Culture, Self and Ways to Achieve SWB: A Cross-Cultural Analysis

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Adopting a cultural psychology approach, independent and interdependent self were viewed as individual level psychological characteristics of culture, primary control, secondary control and harmony beliefs, as well as aspects of social relations were proposed as self-regulated mechanisms leading to SWB. Data collected from 340 Taiwanese and 196 British respondents generally supported our theoretical model. The value of exploring multiple mediators within both individualist and collectivist cultures to understand people’s subjective experiences of well-being was highlighted.

Subjective well-being (SWB) is generally operationalized as both a predominance of positive over negative affect and a global satisfaction with life (Argyle, Martin, & Lu, 1995; Diener, 1984), thus encompassing both affective and cognitive elements. More recently, developments in the field have started to focus on cross-cultural studies and on the influence of culture on SWB. The present paper reports cross-cultural research examining in more detail the relationship between culture and SWB, as well as its possible mediators.

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Culture and SWB

It can be argued that the impact of culture on SWB is fundamental, since culture not only provides a specific set of conceptions of SWB, but also constructs particular pathways for its achievement. However, much of the research on culture and SWB turns out to be flawed. In particular, there is often a distinct bias favoring Western individualist cultural traditions both in theorizing and in selection of empirical variables, with the result that analyses of non-Western, non-individualist cultures may well be severely handicapped and people’s subjective experiences of SWB poorly understood (Kwan, Bond, & Singelis, 1997; Lu, Gilmour, & Kao; 2001; Lu, Gilmour, Kao, & Eng et al., 2001; Suh, 2000). To provide a balanced cultural perspective and to facilitate our understanding of SWB experiences for people in both individualist and collectivist cultures, the present study adopts a cultural psychology approach to test a theoretical framework incorporating culture, self, beliefs, social relationships and SWB.

Markus and Kitayama (1991) proposed a set of constructs at the individual level: the independent and interdependent views of self, to correspond with the widely used individualism-collectivism (I-C) at the societal level. An independent view of self derives from a belief in the wholeness and separateness of each individual’s configuration of internal attributes, emphasizing self-actualization, expressing one’s unique configuration of needs, rights and capacities, and developing one’s distinct potential. This is the prototypical Western characterization of the self, which locates crucial self-representations within the individual.

In contrast, an interdependent view of self derives from a belief in the individual’s connectedness and interdependence to others, emphasizing fitting in, belonging to, fulfilling and creating obligations. This is the prototypical Eastern characterization of the self, which locates crucial self-representations not within the unique individual attributes, but within his/her social relationships.

Recent empirical evidence has shown that in a collectivist culture (Taiwan), interdependent self was more prominent than independent self, whereas in an individualist culture (U.K.), the reverse was true (Lu, Gilmour, Kao, & Eng et al., 2001). However, the above study also found that for Chinese, interdependent self does not rule out the presence of independent self, although the two still have different degrees of elaboration and weight in an organization of personhood. These findings
underline the value of approaching the issue of culture and SWB from both individualist and collectivist vantage points.

Using such an approach, Lu, Gilmour, and Kao (2001) conducted a direct comparison of the East against the West with equivalent samples, and unraveled culture-dependent as well as culture-general effects of values on happiness. Values such as "social integration" and "human-heartedness" led to happiness for the Chinese but not for the British, whereas work-related values were equally important to happiness in both cultures. This suggests that there are powerful variables other than individualism and self-esteem exerting influences on happiness in collectivist culture systems.

Kwan et al. (1997) conducted another bi-cultural study (the United States vs. Hong Kong) examining possible mediators between culture and SWB. Results indicated that while self-esteem was a strong predictor for Americans, both self-esteem and relationship harmony (measured as a relationship outcome) were equally important for the SWB of Chinese.

What these limited studies highlight is that the relationship between culture and SWB may be a complex one, and the possibility of multiple mediators should be seriously contemplated. It seems that cultural beliefs pertaining to self-expression and aspects of social relationships in daily life may be important pathways linking culture and SWB.

