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Surveying happiness in China: comparing measures of subjective well-being

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Abstract

The objectives of this study are to investigate (1) whether subjective well-being (SWB) measures in surveys on China are interchangeable and (2) whether these measures work together as a construct. To accomplish these tasks, we examine SWB measures 1990–2016 for basic statistics, correlations between pairs of happiness terms within the same surveys, and test the internal consistency of five variables in the Blessed Happiness survey. Findings indicate that while the terms are not interchangeable, they work together to create a reasonably reliable construct.

Background

Influential cross-national studies have combined measures for subjective well-being (SWB) or used them interchangeably (Deaton 2008; Hagerty and Veenhoven 2003). A prominent example is Richard Easterlin's work, which uses cross-national data to argue for the "happiness-income paradox," or "Easterlin paradox." Easterlin has found that countries with higher gross domestic product are not happier, even though wealthier individuals are happier within each country, with China as the most significant case (Easterlin 1974; Easterlin et al. 2010). Because of the scarcity of data over time, these studies have combined data sets using different terms for happiness, but treat them as the same concept. Easterlin et al. (2012) combines seven data sets using three terms: satisfaction (*manyi*) (World Values Survey), happiness (*xingfu*) (Asiabarometer), and the "ladder of life" (Pew). The most recent update finds that there is a U-shaped pattern in China, falling in the 2000–05 period and then moving upward again since. As part of the analysis, the authors present trend lines from 1990 to 2015 using five data sets; one trend line begins with Gallup1 (satisfaction *manyi*) and continues with CGSS (happiness *xingfu*) (Easterlin et al. 2017: 50).

The different SWB terms have qualitatively different meanings and histories, so we wonder whether they can be used interchangeably. Additionally, some SWB terms connote emotion or mood, while others are about a broad evaluation of life. Finally, we wonder whether the different measures can be used as part of a construct for a larger assessment of well-being on the part of the respondent.

Comparisons between subjective well-being measures

There are several data sets in China that include more than one SWB measure, which makes it possible to compare measures. In this paper, we examine five SWB

terms—happiness (*xingfu*), satisfaction (*manyi*), good life (*hao sheng huo*), happy (*yukuai*), enjoying life (*xiangshou shenghuo*)—which all have slightly different connotations. Because these measures have not been compared before, we take a “first look” and compare all the terms to each other. Each term is different from the others, and some, like happiness (*xingfu*) have especially complex histories.

Happiness (*xingfu*) is a modern word from Japan’s late imperial period that began to be used in the early twentieth century (Chen 2014). A concept influenced by Confucianism, Daoism, and Buddhism, *xingfu* encompasses friendship, learning, self-knowledge, virtue and living in simplicity. Colloquially, to say that someone is happy (*xingfu*) could mean that one feels very good about one’s life, that their relationships with friends and family (especially parents) are good. To say, “my family is happy (*wo jiating hen xingfu*),” might indicate that my parents are healthy, my children are well, that I have lots of friends, and personal accomplishments (like career or material wealth).

Happiness (*xingfu*) is a term that has been used in the past decade quite a bit by the government, which may affect the way people respond to it. Since around 2000, the Chinese government has been consciously promoting a notion of happiness as something given to the people by the state (Sun 2014). The official discourse adopts a Confucian language of benevolent politics (*仁政 ren zheng*), which suggests that the people receive a happiness made possible by the state, emphasizing the common good and social stability. On March 17, 2013, China’s new leader, Xi Jinping, pronounced a new slogan of “the China Dream” at the Party Congress with this statement: “The China Dream is about strengthening the state and making it powerful and prosperous; achieving a renaissance of the Chinese nation; and promoting the happiness (*xingfu*) of the people” (Xi 2013: 71). This use of the term happiness (*xingfu*) is part of rhetoric justifying the government’s ruling power, using it as a characteristic of a paternal relationship. *Xingfu* has therefore been part of the endeavors to instruct the people about how to think about happiness and the common good.

