study used samples from 14 cultures to examine the understudied concept of fear of happiness, which was developed based on an analysis of some understudied aspects of non-Western cultures. Findings were promising, and the study provided novel insights. We also suggested some potential avenues for future studies. It is hoped that this study will spur further research, and inform more culturally sensitive hypotheses in the field of well-being and happiness studies.

### **Authors' Note**

The contribution of authors other than the corresponding author was equal, and thus the second to last names are ordered alphabetically.

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