Contrasting Cultures, Divergent Ways to Achieve SWB

Beliefs about interpersonal interaction can be regarded as a consequence of self expressions. The independent self requires the individual to actively exercise his/her agency, to seek control over the external environment, to change or influence other people, things and objects in adaptation encounters. A preoccupation with this kind of active mastery is quite evident in the attention given to the topic of control in the West (Furnham & Steele, 1993). Furthermore, a sense of control has been repeatedly linked to a wide variety of indices of adaptation (Steptoe & Appels, 1989).

The interdependent self-construal, on the other hand, requires the individual to build and maintain harmony in interpersonal relationships, to adapt to the environment rather than attempting to control it. In Chinese culture, for example, a state of homeostasis between the self and others, groups, society and Nature is viewed as the ultimate achievement in human adaptation (Chiang, 1996).

There are, then, different ways in which a person can exercise control
in different cultures. Individualist cultures stress self-actualization and self-resilience, whereas the collectivist ones stress fitting in with the social environment and harmonious interpersonal relationships (Hofstede, 1980; Triandis, 1994). This is similar to Weisz, Rothbaum, and Blackburn's (1984) distinction between primary control, where individuals enhance their rewards by influencing existing realities and attempting direct control over situations through personal action, and secondary control, where individuals enhance their rewards by accommodating to existing realities and maximizing satisfaction or goodness of fit with things as they are. In the latter, the individual experiences control indirectly.

In the West, primary control is heavily emphasized and highly valued, in keeping with the cultural emphasis on independent self. In the East, secondary control has traditionally assumed a more central role in everyday life, in keeping with the cultural emphasis on interdependent self. Against such a cultural backdrop, the effect of secondary control and relationship harmony on SWB in collectivist cultures may be just as important as that of primary control on SWB in individualist cultures (Myers & Diener, 1995). Relationship harmony is a concept borrowed from Confucian philosophy, arguably the most significant force shaping the mentality of the Chinese people. Harmony refers to the balance achieved in relationships, and the major focus of this concept is on the relationship, rather than on the satisfaction of its constituent individuals or support derived by an individual from that relationship (Ho, 1993). The current study attempts to go a step further, to be more culturally sensitive in tapping interpersonal beliefs of the relationship, namely the harmony beliefs.

Social interaction is the essence of human living. Extensive evidence has shown that both the presence of and, more importantly, the quality of social relationships do contribute to human happiness in the West and the East (Argyle, 2001; Diener & Diener, 1995; Kwan et al., 1997; Lu, Shih, Lin, & Ju, 1997; Myers & Diener, 1995). We further argue that the quality of social interactions is determined by the self systems and their consonant interpersonal beliefs people practice in daily life. In an individualist society, practicing the independent self and its consonant primary control beliefs may be more likely to generate positive feelings about one's social relations, whereas in a collectivist society, practicing the interdependent self and its consonant primary control and harmony beliefs may be more likely to achieve a similar effect. These subjective experiences of social interactions will then contribute to one's happiness in general. Thus in our
current cultural model, feelings of social interactions are constructed as a possible mediator linking the self and SWB.

The Present Study: Testing a Model

In the search for possible predictors of SWB, it is proposed that culture exerts a critical influence in mapping out specific ways of achieving SWB. At first, culture selects, activates, elaborates, maintains and strengthens one distinct view of self over another. The independent and interdependent self then represent culture at the individual level. They shape and direct the individual’s behaviors to reflect the core underlying cultural concerns. In the interpersonal realm, people with independent self tend to believe in active, primary control, whereas people with interdependent self are more inclined to emphasize secondary control and relationship harmony. Extending Weisz et al.'s (1984) conceptualization of primary versus secondary control, people with primary control beliefs will typically strive to enhance their rewards by influencing existing social realities such as increasing effort in the relationship work, whereas people with secondary control beliefs will typically seek to enhance their rewards by accommodating to existing social realities such as downgrading the importance of a failed relationship. These self-regulatory mechanisms then guide peoples’ everyday social behaviors, and the resultant feelings about these interactions will contribute to their overall SWB.