The other broad life evaluations are not quite as complex as happiness (*xingfu*), but they do have a variety of connotations. Life satisfaction (*manyi*) is translated as “satisfaction” in the Xinhua dictionary. As with its English equivalent, *manyi* denotes met expectations and hopes. Good life (*haoshenghuo*) is a broad, overall evaluation of life that refers to material or physical comfort, including good health and material or financial security.

Three terms we examine primarily denote positive emotion or good mood: happy (*kuai*) and happy (*yukuai*). Enjoying life (*xiangshou shenghuo*) is also a feeling, but it is more specific in that it connotes being anxiety-free and comfortable. It is the picture of someone luxuriating in the sun on a beach and saying to herself, “This is the life.”

The role of emotion in self-evaluation

People use different criteria for self-evaluation, so “cultural prototypes” for life satisfaction vary around the world (Suh 2000: 66). The evaluation of life can vary in regards to how important emotion is in that assessment. In English-language surveys, reliability tests between affect and evaluation show that both types of measures show a serial correlation of about 0.60 (not as high as reliability ratios found for education and income, but high enough to support the research on SWB that combines or substitutes terms

(Krueger and Schkade 2008). However, tests of SWB measures have not been done with Chinese-language surveys.

Evidence from cross-cultural psychology suggests that self-judgment happens differently in China and locations where the English-language SWB surveys are used. Some SWB measures focus on affect (mood or emotional state) while others measure a broad evaluation of one's life. In China, relational and interdependent aspects of the self are emphasized rather than the unique, individuated aspects of the self (Suh et al. 1998). Emotion is not as important to self-judgment and interpersonal considerations ("How am I viewed by others?") in China, and external standards are salient concerns. Relationship harmony predicts life satisfaction more in Hong Kong than in the United States (Kwan et al. 1997). In contrast, in North America, individuals treat their emotions as important evidence for evaluating well-being (Suh 2000). If emotion is not as important to self-judgment in China, the SWB terms referring to emotion, like happy (*kuai*), happy (*yukuai*), or enjoying life (*xiangshou shenghuo*) may not be as similar to self-evaluation terms like happiness (*xingfu*), life satisfaction (*manyi*), or good life (*hao shenghuo*).

Working together as a construct

If the SWB measures are not interchangeable, they could work together as a construct. Positive psychology has conceptualized human flourishing as a construct that is made up of five components: positive emotions, feeling engaged with one's activities, social relationships going well, meaning, a sense of accomplishment, and physical well-being (health and wealth) (Seligman 2011).

In China, people may not use emotion as criteria for self-evaluation as much as in North America, but people may still consider emotion one component among others that are about a broader well-being. As for other elements that approximate the construct people may be using to evaluate their lives, we may be able to tap into feeling engaged with one's activities and a sense of accomplishment with a measure on career satisfaction. Finally, though few cross-national surveys include a question on meaning (*yiyi*), this sense of whether one feels that one's life has a sense of significance, is part of something larger than oneself, and is important would be good to include where possible.

Data and Methods

We list basic statistics from eight data sets where SWB variables are readily available (Table 1).

For comparisons between terms, we utilize three data sets with national sampling that include more than one SWB variable in the same year: World Values Survey, Asia-barometer, and Blessed Happiness.

The cross-national and longitudinal World Values Survey (WVS) includes China and SWB variables beginning in 1990 (though its origins are in the European Values Survey, which began in 1981). We optimize on 1995, 2007, and 2012, the years where more than one SWB term was used. In 1995, the survey includes questions on happiness (*xingfu*) and life satisfaction (*manyi*). In 2007 and 2012, both happy (*yukuai*) and satisfaction (*manyi*) are present (Table 2).

