

# Individual-oriented and socially oriented cultural conceptions of subjective well-being: Conceptual analysis and scale development

Luo Lu<sup>1</sup> and Robin Gilmour<sup>2</sup>

<sup>1</sup>Graduate Institute of Human Resource Management, National Central University, Jhongli City, Taiwan, <sup>2</sup>Department of Psychology, University of Lancaster, Lancaster, UK

Adopting a ‘cross-cultural indigenous approach’ (CCI), we attempted a conceptual analysis of cultural conceptions of SWB in terms of individual-oriented SWB (ISWB) and socially oriented SWB (SSWB) views. Also incorporating findings from our previous qualitative studies, a culturally balanced and fair measurement, The Individual-oriented and Socially oriented cultural conceptions of SWB Scales (ISSWB) was developed and evaluated in two studies involving Chinese and American participants. The 51-item version of the new measure showed good internal consistency reliability, test–retest reliability, convergent and discriminant validity. Further analysis showed that the Chinese possessed stronger SSWB than the Americans, while the Americans possessed stronger ISWB than the Chinese. There were also intracultural differences among the Chinese people. Overall, the studies showed the utility of ISSWB scales for future studies.

*Key words:* Americans, Chinese, culture, measurement, subjective well-being.

## Introduction

What is happiness? This is a simple question. We all know the answer, or do we? As soon as we hear people talk about happiness, we will be stunned how diverse each one’s ideas about happiness are! The differences are even more substantial in the ways people from East Asia and North America think about happiness. Regarded as a ‘basic building block, a value in terms of which other values are justified’ (Braithwaite & Law, 1985, p. 261), the experiences of happiness may be universal, but its meaning remains complex and culture-bonded.

In this paper, we take the position that the cultural conceptions of happiness are critical aspects of subjective well-being (SWB), which have largely been neglected thus far by Western psychologists. We then set out to systematically delineate the differences between American and Chinese cultural conceptions of happiness, and to develop scales measuring such diverse cultural conceptions of SWB prevalent in Confucian East Asia and Christian Europe–North America.

Because meanings and concepts are molded by culture (Bruner, 1990), it seems necessary to explore what people think about happiness as embedded in the world of meanings/values construed by a unique cultural tradition. As

Kitayama and Markus (2000) point out, well-being is a ‘collaborative project’, in the sense that the very nature of what it means to be well or to experience well-being takes culture-specific forms (Shweder, 1998). These variations can make a difference not only for the meaning of SWB, but also in the ways that people achieve and maintain well-being, as already shown by ours and other researchers’ studies (Diener & Diener, 1995; Chiasson *et al.*, 1996; Kwan *et al.*, 1997; Lu & Shih, 1997; Furnham & Cheng, 2000; Suh, 2000; Lu, 2001; Lu *et al.*, 2001a; Lu *et al.*, 2001b; Lu & Gilmour, 2004a, b). Thus, it seems that assuming SWB has the same meaning across the world is problematic, albeit it seems to be assumed by previous cross-cultural research on SWB (e.g. Micholas, 1991; Veenhoven, 1993; Diener & Suh, 1999).

However, the validity of comparative research has long been a hotly debated issue. Yang (2000) has advocated a ‘cross-cultural indigenous approach’ (CCI) that seeks to solve the twin problems of scientific ethnocentrism and cross-cultural equivalence that have troubled mainstream cross-cultural psychology for decades. In essence, the CCI seeks to define the parameters under which a comparative research project could be undertaken. Going further beyond the derived etic style of research advocated in cross-cultural research (Berry, 1969), the CCI method includes a synthesis of mono-cultural and comparative research. The CCI relies heavily upon mono-cultural studies with an indigenous perspective, including conceptual analysis and qualitative data collection. Basing on the primarily qualitative mono-cultural research, the CCI then envisages cross-culturally appropriate, focused, and refined research. In the

*Correspondence:* Luo Lu, Graduate Institute of Human Resource Management, National Central University, No. 300, Jhongda Road, Jhongli City, Taoyuan County 32001, Taiwan. Email: luolu@mgt.ncu.edu.tw

case of a quantitative study, cross-culturally fair and balanced tools should first be developed to collect data for comparison. Such an instrument should include all the common, less common, and unique aspects of the studied psychological characteristics as identified by the above-mentioned indigenous qualitative studies. The fundamental principle of the CCI is to maximize the cross-cultural indigenous compatibility of conceptualization, research design, data collection, analysis and interpretation. Although carrying out a comparative study adopting the CCI approach may be time-consuming, effort-intensive and very complicated, it nonetheless promises a substantial contribution towards the goal of building a valid global psychology.

Our recent studies on the SWB are informed by the CCI approach. We (Lu, 2001; Lu & Gilmour, 2004a) started by asking Chinese and American university students to write free-format essays under the title of 'what is happiness?' What we found was that in some respects, these definitional accounts of happiness are similar to one another; they all consider happiness as a desirable, positive inner state of mind. At the same time, there are some distinct differences between the Chinese and American accounts. For example, the Chinese accounts seem more solemn and introspective, with more emphasis on spiritual cultivation and psychological transcendence. The American accounts, by comparison, seem more uplifting, elated, exciting, and show more emphasis on enjoying life in the physical sense and present time. Furthermore, the Chinese students appear to desire a more balanced life, with social expectations finely integrated into their sense of well-being. The American students, in contrast, appear to uphold personal happiness as the supreme value of life, and blatantly assert individual agency against social restrictions. Informed by these qualitative empirical data, we will further contrast at the conceptual level two cultural systems of SWB: East Asian socially oriented and Euro-American individual-oriented cultural conceptions of SWB.

### **Euro-American individual-oriented cultural conceptions of SWB**

The study of SWB has mostly developed within a European American framework, and it incorporates a web of tacit understandings and implicit assumptions that are shared by both researchers and participants (Markus & Kitayama, 1998). Borrowing Suh's (2000, p. 63) metaphor of 'self as the hyphen between culture and subjective well-being', the construction of self, the participation of self in social institutions and the daily lived world may hold the key to our understanding of the meaning of happiness in various culture systems.