At the same time, previous work (Lu, Gilmour, Kao, & Eng et al., 2001; Lu & Kao, 2002) have demonstrated that contrasting cultural components do coexist within individuals; and on the basis of this we would hypothesize additional, perhaps secondary, links in the model, where interdependent self also has associations with primary control beliefs and independent self has associations with secondary control. However, we found no theoretical or empirical basis to hypothesize a link between independent self and harmony beliefs.

In order to investigate this more systematically, we proposed a more detailed model to be tested that incorporates a number of possible culture-based, self-regulated pan-cultural ways of achieving SWB. This model is presented in Figure 1.

The current model in Figure 1 may look similar to one tested in our previous study (Lu, Gilmour, Kao, & Eng et al., 2001). However, the present study was distinctive from and advances beyond the earlier one in the following aspects. First, in the earlier study, the construct of active
current cultural model, feelings of social interactions are constructed as a possible mediator linking the self and SWB.

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control over the (social) environment was indexed by the internal locus of control, whereas a theoretically more refined dual-concept of primary versus secondary control beliefs was adopted to represent the inclination of mastery of or submission to the (social) environment. Such a modification ties the control construct tighter to the independent/interdependent self. Second, the earlier model specified only links of the independent self-control beliefs and the interdependent self–harmony beliefs, whereas the current model added extra links between independent self–secondary control beliefs and between interdependent self–primary control beliefs. Such amendments took into account of the latest theoretical arguments of cultural values coexistence (Lu, 2003; Yang, 1996) and consonant empirical findings (Lu & Gilmour, 2001; Lu, Gilmour, Kao, & Eng et al., 2001; Lu & Kao, 2002). Third, the earlier study used Singelis’ (1994) measure of independent/interdependent self which suffered poor psychometric quality in cross-cultural studies (Levine et al., 2003). The present study developed a new scale following rigorous theoretical and psychometric procedures (details below) aimed to measure the independent and interdependent self more reliably and adequately in the cross-cultural context. Finally, the earlier study used a happiness measure that arguably is more inclined towards the affective aspects of SWB, whereas the present study sought to extend the model to cover the cognitive aspects of the experience, namely life satisfaction. To sum, the earlier study may be regarded as a pioneer work and the present one was a concerted effort to reproduce, refine and surpass the previous achievement.
Method

Participants

A broad cross-section of university students and community adults were surveyed with structured questionnaires. A total of 340 (196 students and 144 adults) valid questionnaires were returned in Taiwan, and 196 (106 students and 90 adults) were returned in the United Kingdom. The completion rate was 80.5% for the Taiwan Chinese sample and 76.4% for the British sample.

Instruments

Although there are existing scales to measure some of the constructs in our model, they are not without problems or limitations. For instance, Singelis' (1994) 24-item "Independent and Interdependent self-construals scale" suffers poor reliability (α = .52-.73) when administered to Chinese and British samples (Lu, Gilmour, Kao, & Eng et al., 2001). Furthermore, the conceptual facets covered by the scale were never clearly specified, and items were written for use with student samples. In the realm of control beliefs, no scales exist which measure primary and secondary control beliefs. The closest to tapping these dual constructs are scales focusing on coping strategies with a primary or secondary control orientation (Brandstätter & Renner, 1990; Chipperfield, Perry, & Menec, 1999). It seemed sensible, therefore, to try to construct new scales which would be better-conceptualized, more precisely measure the constructs defined in our model, and can be used with a wider population than just students. Such scales could be expected to perform better psychometrically.