Table 1 Surveys on happiness in China

Name (English/Chinese)	Year	N	Type	Host	Countries	Design	Sampling
Asiabarometer (AB)/亚洲指标调查数据库	2006	2000	academic	University of Niigata Prefecture	cross-natl	face-to-face interviews	national
Blessed Happiness (BH)/中国公众幸福感调查问卷	2016	2627	academic	Georgetown University	China	face-to-face interviews	national
China Health and Nutrition Survey CHNS)/中国健康和营养调查	2011	26,000	academic	University of North Carolina at Chapel Hill	China	not found	national
Chinese General Social Survey (CGSS)/中国综合社会调查	2003–2007, 2010–2019	5894	academic	Renmin University and the Hong Kong University of Science and Technology	China	not found	urban-only (2003); national (2012)
Pew Global Attitudes Project (Pew)/佩尤全球态度调查	2002, 2005, 2007, 2010	approx. 2000–3500	public opinion	Pew Research Center	cross-natl	face-to-face interviews	urban-only
Spiritual Life Study of Chinese Residents (SL)/消费、幸福感及社会意见调查	2007	7021	academic	Association of Religion Data Archives	China	face-to-face interviews	national
World Values Survey (WVS)/世界价值观调查	1990, 1995, 2001, 2007, 2012	approx. 1000–2500	academic	Research Center for Contemporary China/Peking University	cross-natl	face-to-face interviews	national

Table 2 Subjective well-being terms in surveys by type/connotation and question

Term	Type/connotation	Survey question (example)	Surveys
幸福 xingfu (happiness)	Overall Evaluation/one's life is going well as relating explicitly to relationships with family and friends; mood; health; material comfort; respect	Asiabarometer 2006. All things considered, would you say that you are happy these days? Very happy, Quite happy, Neither happy nor unhappy, Not too happy, Very unhappy 总体来讲,你觉得自己最近幸福吗?(限选一项) 非常幸福, 比较幸福, 一般, 不太幸福, 很不幸福	WVS 1995, Asiabarometer 2006, CGSS (2003/2013, 2012), Spiritual Life 2007, Blessed Happiness 2016
满意 manyi (satisfaction)	Overall Evaluation/met expectations; material comfort; can also refer to satisfaction about specific things or issues	Spiritual Life 2007. Do you feel satisfied with the way your life has been going recently? Very dissatisfied, very satisfied. 请问您对自己近来的生活满意吗?非常不满意, 非常满意	Pew 2009, WVS (1990, 1995, 2001, 2007)
好生活 haoshenghuo (good life)	Overall Evaluation/comfortable life	Blessed Happiness 2016. Do you think you currently have a good life? Very good, Good, Not so good, Very bad. 您觉得您现在过的生活算是好的生活吗?非常好, 比较好, 不太好, 非常不好	BH 2016
快乐 kuaile (happy)	Positive Emotion/cheerful, untroubled, lighthearted	CHNS 2011. I am as happy now as I was younger. 我和年轻时一样快乐	CHNS 2006, WVS (1990, 2007)
享受生活 xiangshou shenghuo (enjoying life)	Positive Emotion/carefree, blissful; "this is the life"	Asiabarometer 2006. How often do you feel you are really enjoying life these days? Often, sometimes, rarely, never. 最近您每隔多长时间会感到自己是真正的在享受生活?经常, 有时, 很少, 从不	Asiabarometer 2006
愉快 yukuai (happy)	Positive Emotion/pleased, content	WVS 2007, 2012. [recoded] Taking all things together, would you say you are Very happy, Rather happy, Not very happy, Not at all happy. 将所有的情况都考虑进来, 目前您生活得愉快吗?(读出选项) 很愉快, 愉快, 不太愉快, 一点都不愉快, 不知道	WVS (2007, 2012)
生活的阶梯 shenghuo de jieti (ladder of life)	Career/"up" is better while "down" is worse	Pew 2010. Here is a ladder representing the "ladder of life." Let's suppose the top of the ladder represents the best possible life for you; and the bottom, the worst possible life for you. On which step of the ladder do you feel you personally stand at the present time?	Pew (2002, 2005, 2007, 2010)

Table 2 Subjective well-being terms in surveys by type/connotation and question (*Continued*)

意义 yiyi (meaning)	Meaning/sense of significance	<p>“以下有一条梯子代表生活的阶梯,让我们假设梯子的最高处10分代表对您来说可能是最好的生活,而底部0分则代表对您来说可能是最差的生活。您个人觉得您现在是在这个梯子的哪一级呢?*</p>	BH 2016
		<p>Blessed Happiness 2016. Do you think your life is meaningful? Very meaningful, Meaningful, Not so meaningful, Meaningless 您觉得人生有意义吗? 非常有意, 比较有意, 不太有意, 非常没意义</p>	