Euro-American theories of SWB are firmly based on a highly individualistic self concept. Such a view of the per-

son as a bounded, coherent, stable, autonomous, free entity is variously termed independent self (Markus & Kitayama, 1991) or individual-oriented self (Yang, 2003). This is the prototypical North American characterization of the self, which locates crucial self-representations within the individual.

In the Euro-American culture of individualism (Hofstede, 1980; Kim *et al.*, 1994; Triandis, 1994), social customs, institutions and the media all conspire to foster the agentic way of being, emphasizing free will and individual reason (Markus & Kitayama, 1998). In particular, the American culture strongly advocates relentless pursuit of individual interests and generously rewards personal successes.

Embedded in such a historical and cultural milieu, one distinct characteristic of the Euro-American cultural conceptions of SWB is personal accountability, which essentially claims that happiness is everyone's natural and inalienable right; furthermore, one should be responsible for his own happiness. Being happy is seen as a personal accomplishment, and the American culture is obsessed with achieving personal happiness. Happiness thus has many positive associations. For example, happiness is closely related to self-esteem, health and life satisfaction (Diener *et al.*, 1985; Diener & Diener, 1995; Lu, 1995). On the other hand, failing to be happy implies that one is shirking one's responsibility and failing to realize the American cultural mandate. The robustly found prevalence of 'illusory optimism' in North America (Taylor & Brown, 1988; Heine & Lehman, 1995) may suggest a prevailing tendency of self-enhancement to protect oneself from vulnerable feelings of failure and unhappiness.

Another distinct characteristic of the Euro-American cultural conceptions of SWB is explicit pursuit, which essentially claims that people should actively strive for happiness, and the pursuit of happiness should not be jeopardized in any way. The active and explicit pursuit of happiness is one of the best ways of living out an independent personhood, which masters and controls the external environment, identifies and realizes potentials, creates and achieves goals. Active striving for happiness, never backing down, taking necessary risks and bearing costs are themes that frequent the popular psychological literature, media discourses and the daily expressions of Americans. Furthermore, with an infrastructure of democracy and social equality, a constitution that upholds individual rights, social customs that encourage personal striving and reward achievement, the opportunities and freedom to pursue happiness in Euro-America are abundant.

To summarize, a free individual unceasingly pursuing happiness with the blessings of the society best portrays the Euro-American cultural conceptions of the individual-oriented SWB, composed of two distinct characteristics: personal accountability and explicit pursuit.

## East Asian socially oriented cultural conceptions of SWB

The East Asian view of the self, in sharp contrast to the Euro-American view, is of a connected, fluid, flexible, committed being that is bound to others. This conceptualization has been variously termed interdependent self (Markus & Kitayama, 1991) or socially oriented self (Yang, 2003). As the prototypical East Asian characterization of the self, it locates crucial self-representations not within unique individual attributes, but within one's social relationships.

In the East Asian culture of collectivism, social customs, institutions and the media all conspire to foster the relational way of being, emphasizing roles, statuses and in-group membership (Markus & Kitayama, 1998). Thus, many Asian cultures advocate priority of collective welfare over personal interests, and reward self-control, diligent role performance, and rigorous self-cultivation.

Within this particular historical and cultural milieu, East Asian cultural conceptions of SWB has a distinct characteristic of role obligations, which states that happiness should be based upon the fulfillment of social role obligations, and accomplished through self-cultivation. In so doing, group welfare and social harmony can be ensured. In contrast to the prevalence of self-enhancement among North Americans, East Asians (Japanese for instance) frequently exhibit a tendency of self-criticism and self-effacement (Heine *et al.*, 1999; Kitayama & Markus, 2000). This is because the pursuit of socially desirable and culturally mandated achievement rather than striving for personal accomplishment is the more characteristic mode of the participating socially oriented self (Yu & Yang, 1994). Consequently, in the East Asian socially oriented cultural conceptions of SWB, the fulfillment of role obligations in interdependent social relationships, the creation and maintenance of interpersonal harmony, the striving to promote the welfare and prosperity of the collective (e.g. family), even at a cost to one's personal welfare, are the core issues. Such a view of SWB is consonant with a Confucian obligation-based moral discourse, in contrast to a Euro-American right-based one (Hwang, 2001).

Another defining characteristic of East Asian socially oriented cultural conceptions of SWB is a view of dialectical balance. 'Happiness' and 'unhappiness' are viewed as two sides of a coin. People should not pursue happiness in excess, rather they should search for deeper internal homeostasis and external fusion. The Japanese culture exhibits a 'habit of hesitation' towards happiness (Minami, 1971, p. 34). This characteristic oriental reservation may be traced back to the ancient *Yin-Yang* philosophy which takes a cosmological view that everything from the cosmos to human life is a never-ending cyclic process of change, between good and bad, happiness and misery, well-being and ill-being. To exemplify in the case of happiness/unhap-

piness: 'happiness is dependent on unhappiness, while unhappiness is hidden in happiness' (Lu, 1998).

To summarize, happiness is constructed very differently in the East Asian cultures. The North American vision of personal happiness is no longer a dominant concern for most East Asians. Instead, a self-cultivated person diligently carrying out his moral duties to pursue happiness for the society with the cooperation of others thus best captures the essence of the East Asian cultural conceptions of SWB. We termed this view the socially oriented cultural conceptions of SWB, composed of two distinct characteristics: role obligations and dialectical balance.

## The present series of studies

We have argued that the unquestioned assumption underlying most extant cross-cultural research on SWB is problematic. That is, SWB does not have the same meaning across the world; instead, our previous indigenous qualitative study and conceptual analysis suggest that Euro-American and East-Asian conceptions of SWB may differ systematically in that the former is more individual-oriented and the latter is more socially oriented. Following the CCI procedure (Yang, 2000), we will then develop cross-culturally balanced measures of conceptions of SWB and empirically demonstrate those cross-cultural differences between Americans and Chinese.

Furthermore, any potential differences between the two major Chinese societies, Mainland China (PRC) and Taiwan, will be interesting to ponder. We (Lu *et al.*, 2003) have systematically contrasted the political, social and economic systems in the PRC and Taiwan, drawing on both historical developments and current events in the two regions. In short, the PRC is a socialist society undergoing transition towards a market economy. Taiwan is a new democracy continuing its rapid industrialization and is economically more Americanized. For the interests of the present study, we will examine whether the greater exposure to North American culture and the trend of globalization of the Taiwanese people and the younger well-educated generation in both societies has marked any differences in their conceptions of SWB.