We note two issues that SWB researchers will need to be aware of when using the WVS China data. First, while there may seem to be two SWB terms in the WVS 1990, there is no Chinese questionnaire available to the public. It is difficult to tell which terms are being used from the English translation in the “results” file that is available on the website, so we do not use it. Second, the English translation in the 1995 codebook for V11 may be misleading for SWB researchers because, while it seems like a general SWB question, it is actually a specific question about the respondent’s health. The results file translates the question as “Taking all things together, would you say that you are: Very good, Good, Fair, Poor, Very poor,” but examining the Chinese, the question is “整体上看,您最近的健康状况如何?,” which is more accurately, “Lately, would you say that your health has been: Very good, Good, Average, Not good, Very Bad.”

Asiabarometer (AB) includes two SWB measures in its survey on China, which is included in its comparative survey covering East, Southeast, South, and Central Asia every year between 2003 and 2008 (but not every country is included each year). The survey covers topics such as identity, social actions, customs and rules, life values, economic conditions, social infrastructure, and political consciousness. In its nationally representative 2006 survey of China, AB includes one overall evaluation variable (happiness *xingfu*) and one measuring positive emotion (enjoying life *xiangshou shenghuo*).

A nationally representative 2016 survey, Blessed Happiness (BH), is an offshoot of a three-year ethnographic project on how people in China define happiness and the good life lasting from 2013 to 2016. The survey includes two measures for overall evaluation (happiness *xingfu* and good life *haoshenghuo*), one measure for positive emotion (happy *kuai*), one measure for satisfaction (*manyi*) with one’s job, and, perhaps most unique among the surveys, a measure for the respondent’s sense of meaning, “Do you feel your life has meaning? Has a lot of meaning, Has more meaning, Doesn’t have much meaning, Very much lacking meaning.” The survey includes a variety of social interaction measures. The data will be publicly available in 2019.

Results

We provide basic statistics for the SWB terms in Table 3. The corresponding scatterplot (Fig. 1) shows the three SWB measures over time in all data sets: happiness (*xingfu*), satisfaction (*manyi*), and ladder, from 1990 to 2016. We examine the highest SWB category because it is the most “comparable” of the responses (the “happiest” response available to respondents). The middle two responses are harder to compare (for example, “neither” is not the same as “quite happy” or “somewhat satisfied”). Additionally, if there are cultural traditions of emotional moderation, it may be that those who do select the highest level of SWB might feel strongly about it. We observe that, in each general time period, respondents tend to feel most satisfied (*manyi*) relative to the highest responses for happiness (*xingfu*) and ladder questions. This begins to suggest that satisfaction (*manyi*) seems to be conceptually different from the other concepts.

Moderate-to-low correlations between terms

Simple correlations (Pearson’s R) between pairs of happiness terms in the same data set and year are in Table 4. The correlation between terms is not high. That the correlations between SWB terms are at best moderate suggest that people do not respond the

Table 3 Basic statistics

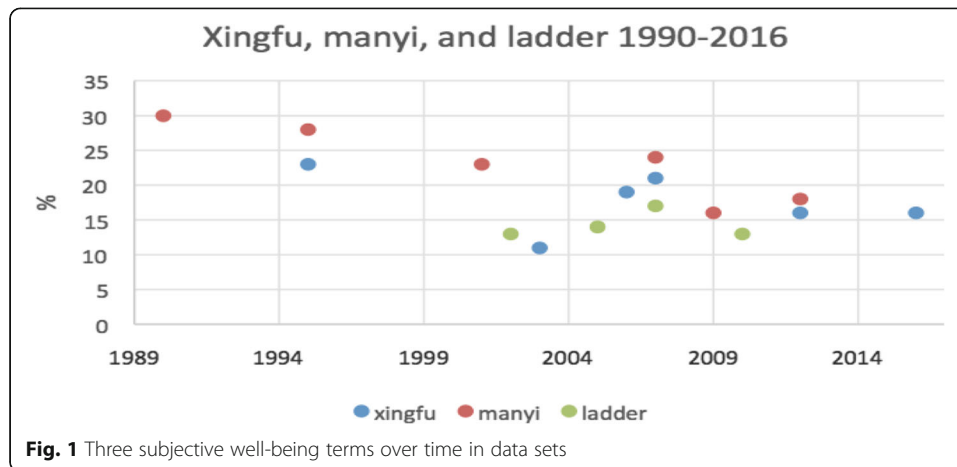
National sample	Very/Quite happy	Neither	Not happy	Very unhappy
<i>Happiness xingfu</i>				
WVS 1995	23	61	14	2
AB 2006	19	40	34	7
SL 2007	33	47	16	4
CGSS 2012	16	58	17	10
BH 2016	16	69	13	2
Happy yukuai	Very happy	Rather happy	Not too happy	Not at all happy
WVS 2007	21	55	19	4
WVS 2012	16	69	13	1
<i>Satisfied manyi</i>	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
WVS 1990	30	52	15	3
WVS 1995	28	45	21	7
WVS 2001	23	45	24	8
WVS 2007	24	50	19	8
WVS 2012	18	57	21	3
<i>Happy kuaile</i>	Strongly agree/ Agree	Neutral	Disagree	Strongly disagree
CHNS 2010	39	29	30	2
BH 2016	18	72	10	0
Good life haoshenghuo	Very good	Good	Not so good	Very bad
BH 2016	16	66	17	1
Enjoying life xiangshou shenghuo	Often	Sometimes	Rarely	Never
AB 2006	23	52	22	4
Meaning yiyi	Very meaningful	Meaningful	Not so meaningful	Meaningless
BH 2016	24	68	7	0
Urban-only sample				
Ladder of life shenghuo de jieti	highest 10, 9, 8	7, 6, 5	4, 3	lowest 2, 1, 0
Pew 2002	13	62	16	9
Pew 2005	14	61	17	8
Pew 2007	17	66	13	4
Pew 2010	13	73	14	1

This table gives the percentage of responses to happiness questions by data source

same to the various SWB concepts. In the WVS 1995, happiness (*xingfu*) and satisfaction (*manyi*) are correlated at 0.44. In the BH 2016, the good life (*hao shenghuo*) is correlated with happiness (*xingfu*) at 0.42. We note, however, that Pearson's R assumes a linear relationship, so we are not sure how this statistic fits with how conceptually related two measures of happiness are.

Emotion and evaluation

The findings offer some support for the idea that in China, emotions do not make up a large portion of self-evaluation. The results indicate that the evaluation terms of happiness (*xingfu*), satisfaction (*manyi*), and good life (*hao shenghuo*) are not really



equivalent, but that they are even less similar to the emotion terms enjoying life (*xiangshou shenghuo*) and happy (*kuaile*).

In the WVS, the affective happy (*yukuai*) is correlated with satisfaction (*manyi*) at 0.53 in 2007, and 0.50 in 2012. In the Asiabarometer 2006, happiness (*xingfu*) and enjoying life (*xiangshou shenghuo*) are correlated at 0.45. In the BH 2016, happiness (*xingfu*) is correlated with good life (*hao shenghuo*) at 0.42, meaning (*yiyi*) at 0.36, and satisfied (*manyi*) with job at 0.35, and least of all with happy (*kuaile*) at 0.33. It is not much of a difference, but the least correlated variable with the evaluative happiness (*xingfu*) is indeed happy (*kuaile*), which gives some support to the argument that the evaluative and the affective are not the same thing in China. People who respond that they have a very good life do not necessarily say they feel positive emotions.