Finally, it needs to be stated at the outset that seemingly contrasting cultural elements can coexist at the psychological level. Yang (2003) asserted that both individual-oriented and socially oriented self are integral parts of the Chinese self. We have indeed consistently found a coexistence of the independent and interdependent self in cross-cultural analyses (Lu *et al.*, 2001b; Lu & Gilmour, 2004b). It is thus conceivable that although the socially oriented cultural conceptions of SWB may be the dominant views among the East Asians, they may also possess some individual-oriented views of SWB. In view of social change

and psychological transformation, we may even expect that the Chinese people, especially the younger well-educated generation are becoming increasingly individual-oriented in general (Lu & Yang, 2004). Similarly, although the individual-oriented cultural conceptions of SWB may be the dominant views among the Euro-Americans, they may also possess some socially oriented views of SWB. Our overall purpose was to develop a new scale that would reliably measure individual-oriented and socially oriented cultural conceptions of SWB delineated earlier as individual differences variables for people of any culture.

### Study 1: Scale development

The aim of this study was threefold: to develop a scale measuring key elements of individual-oriented and socially oriented cultural conceptions of SWB; to conduct preliminary evaluation in a sample of Chinese students and adults; and to finalize a short yet effective version for further scale evaluation and cross-cultural studies.

#### Method

*Item development.* Items were developed to measure the constellation of thoughts, feelings, and actions composing individual-oriented and socially oriented conceptions of SWB as described previously. A combined inductive and deductive approach to item generation as suggested by Hinkin (1995) was adopted at this stage. Integrating qualitative data collected from large samples of Chinese and American students, as well as Chinese and British community adults with our conceptual analysis, a comprehensive theoretical scheme was constructed. Both the structure and definitions of the constructs measured are given in Table 1.

The scheme for item generation as depicted in Table 1 has two first-level scales measuring Individual-oriented (ISWB) and Socially oriented SWB (SSWB) conceptions. A total of four second-level subscales are needed to measure key components of the ISWB and SSWB, namely, 'personal accountability' (PA) and 'explicit pursuit' (EP) as constituents of ISWB, 'role obligations' (RO) and 'dialectical balance' (DB) as constituents of SSWB. This two-dimensional structure (ISWB and SSWB) forms the backbone for our new scale. However, to ensure comprehensiveness, the structure is elaborated in more detail. As can be seen in Table 1, the elaborate theoretical scheme ensures the conceptual comprehensiveness of the new scale. We followed Hinkin (1995) in our development of the scale. Two summation scores, ISWB and SSWB, were computed to represent personal endorsement of the individual-oriented and socially oriented SWB conceptions. Four further summation scores, PA, EP, RO, DB,

were computed to represent personal endorsement concerning personal accountability, explicit pursuit, role obligations and dialectical balance. These six scores were the major focus of analysis while 19 other scores derived from lower-level subscales as indicated in Table 1 were also examined for their reference values.

*Instrument.* The 96 ISSWB items were randomly ordered as a single scale. Respondents were asked to indicate their agreement with the items on a 6-point Likert-type rating scale (1 = strongly disagree, 6 = strongly agree). A second part of the instrument included items from the Crowne and Marlowe's (1964) Social Desirability Scale.

*Participants.* The sample consisted of 104 Chinese students and 33 community adults in Taiwan. Students were recruited from various universities across the country and adults were residents of a big metropolitan city. Although the age range was wide (from 19 to 48 years), most participants were young (with a mean age of 24.84,  $SD = 4.71$ ). There were 46 males and 91 females. Participants volunteered and completed the instrument at their leisure.

#### Results

*Finalizing the ISSWB.* Creating a relatively short yet effective version for future studies was the aim at this stage. A set of criteria was followed in selecting items for the finalized scales: (i) the rate of correct classification above 80% in the sorting practice (to be described below); (ii) low correlation with the social desirability score ( $r < 0.20$ ); (iii) a normal distribution with skewness and kurtosis below 1; (iv) sufficient discriminate power ( $5 > \text{mean} > 2$ ) and variance ( $1.5 > SD > 0.5$ ); (v) high item contribution to the scale ( $ITC > 0.20$ ); and (vi) sufficient number of items in the subscales.

Following the above a priori selection criteria, a short version of the new measure was finalized. The original structure was retained and Cronbach's alpha coefficients for the six main scales and subscales were all in the range of 0.80s. Cronbach's alpha was 0.88 for ISWB (0.81 for PA and 0.86 for EP) and 0.89 for SSWB (0.87 for RO and 0.82 for DB). The finalized version of ISSWB thus had 51 items in total, 25 measuring individual-oriented SWB conceptions and 26 measuring socially oriented SWB conceptions.

*Validity.* There are several indications that the ISSWB is a valid measure of SWB conceptions. First, the face validity for the ISWB and SSWB scales is quite high. With a detailed theoretical framework, the comprehensiveness of the scale was ensured. The wide range across feelings, behaviors, and thoughts represented by ISSWB items also contributes to the content validity of the scale. The appropriateness of items can be scrutinized in the Appendix.