Coefficients of reliability

The five SWB variables in BH 2016 allowed us to further examine the “relatedness” of these measures. We generated Cronbach’s alpha, a measure of reliability or internal consistency, for happiness (*xingfu*), meaning (*yiyi*), happy (*kuaile*), satisfied (*manyi*) with job, and good life (*hao shenghuo*). With all five variables, the Cronbach’s alpha coefficient is 0.73, indicating a reasonably reliable SWB concept. Removing just one variable lowers the alpha to between 0.65 to 0.72 (for the latter alpha, the combination of four variables are happiness, meaning, satisfied with job, and good life—that is, including happy seems to reduce internal consistency). Removing two variables reduced the alphas even more. The five-variable alpha may be higher simply because we increased the number of items in the analysis. However, combined with the moderate-to-low correlation numbers in Table 4, this means that the high alpha coefficients are not solely because the variables are highly correlated to begin with. We believe that the face validity is reasonably high, since these measures may tap into different elements of how people assess a flourishing life.

Modal response: second highest

We observe that the modal response for happiness (*xingfu*), satisfaction (*manyi*), and ladder is the second highest response (Fig. 2). In other words, “neither” happy nor

Table 4 Correlations and descriptive statistics

<i>WVS 1995</i>	1	2			
1. happiness (<i>xingfu</i>)					
2. satisfaction (<i>manyi</i>)	0.44 ^a				
Mean (SD)	1.95 (0.66)	6.83 (2.42)			
Range	1–4	1–10			
N	1491	1495			
<i>WVS 2007</i>	1	2			
1. happy (<i>yukuai</i>)					
2. satisfaction (<i>manyi</i>)	0.53 ^a				
Mean (SD)	2.06 (0.75)	6.76 (2.40)			
Range	1–4	1–10			
N	1978	1937			
<i>WVS 2012</i>	1	2			
1. happy (<i>yukuai</i>)					
2. satisfaction (<i>manyi</i>)	0.50 ^a				
Mean (SD)	1.99 (0.58)	6.85 (1.98)			
Range	1–4	1–10			
N	2272	2252			
<i>AB 2006</i>	1	2			
1. enjoying life (<i>xiangshou shenghuo</i>)					
2. happiness (<i>xingfu</i>)	0.45 ^a				
Mean (SD)	2.07 (0.77)	1.50 (0.67)			
Range	1–4	1–4			
N	1997	1998			
<i>BH 2016</i>	1	2	3	4	5
1. happy (<i>kuai</i>)					
2. happiness (<i>xingfu</i>)	0.33 ^a				
3. satisfied (<i>manyi</i>) with job	0.27 ^a	0.35 ^a			
4. meaning (<i>yiyi</i>)	0.24 ^a	0.36 ^a	0.33 ^a		
5. good life (<i>hao shenghuo</i>)	0.28***	0.42 ^a	0.44 ^a	0.44 ^a	
Mean (SD)	3.07 (0.53)	3.98 (0.63)	2.84 (0.61)	3.17 (0.55)	2.98 (0.60)
Range	1–4	1–5	1–4	1–4	1–4
N	2597	2635	2189	2557	2561

^aThis table presents the correlations between pairs of measures examined in this paper that exist in the same data set

unhappy (*xingfu*), “somewhat satisfied” (*manyi*), and “7,6,5” for ladder). While we do not have a definite explanation for this, one factor that may contribute to this is that people are less likely to choose the highest response because of the traditional cultural preference to be in moderate, reflecting the idea that happiness and unhappiness follow upon one another, so events in one’s life should not be interpreted as either extremely good or bad.

In Chinese tradition, there is the idea that happiness and unhappiness follow upon one another, so events should be interpreted as neither extremely good nor extremely bad, and should not be received with excessive emotion. Fortune can turn quickly into misfortune because of uncontrollable external factors, and vice versa, as the

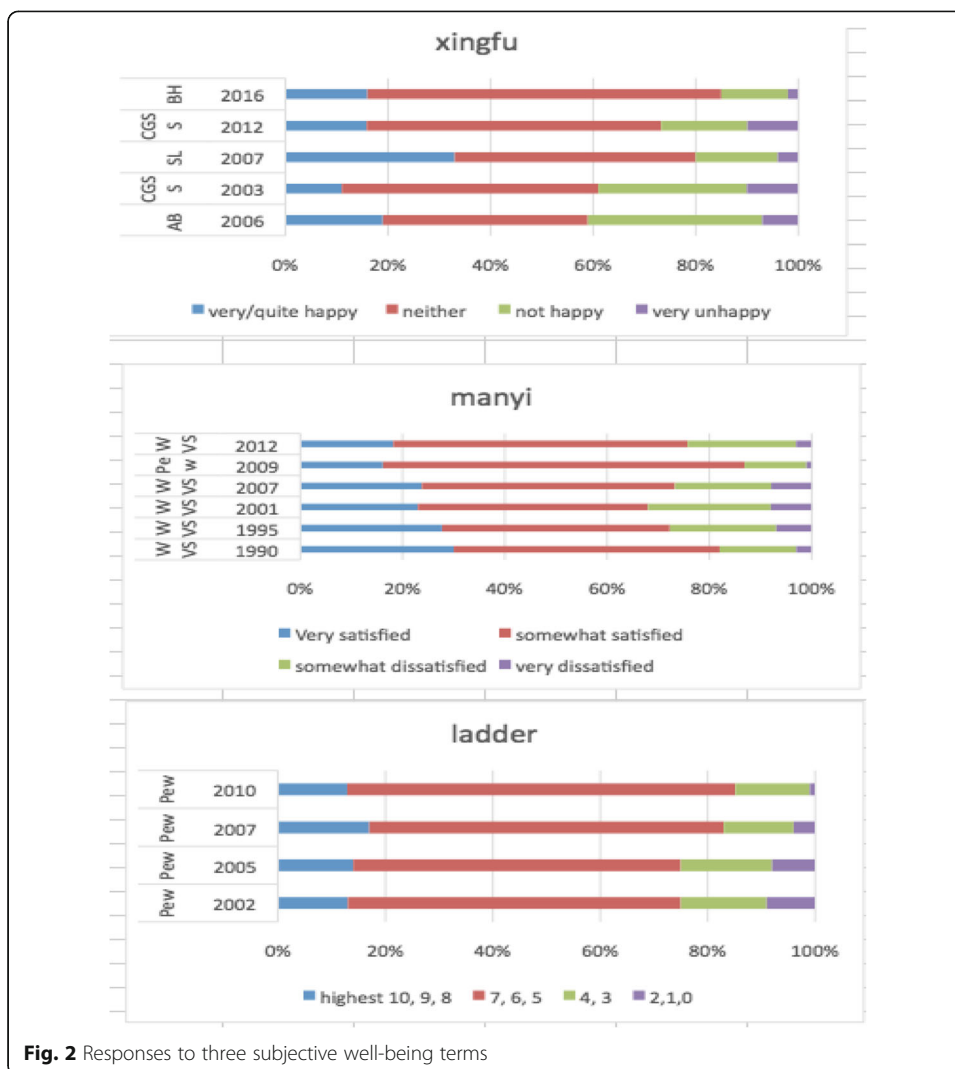


Fig. 2 Responses to three subjective well-being terms

well-known story of old man Saiweng shows: when his horse ran away, his neighbors were sad for him, but he thought it could turn out to be a blessing. The horse returned after a few months along with another horse, and though it seemed like good luck, he thought it could eventually lead to misfortune. His son then broke his leg riding the new horse, which seemed like a setback, but a year later, there was a military draft and his son did not have to join in the fighting. The story shows that Saiweng’s attitude, which was one of moderation, is a good one: when something seems like good luck, a reversal of fortune could come at any time, and vice versa. Restraining one’s reaction to events is wise, since fate can always quickly swing the other way.

Discussion

We discuss three items that warrant further investigation.

Something about satisfaction (manyi)

While respondents seem to prefer the second highest response, there may be something different about satisfaction (*manyi*) in that respondents seem more likely to choose the

highest level response, at least before 2007, when more than 20% selected the highest level), which we do not see in the ladder or happiness (*xingfu*) variables (Table 3). Over time, however, satisfaction (*manyi*) seemed to have declined in China. Satisfaction (*manyi*) may be an easier question to answer than happiness (*xingfu*) because of its history, and it also may be easier to answer than the questions about emotions (happy *kuai*le and *yukuai*). Cross-cultural psychology shows that Chinese respondents think less frequently than Americans about whether their lives are happy, satisfying, or joyful (Diener et al. 1995).