**Table 1** Theoretical structure and definitions of the constructs measured

Level	Codes	Constructs	Definitions
1st	I	Individual-oriented SWB (ISWB)	SWB conceptions as an expression and practice of an independent or individual-oriented self.
2nd	I1	Personal accountability (PA)	Happiness is everyone's right, and everyone should be responsible for his own happiness.
3rd	I1-1	Natural right	Happiness is a born right which one cannot be deprived of.
4th	I1-1-1	Right	Happiness is a personal right.
4th	I1-1-2	Value	Happiness is a supreme value.
3rd	I1-2	Individual responsibility	People should be completely responsible for their own welfare.
4th	I1-2-1	Success	Being happy is a personal accomplishment.
4th	I1-2-2	Failure	People should be responsible for their own unhappiness.
2nd	I2	Explicit pursuit (EP)	People should actively strive for happiness, and the pursuit of happiness should not be jeopardized in any way.
3rd	I2-1	Active striving	People should actively strive for happiness, never back down, and take the necessary risks and bear the costs.
3rd	I2-2	Conducive environment	Society should provide necessary resources, conditions, and opportunities, encouraging and helping people in their pursuit of happiness.
1st	S	Social-oriented SWB (SSWB)	SWB conceptions as an expression and practice of an interdependent or social-oriented self.
2nd	S1	Role obligations (RO)	Happiness should be based upon the fulfillment of social role obligations, and accomplished through self-cultivation. In so doing, group welfare and social harmony can be ensured.
3rd	S1-1	Other priority	Welfare of others should take precedence over personal happiness, to achieve the 'happiness of society'.
4th	S1-1-1	Groups (family)	Welfare of groups, especially family, should take precedence over personal happiness.
4th	S1-1-2	Relationships	In dyadic relationships, welfare of the other party should take precedence over personal happiness.
4th	S1-1-3	Others (society)	Welfare of generalized others, even that of society, should take precedence over personal happiness.
3rd	S1-2	Self-cultivation	Happiness should be accomplished through self-cultivation.
2nd	S2	Dialectical balance (DB)	'Happiness' and 'unhappiness' are two sides of a coin. People should not pursue happiness in excess, rather they should search for deeper internal homeostasis and external fusion.
3rd	S2-1	Dialectical relation	The relationship between 'happiness' and 'unhappiness' is dialectical. They are interdependent. Each is the precondition of the other, and each can transform into the other in an endless circle.
4th	S2-1-1	Interdependence	'Happiness' and 'unhappiness' are present in each other's contrast.
4th	S2-1-2	Transformation	'Happiness' and 'unhappiness' can transform into each other, and are dynamic.
3rd	S2-2	Ultimate equilibrium	Happiness is the ultimate state of internal and external equilibrium.
4th	S2-2-1	Internal equilibrium	Internal equilibrium of physical, psychological and spiritual being.
4th	S2-2-2	External equilibrium	The harmony and equilibrium of interpersonal (social) relationships, as well as the harmony and equilibrium between people and nature.

Second, all the original items were subject to a sorting practice to further ensure the content validity. Nine graduate students of diverse social sciences backgrounds were asked to classify each randomly ordered item into the theoretical structure as depicted in Table 1. Only those items that achieved over 80% correct assignment were retained.

Finally, the possibility of social desirability bias was checked. Consequently, none of the six main scores correlated with the social desirability score (ISWB:  $r = 0.03$ , SSWB:  $r = 0.09$ , PA:  $r = 0.08$ , EP:  $r = 0.07$ , RO:  $r = 0.06$ , DB:  $r = 0.02$ ). Thus far, preliminary support was ensured for reliability and validity of the ISSWB in the current Taiwanese sample. However, with a mono-cultural sample

and limited tests for reliability and validity, the present study can only be regarded as a pilot one. Also, the relatively low sample to items ratio (1.43) did not warrant an exploratory factor analysis for the item selection. Thus, the above reported preliminary evidence of reliability and validity needs to be replicated in other independent samples. More importantly, following the CCI approach, a proper cross-cultural study validating the ISSWB and comparing cultural conceptions of SWB in East Asia and North America should now be carried out, thus the second study reported below.

## Study 2: Scale evaluation

### Method

*Instrument.* The individual-oriented and socially oriented cultural conceptions of SWB have been conceptualized as generic constructs that would apply to individuals in any culture. No need is thus envisaged to either revise the theoretical framework or the ISSWB items for cross-cultural studies. In fact, when the initial ISSWB items were developed, a parallel English version was written. A standard procedure of back-translation was conducted to ensure the Chinese and English versions were equivalent. Although extensive scale evaluation work as described in Study 1 is yet to be carried out with Euro-American samples, some preliminary supporting evidence is available to justify the use of the ISSWB with the American sample in the present study. First, our standard procedure of back-translation ensured the equivalent versions of Chinese and English, hence largely eliminating problems caused by language transportation. Second and more importantly, throughout the construction and revision of the ISSWB, researchers from both individualist (Britain) and collectivist (Taiwan and PRC) cultural backgrounds maintained intensive and extensive exchanges of views and knowledge, to ensure that the final products of this professional as well as cultural collaboration should be psychologically meaningful to people of both individualist and collectivist cultures. Furthermore, contents of the finalized ISSWB following the Chinese scale evaluation study were verified and slightly revised by the British researcher (second author), his American colleagues and students (while he was on sabbatical in the USA) through informal discussions. However, these were linguistic stylistic polish rather than substance changes.

In the first part of the test battery, the 51-item ISSWB was used to measure individual-oriented and socially oriented cultural conceptions of SWB. For clarity and parsimony, again six scores were computed for the scale: ISWB and SSWB, PA and EP (two components of the ISWB), RO

and DB (two components of the SSWB). Descriptions of these constructs are given in Table 1.

In the second part of the test battery, several other scales were included to validate the new ISSWB. Independent and Interdependent Self Scales (IISS, Lu & Gilmour, 2004b) were used to assess personal endorsement on independent and interdependent self views as constructed by Markus and Kitayama (1991). Based on our previous discussions pertaining to the interlocking nature of self and SWB conceptions in different cultural systems, it was hypothesized that independent self would be associated more strongly with individual-oriented SWB whereas interdependent self would be associated more strongly with socially oriented SWB (Hypothesis 1).

The Primary Control Beliefs Scale (Lu & Gilmour, 2004b) was used to measure personal convictions on actively controlling the environment – ‘changing the world’ or primary control – as proposed by Rothbaum *et al.* (1982). The Harmony Beliefs Scale (Lu *et al.*, 2001b) was used to measure personal convictions on diligently maintaining interpersonal harmony. Based on existing literature pertaining to the characteristics of individualist and collectivist cultures, it was reasonable to infer that actively controlling the environment is a distinct characteristic of individualist cultures whereas diligently maintaining interpersonal harmony is a distinct characteristic of collectivist cultures. Morling (2000) surveyed American and Japanese students’ reasons for choosing classes, their attributions for mistakes in class, and their behavioral responses to a difficult class. She found that the response pattern of American students suggested more primary control, whereas that of Japanese students suggested more secondary control. Earlier, Peng (1995) also found that Americans scored higher on primary control whereas Chinese scored higher on secondary control. It was thus hypothesized that primary control beliefs would be associated more strongly with individual-oriented SWB whereas harmony beliefs would be associated more strongly with socially oriented SWB (Hypothesis 2).

Chinese Happiness Inventory (CHI, Lu, 1998) was used to measure perceived level of happiness, composed of positive affect (lack of) negative affect, and life satisfaction. As feelings of happiness are theoretically distinct from conceptions of happiness, we hypothesized that there would be only weak associations between the two (Hypothesis 3).

Social Desirability Scale (Crowne & Marlowe, 1964) was again included to check for potential bias in the ISSWB.

We concede that there may be other existing instruments that are relevant to cultural conceptions of SWB, the above measures were chosen for several reasons. First, all these measures were originally developed with a culture-sensitive approach tapping constructs embedded in East

Asian and Euro-American cultural traditions, and later validated for cross-cultural research purposes. Thus, there should be a smaller risk of imposing theoretical constructs specific to one culture onto another. Second, all these measures were repeatedly used in our series of cross-cultural SWB studies and have demonstrated good reliability and validity. Third, although there are widely used measures for similar constructs, such as Singelis' (1994) Self-Construal Scale (SCS), they are not without critiques. The CSC suffered poor reliability ( $\alpha = 0.52\text{--}0.73$ ) when recently given to Chinese and British general populations (Lu *et al.*, 2001b). Finally, the CHI was already widely used with various Chinese, Japanese, Australian, American and British samples (Shih, 1999).

*Participants.* A broad cross-section of university students were recruited in the PRC, Taiwan and the USA. Additional samples of community adults were also recruited in the PRC and Taiwan. Consequently, five samples were formed: 225 Taiwanese students (54% male, mean age = 20.24 years), 114 PRC students (30.7% male, mean age = 21.78 years), 286 American students (27.3% male, mean age = 19.41 years), 124 Taiwanese adults (48.8% male, mean age = 40.18 years), and 204 PRC adults (46.8% male, mean age = 30.60 years). The total sample size was 953.

## Results

A preliminary analysis revealed that all main research variables were normally distributed across all five samples, including scores on independent self, interdependent self, primary control, harmony, happiness, and the six scores on ISSWB. Coefficients of skewness and kurtosis all fell between +1 and -1. For further details, all 51 items of ISSWB were normally distributed across all five samples, with coefficients of skewness and kurtosis falling between +1 and -1. These results ensured an acceptable statistical basis for further analyses. They were also indicators of satisfactory psychometric properties across cultures for the ISSWB.

*Reliability.* Internal consistency reliability for the ISSWB scales was uniformly good for all the five samples (incorporated in Tables 2-4). For the ISWB and SSWB scales,  $\alpha$  coefficients were mostly in the upper 0.80 range. For their constituting elements of PA, EP, RO, and DB,  $\alpha$  coefficients were mostly between the upper 0.70 and lower 0.80 range. Thus, there was further evidence supporting the cross-cultural equivalence of psychometric properties of the ISSWB.

The test-retest reliability of the ISSWB scales was examined with an independent Taiwanese student sample. A total of 130 students (90 females and 40 males) were recruited in a large university and tested twice with a 2-

month interval. The autocorrelations were 0.70 for ISWB (0.68 for PA and 0.60 for EP) and 0.76 for SSWB (0.73 for RO and 0.74 for DB). Thus temporal reliability of the scales was established.

*Validity.* Construct validity was assessed by examining their associations with other measures that should be theoretically related to SWB conceptions. As our Hypothesis 1 and Hypothesis 2 stated, ISWB was expected to have associations with independent self and primary control as they were all derived from the individualist cultural tradition. Similarly, SSWB was expected to have associations with interdependent self and harmony beliefs as they were all derived from the collectivist cultural tradition. Correlation matrices for each of the five individual samples are presented in Tables 2-4.

Reading these five matrices, several findings were revealed. First, ISWB and SSWB were generally highly correlated (0.47-0.66). Second, both ISWB and SSWB were positively correlated with independent self, interdependent self, primary control beliefs, and harmony beliefs. Third, our Hypotheses 1 and 2 seemed to be most clearly supported in the American sample.

However, with a high correlation between ISWB and SSWB, it might be difficult to detect differential associations of these with different types of self-construals and beliefs. To better test the two hypotheses, we computed partial correlations of ISWB (or SSWB) while controlling for its companion SSWB (or ISWB) separately in each of the three samples (Taiwan, PRC, and USA). Results were more clear-cut this time as presented in Table 5. In all three samples, ISWB correlated more strongly with independent than interdependent self, with primary control than harmony beliefs. In contrast, SSWB correlated more strongly with interdependent than independent self, with harmony than primary control beliefs. Our Hypotheses 1 and 2 were tentatively supported.

To provide a stronger test, we performed two sets of hierarchical regression with ISWB and SSWB as dependent variables. The logic was that if ISWB was more influenced by independent self and primary control beliefs, then adding interdependent self and harmony beliefs into the equation after the first set of variables should have a relatively small contribution, and vice versa in the case of SSWB. The regression analyses were first conducted separately in each of the three samples (Taiwan, PRC, and USA), and then in the entire sample (combining the three samples together).

Results were generally similar in the three samples. For the Taiwan sample, while predicting ISWB scores, independent self and primary control beliefs explained a total of 37% of variance ( $F_{2,308} = 89.89, p < 0.001$ ). However, adding interdependent self and harmony beliefs made no increment in  $R^2$  ( $\Delta F_{2,306} = 1.18$  (ns)). Similarly, while predicting SSWB scores, interdependent self and harmony