Comment on Easterlin et al. 2017

Using different datasets and concepts (if each concept is analyzed as an individual trend line), we find support for Easterlin et al.'s (2017) argument that SWB in Chinese since the 1990 has basically taken on this U-shaped pattern, dipping in particular in the 2000–05 period and then rising again since.

However, we have a critique of Fig. 3.1 in their paper, where they present “Gallup1” before 2006 (based on the life satisfaction measure, *manyi*), and then continue the trend line with CGSS data on happiness (*xingfu*). We find that happiness (*xingfu*) and satisfaction (*manyi*) are only weakly correlated in WVS 1995, suggesting that the concepts in the survey could be different. Thus, combining the trend line may be problematic.

Easterlin relies on life satisfaction (*manyi*), happiness (*xingfu*), and a “ladder of life” question. Our data do not allow for comparisons between the “ladder” and the other terms used for SWB, but based on a qualitative understanding of “ladder” as pertaining to individual accomplishment more than social relationships going well, we think satisfaction (*manyi*) could be similar to the BH measure of satisfied (*manyi*) with job. Because satisfied (*manyi*) with job is only weakly correlated with the overall evaluation measures (happiness *xingfu*, good life *hao shenghuo*), positive emotion (happy *kuai*le) and meaning (*yiyi*), we caution against treating the “ladder” as the same as the others variables.

Comment on “ladder of life” question in China

Because Pew, which does the only publicly-available survey in China using the “ladder of life” question, only provides an urban sample, it is not comparable to the nationally-representative surveys we examine. However, since it is often used, sometimes in combination with other surveys, we offer some comments on what the question might evoke in respondents. The “ladder of life” survey question used by Pew asks an evaluative question. It asks the respondent to assess his or her well-being using a particular metaphor of an individual standing on a ladder. The wording of the question is:

Please imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally stand at this time?

This approach corresponds with Cantril's (1965) “Self-Anchoring Striving Scale,” in which the good or bad life is hoped to be self-defined. The “ladder of life” question

might correspond most to “engagement” and “accomplishment” in Seligman’s concept of flourishing, but we could not compare as did not have any data sets where it overlapped with another SWB measure.

We do note, however, that in the symbolic continuum of the “ladder” question, going up is equated with as “best” and down as “worst,” but what exactly the anchoring point at the top means is supposed to be up to the individual to define for himself. The ladder as a metaphor presents a metaphor for well-being that is conceptualized around an individual; there is no room, for example, for a family on a ladder. Because the “ladder” question does not encompass one’s relationships, it may be a measure that is specific to an evaluation of the individual’s own achievements or accomplishments.

Conclusions

This is a first effort to compare SWB measures, and we acknowledge that we are using simple methods to address a complex question. To answer our original questions of (1) whether we can use the different measures for subjective well-being interchangeably (2) whether they may work together as a construct, we draw upon our findings with regard to correlations between the terms and coefficients of reliability. The correlations between the SWB terms are relatively weak (under 0.53), showing that the measures are not interchangeable. That the modal response is the second highest category may indicate a tendency towards moderate responses. Since the Cronbach’s alpha coefficients (at least in the BH data set) show that happiness (*xingfu*), happy (*kuai*), good life (*haoshenghuo*), satisfied (*manyi*) with job, and meaning (*yiyi*) have shared covariance, they may therefore tap into a larger underlying concept. Our findings suggest that the different measures are not interchangeable, but they may be used together as a measure of human flourishing, consisting of different components, including positive emotion, social relationships going well, and meaning.

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Authors’ contributions

BH designed the framework of the study and drafted the manuscript. WZ contributed to the theoretical framework and collected and coded the dataset. CK did the quantitative analysis: the interpretation of basic statistics in Table 3, the correlations in Table 4, and calculating the Cronbach’s alpha coefficient for the five BH variables that we describe in the findings. All authors read and approved the final manuscript.

Competing interests

We confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. The authors declare that they have no competing interests.

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