**Table 2** Correlation matrix for the Taiwanese samples

	1	2	3	4	5	6	7	8	9	10	11	12
Cronbach's alpha	0.83	0.82	0.88	0.82	0.78	0.87						
1. PA	1.00	0.48***	0.92***	0.46***	0.37***	0.46***	0.07	0.39***	0.32**	0.41***	0.24*	0.26**
2. EP	0.57***	1.00	0.79***	0.54***	0.45***	0.53***	0.03	0.56***	0.58***	0.36***	0.26**	0.19
3. ISWB	0.93***	0.83***	1.00	0.57***	0.45***	0.55***	0.06	0.54***	0.46**	0.43***	0.27**	0.28**
4. RO	0.42***	0.46***	0.49***	1.00	0.64***	0.90***	0.25**	0.56***	0.64***	0.59***	0.64***	0.14
5. DB	0.30***	0.30***	0.33***	0.52***	1.00	0.91***	0.10	0.36***	0.39***	0.32***	0.36***	0.05
6. SSWB	0.41***	0.44***	0.47***	0.89***	0.86***	1.00	0.18	0.52***	0.60***	0.51***	0.56***	0.13
7. SD	-0.10	-0.02	-0.06	0.09	-0.07	0.00	1.00	0.10	0.11	0.19*	0.16	0.03
8. Ind. self	0.45***	0.60***	0.58***	0.44***	0.22***	0.39***	0.02	1.00	0.65***	0.50***	0.41***	0.06
9. Interdep. self	0.32***	0.37***	0.39***	0.58***	0.31***	0.52***	-0.02	0.40***	1.00	0.61***	0.54***	0.09
10. Control	0.42***	0.37***	0.45***	0.48***	0.29***	0.43***	0.11	0.46***	0.56***	1.00	0.62***	0.15
11. Harmony	0.26***	0.28***	0.29***	0.41***	0.39***	0.46***	0.01	0.30***	0.57***	0.48***	1.00	0.12
12. Happiness	0.27***	0.24***	0.29***	0.29***	0.09	0.22**	0.17*	0.23**	0.21**	0.29***	0.05	1.00
Cronbach's alpha	0.79	0.79	0.86	0.84	0.77	0.87						

The upper triangle contains correlations for the adult sample, while the lower triangle contains correlations for the student sample.

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

**Table 3** Correlation matrix for the PRC samples

	1	2	3	4	5	6	7	8	9	10	11	12
Cronbach's alpha	0.68	0.77	0.80	0.84	0.74	0.86						
1. PA	1.00	0.51***	0.91***	0.46***	0.33***	0.42***	-0.03	0.45***	0.50***	0.39***	0.30***	0.09
2. EP	0.51***	1.00	0.83***	0.53***	0.43***	0.55***	-0.05	0.44***	0.53***	0.39***	0.32***	0.03
3. ISWB	0.90***	0.84***	1.00	0.54***	0.39***	0.51***	-0.06	0.48***	0.58***	0.43***	0.34***	0.06
4. RO	0.48***	0.53***	0.59***	1.00	0.57***	0.90***	-0.03	0.46***	0.61***	0.52***	0.52***	0.14
5. DB	0.41***	0.40***	0.45***	0.60***	1.00	0.88***	-0.22**	0.24***	0.46***	0.29***	0.38***	-0.13
6. SSWB	0.50***	0.53***	0.59***	0.92***	0.87***	1.00	-0.12	0.39***	0.61***	0.47***	0.55***	-0.01
7. SD	-0.08	0.10	0.00	-0.06	-0.24*	-0.17	1.00	0.06	-0.07	0.07	0.05	0.17*
8. Ind. self	0.61***	0.68***	0.72***	0.54***	0.39***	0.53***	0.04	1.00	0.62***	0.56***	0.42***	0.27***
9. Interdep. self	0.43***	0.41***	0.46***	0.52***	0.33***	0.49***	-0.01	0.58***	1.00	0.56***	0.56***	0.18*
10. Control	0.56***	0.37***	0.53***	0.56***	0.39***	0.54***	-0.00	0.66***	0.58***	1.00	0.52***	0.34***
11. Harmony	0.40***	0.37***	0.43***	0.54***	0.44***	0.55***	-0.23*	0.52***	0.57***	0.59***	1.00	0.12
12. Happiness	0.29**	0.01	0.18	0.12	0.19	0.17	-0.28**	0.06	-0.05	0.19	0.27**	1.00
Cronbach's alpha	0.73	0.88	0.85	0.86	0.76	0.88						

The upper triangle contains correlations for the adult sample, while the lower triangle contains correlations for the student sample.

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

**Table 4** Correlation matrix for the American sample

	1	2	3	4	5	6	7	8	9	10	11	12
Students ( $N = 286$ )												
1. PA	1.00											
2. EP	0.54***	1.00										
3. ISWB	0.91***	0.84***	1.00									
4. RO	0.59***	0.50***	0.63***	1.00								
5. DB	0.48***	0.42***	0.52***	0.51***	1.00							
6. SSWB	0.63***	0.53***	0.66***	0.89***	0.85***	1.00						
7. SD	0.04	-0.10	-0.02	0.09	-0.18**	-0.04	1.00					
8. Ind. self	0.42***	0.47***	0.51***	0.35***	0.26***	0.35***	-0.01	1.00				
9. Interdep. self	0.25***	0.22***	0.27***	0.51***	0.33***	0.49***	-0.09	0.28***	1.00			
10. Control	0.41***	0.43***	0.47***	0.49***	0.39***	0.51***	0.01	0.46***	0.41***	1.00		
11. Harmony	0.24***	0.27***	0.28***	0.41***	0.21***	0.36***	0.03	0.30***	0.48***	0.54***	1.00	
12. Happiness	0.17**	0.11	0.16*	0.17**	-0.14**	0.03	0.29***	0.16*	0.10	0.19**	0.13*	1.00
Cronbach's alpha	0.79	0.78	0.85	0.84	0.73	0.86						

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

**Table 5** Partial correlations between ISWB and SSWB with different self-construals and beliefs

	PRC		Taiwan		USA	
	ISWB	SSWB	ISWB	SSWB	ISWB	SSWB
Independent self	0.44	0.20	0.45	0.21	0.35	<u>-0.02</u>
Interdependent self	0.33	0.40	0.19	0.43	-0.16	0.44
Primary control beliefs	0.26	0.37	0.29	0.31	0.16	0.22
Harmony beliefs	0.14	0.47	<u>0.06</u>	0.44	<u>0.00</u>	0.40

All correlation coefficients were statistically significant except for those underlined.

Partial correlations with ISWB were conducted controlling for SSWB, while those with SSWB were conducted controlling for ISWB.

beliefs explained a total of 36% of variance ( $F_{2,307} = 88.18$ ,  $p < 0.001$ ). However, adding independent self and primary control beliefs made a 3% increment in  $R^2$  ( $\Delta F_{2,305} = 8.85$ ,  $p < 0.001$ ). For the PRC sample, while predicting ISWB scores, independent self and primary control beliefs explained a total of 37% of variance ( $F_{2,247} = 73.73$ ,  $p < 0.001$ ). However, adding interdependent self and harmony beliefs made a 3% increment in  $R^2$  ( $\Delta F_{2,245} = 6.77$ ,  $p < 0.001$ ). Similarly, while predicting SSWB scores, interdependent self and harmony beliefs explained a total of 41% of variance ( $F_{2,259} = 90.34$ ,  $p < 0.001$ ). However, adding independent self and primary control beliefs made a 1% increment in  $R^2$  ( $\Delta F_{2,257} = 4.69$ ,  $p < 0.01$ ). For the US sample, while predicting ISWB scores, independent self and primary control beliefs explained a total of 33% of variance ( $F_{2,250} = 61.85$ ,  $p < 0.001$ ). However, adding interdependent self and harmony beliefs made no increment in  $R^2$  ( $\Delta F_{2,248} = 0.44$  (*ns*)). Similarly, while predicting SSWB scores, interdependent self and harmony beliefs explained a total of 26% of variance ( $F_{2,246} = 34.43$ ,  $p < 0.001$ ). However, adding independent self and primary control beliefs made a 10% increment in  $R^2$  ( $\Delta F_{2,244} = 20.06$ ,  $p < 0.001$ ).

When repeating the above regression analyses in the entire sample, we added a culture variable (dummy coding) and four interaction terms involving this culture variable and the four predictor variables, to check whether the effects of these predictors varied across cultural groups. However, none of the interactions reached statistical significance in predicting either ISWB or SSWB scores. We then simplify the procedure to include only the four predictors in exactly the same sequence as described above to predict ISWB and SSWB scores in the entire sample. Results again were similar to the findings in separate sample analyses. For the entire sample, while predicting ISWB scores, independent self and primary control beliefs explained a total of 36% of variance ( $F_{2,812} = 226.86$ ,  $p < 0.001$ ). However, adding interdependent self and harmony beliefs made a 1% increment in  $R^2$  ( $\Delta F_{2,810} = 8.99$ ,  $p < 0.001$ ). Similarly, while predicting SSWB scores, interdependent self and harmony beliefs explained a total of 40% of variance ( $F_{2,818} = 261.19$ ,  $p < 0.001$ ). However, adding independent self and primary

control beliefs made a 3% increment in  $R^2$  ( $\Delta F_{2,816} = 29.78$ ,  $p < 0.001$ ).

We are now more confident that our Hypotheses 1 and 2 were indeed supported. Overall, reasonable convergent validity was achieved as constructs with common roots in individualism or collectivism generally had stronger associations. Divergent validity was also achieved as constructs with different salience to individualism and collectivism had weaker associations.

A further test for the discriminant validity of ISSWB scales was conducted examining evidence for Hypothesis 3. Theoretically, cultural conceptions of SWB and reported levels of SWB should be distinguishable as the former tap views about well-being whereas the latter indicate subjective levels of experienced well-being. Results showed that scores on the ISSWB scales generally did not correlate with reported happiness across all five samples, with Pearson coefficients ranging from 0.01 to 0.29. This indicates that views about well-being and experienced well-being can indeed be separately measured.

Another line of testing for construct validity was to compare the relative strength of endorsement on ISWB and SSWB among the Chinese and Americans. As discussed earlier, East Asians were assumed to hold stronger socially oriented cultural conceptions of SWB whereas Euro-Americans were assumed to hold stronger individual-oriented cultural conceptions of SWB. A pattern consistent with this theoretical profile would indicate validity for the ISSWB scales. Two-factorial ANOVA were performed with ISWB or SSWB as dependent variable, culture (Chinese vs Americans) and sex (male vs female) as factors, age as covariate.

With regard to ISWB, a main effect of culture was observed (Chinese: mean = 117.48, Americans: mean = 123.07;  $F_{1,830} = 11.35$ ,  $p < 0.001$ ). Sex did not have a main effect ( $F_{1,830} = 0.48$  (*ns*), neither was the culture–sex interaction significant ( $F_{1,830} = 3.41$  (*ns*)). However, the covariate age had a significant effect ( $F_{1,830} = 6.55$ ,  $p < 0.05$ ). With regard to SSWB, again only the main effect of culture (Chinese: mean = 118.43, Americans: mean = 109.14;  $F_{1,834} = 41.73$ ,  $p < 0.001$ ) and the covariate effect of age

were observed ( $F_{1,834} = 14.43, p < 0.001$ ). Neither the main effect of sex ( $F_{1,834} = 6.56$  (*ns*)) nor the culture–sex interaction was significant ( $F_{1,834} = 0.75$  (*ns*)).

As discussed above, intracultural differences between PRC and Taiwan were also of interest in the present study. As in previous analyses, age showed consistent significant effects whereas sex showed none on ISWB and SSWB, cohort (students *vs* adults) as a proxy for age grouping was treated as a factor along with nation (PRC *vs* Taiwan) in this two-way ANOVA.

A main effect of nation was found for SSWB, indicating that the Taiwanese scored higher on the socially oriented conceptions than the PRC Chinese (Taiwanese: mean = 119.61, PRC: mean = 116.67;  $F_{1,515} = 11.62, p < 0.001$ ). This is quite reasonable because in the decades following their retreat from the mainland, the Taiwanese government has deliberately used the Confucian values and the Chinese cultural traditions as a weapon to fight communism opposite the Taiwan Strait. In contrast, in mainland China, Confucianism and many Chinese cultural traditions were uprooted during the Cultural Revolution and are only rekindled following the Reform introduced.

A cohort main effect was found for ISWB, indicating that adults scored higher on the individual-oriented conceptions than students (adults: mean = 119.32, students: mean = 116.30;  $F_{1,515} = 8.03, p < 0.01$ ). A cohort main effect was also present for SSWB, indicating that adults scored higher on the socially oriented conceptions than students (adults: mean = 121.41, students: mean = 115.94;  $F_{1,515} = 23.85, p < 0.001$ ). No interaction effects were found in the present study. To summarize, these intracultural differences between Taiwan and PRC can be interpreted in a sensible way.

The last validity test for the ISSWB scales was to examine their relations with social desirability bias. Results showed that scores on the ISSWB scale generally did not correlate with the social desirability score across all five samples; the highest correlation coefficient was 0.17. Thus far, strong support was found for good reliability and validity of the ISSWB scales in both the Chinese and American samples, ensuring its utility as a psychological measure of SWB conceptions in future cross-cultural studies.

## Discussion

The present research adopted a cross-cultural indigenous approach to develop a culturally balanced measurement of individual- and socially oriented cultural conceptions of SWB. The items composing the scale were developed to tap a wide variety of cognitions, affect, and behaviors related to such conceptions as defined in Table 1. In a series of two studies, the 51-item measure (ISSWB) showed good content adequacy, internal consistency reliability, test–retest reli-

ability, construct validity and meaningful patterns in cross-cultural and intracultural comparisons across a total of six independent samples and two diverse cultures. This preliminary evidence thus ensures the future utility of the ISSWB as a reliable and valid measurement of the dual SWB conceptions: individual-oriented and socially oriented views.

## Strengths, limitations and future research

The present research of conceptual analysis and scale development has several strengths. First, our cultural analysis and previous qualitative studies corroborate to reveal the cultural underpinning of SWB conceptions in East Asia and Euro-America. Based on such cross-cultural indigenous research, our ISSWB scales offer a cultural balanced and comprehensive measure of individual- and socially oriented cultural conceptions of SWB as individual differences variables. Second, the main effect of culture on SWB conceptions in the Chinese-American comparison supports both our theoretical analysis and findings from previous mono-cultural qualitative studies. The main effect of nation on SSWB conceptions in the PRC-Taiwan comparison further indicates that diverse regional political-social-economic background within the same cultural tradition has some impact on people's SWB conceptions. Thus, the cross-cultural and intracultural applicability of the scales has been ensured. Finally, using unique and independent samples for each phase of the project, sample specific bias has been greatly reduced. Replication and validation across samples, age groups, subcultures and cultures lent us greater confidence in claiming reliability and validity for the ISSWB.

The present research has several shortcomings. First, the ISSWB was validated only in Chinese and American cultures. Diverse cultural traditions, such as Hindu, Muslim, and Buddhist, need to be sampled. Second, we examined differential associations between independent/interdependent self, primary control/harmony beliefs and ISWB/SSWB. Results were supportive of our theoretical predictions. Future research could then more systematically examine other potential antecedents, concomitants, and consequences of these cultural conceptions of SWB. Third, in both Chinese-American and PRC-Taiwan comparisons, age may be an important factor influencing people's SWB conceptions. Future research should then more systematically examine differences across discrete age groups mono-culturally and cross-culturally.

Finally, we expected that ISSWB and SSWB might coexist within an individual. In the case of the Chinese, Lu (2003) argued that the traditional Chinese construct of 'self-in-relation' has already been functionally integrated with the Western construct of 'independent and autonomous self' to form a new 'composite self'. This hybrid of 'bicultural self' (Lu & Yang, 2004) can effectively express

and gratify the fundamental human needs of both 'independence' and 'interdependence'. The equally strong conviction of both individual- and socially oriented SWB conceptions emanates from such a composite or bicultural self. Nonetheless, more systematic and fine-grained analysis is needed to look at the exact process and dynamism of such cultural integration as well as its functional values. Our ability to measure the dual SWB conceptions thus provides a basis to launch a concerted research effort looking at the intricate relation between the culture and the psyche.

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## Appendix

### Items in the ISSWB scales

#### Individual-oriented SWB – Personal accountability (ISWB – PA)

- 1 Happiness is a born right
- 2 Everyone has the right to pursue happiness
- 3 To pursue happiness is everyone's right
- 4 Happiness is the most important meaning of life
- 5 Happiness is the supreme goal in life
- 6 There's nothing better in the world than to have happiness
- 7 Happiness is personal successes
- 8 Happiness is personal victories
- 9 Happiness is a reward for hard work
- 10 Everyone has to be responsible for one's own happiness and unhappiness
- 11 One has to work to be happy, it doesn't just happen
- 12 Unhappy people are those who don't work hard enough
- 13 No one should be responsible for your unhappiness
- 14 One makes one's own unhappiness
- 15 One's happiness or unhappiness depends on oneself rather than others

#### Individual-oriented SWB – Explicit pursuit (ISWB – EP)

- 1 One needn't be shy about pursuing happiness
- 2 Happiness is having goals and working toward them
- 3 One should be brave to pursue happiness
- 4 One should pursue my happiness even in the face of great difficulties
- 5 Even though there are costs in pursuing happiness, one should not back off
- 6 The pursuit of happiness should be encouraged by society
- 7 Society should provide equal opportunities for individuals to pursue happiness
- 8 Society should provide ample opportunities for individuals to pursue happiness
- 9 Schools should teach young children the value of pursuing personal happiness
- 10 Society should tolerate the pursuit of personal happiness

#### Social-oriented SWB – Role obligations (SSWB – RO)

- 1 Happiness is the well-being of one's family
- 2 Happiness of the family is a prerequisite of personal happiness
- 3 The happiness of my family is my happiness
- 4 Happiness is sharing with friends
- 5 Happiness is to make friends happy
- 6 True happiness is something friends and family share
- 7 Happiness is putting the welfare of society as the utmost concern
- 8 Happiness is to sacrifice personal welfare in pursuit of society's welfare
- 9 Knowing that I made someone else happy makes me the happiest person
- 10 Happiness is the consequence of self-cultivation
- 11 Happiness is fulfilling one's social duties
- 12 Happiness is achieved through controlling one's desires
- 13 Being content is the rule of happiness
- 14 To be happy is to see through things in life

#### Social-oriented SWB – Dialectical balance (SSWB – DB)

- 1 There is only a thin line between happiness and unhappiness
- 2 Happiness and unhappiness are two sides of the same coin
- 3 I believe that happiness and unhappiness coexist
- 4 Disasters often follow good fortune
- 5 Sadness often follows happiness, and good fortune may overtake ill-fortune
- 6 Disaster is the neighbor of good fortune
- 7 Happiness is a state of physical, psychological, and spiritual balance
- 8 Happiness is to be content with life
- 9 Being happy is to be at ease with oneself
- 10 Happiness is the harmony of interpersonal relationships
- 11 Happiness is finding a place in the society
- 12 Happiness is the harmony between humans and nature