For all newly created scales, items were developed to tap the constellation of thoughts, feelings, and actions comprising the specific constructs as described previously. Adopting a deductive approach, efforts were made to synthesize existing literatures to form comprehensive conceptual schemes for item generation (Hinkin, 1995). These schemes are presented below for each scale. Before applying them to the main model-testing study, an independent, large sample of both Chinese students and community adults (N = 606, age ranged from 17 to 61, with 53.5% males and 46.7% females) was used to finalize the new measures and ascertain their reliability and validity. Evidence will be presented following a description of the final version of the scales used in the main study.
1. Self Views

Two scales were constructed with 21 items each to measure independent and interdependent self. The Independent Self Scale was based conceptually on the psychological characteristics of the independent self delineated by Markus and Kitayama (1991), as well as the latest construction of individualistic characteristics advanced by Triandis and Gelfand (1998). The final version of the scale thus measured seven facets of the independent self, with three items each. These facets are: (a) being independent/unique and consistent; (b) expressing oneself; (c) realizing internal attributes; (d) promoting one’s own goal; (e) being direct; (f) separation from in-group; and (g) self-reliance with hedonism. A total score was computed to represent personal endorsement of the independent self view.

The Interdependent Self Scale was based conceptually on the above researchers’ analyses of the interdependent self and collectivistic characteristics, as well as the newly proposed construct of “relational interdependence” by Cross, Bacon, and Morris (2000). The final version of the scale thus measured seven facets of the interdependent self, each with three items. These facets are: (a) belonging and fitting in; (b) occupying one’s proper place; (c) engaging in appropriate action; (d) promoting others’ goals; (e) being indirect; (f) family integration; (g) interdependence with sociability. A total score was computed to represent personal endorsement of the interdependent self view. For both scales, 7-point Likert scales and aggregate scores were used.

2. Harmony Beliefs

The 20-item Harmony Beliefs Scale was revised from its forerunner developed and validated in a previous study (Lu, Gilmour, Kao, & Eng et al., 2001). Chinese idioms depicting interpersonal harmony were re-written into belief statements with reference to general social interactions without specifying a particular type of relationship. Respondents rated each statement on a 7-point Likert scale, with high total scores indicating higher endorsement of harmony beliefs.

3. Control Beliefs

Two scales were constructed to measure primary and secondary control beliefs. The Primary Control Beliefs Scale was conceptually based on the primary control construct delineated by Rothbaum, Weisz, and Snyder.
(1982) and Weisz et al. (1984), incorporating specific primary control strategies analyzed by Chipperfield et al. (1999). Items were written into statements conveying beliefs, not specific behaviors. The final version thus had 8 items and measured four facets of primary control beliefs in the interpersonal realm: (a) persistence (continuing with the relationship work); (b) effort exertion (trying harder to accomplish the relationship); (c) effort attribution (telling oneself that success at the relationship is still possible with effort); and (d) task modification (changing something about the way the relationship is approached, e.g. allowing for more time). A higher total score indicated higher endorsement of primary control beliefs.

The Secondary Control Beliefs Scale was conceptually based on the above researchers' analyses of the secondary control construct. Ten items were written in the form of beliefs. The final version measured five facets of secondary control beliefs in the interpersonal realm: (a) expecting less of oneself (lowering relationship goals); (b) accepting personal limitations; (c) downgrading relationship importance; (d) perceiving benefits (searching for positive meanings in failure); and (e) selection (changing to a relationship with greater chance of success). A higher total score indicated higher endorsement of secondary control beliefs. For both scales, 7-point Likert scales and aggregate scores were used.

4. Social Interactions
The 20-item Social Interactions Inventory was revised from its forerunner developed and validated in a previous study (Lu, Gilmour, Kuo, & Eng et al., 2001). Five cardinal relations of key significance were sampled including those with authorities, between parents and children, between romantic partners (spouses or lovers), among siblings, and between friends. These relations are modern equivalents of the traditional Chinese concept of "wu hua," which are also prevalent in Western societies. Respondents rated their subjective experiences in each type of social relation on four dimensions: (a) satisfaction; (b) dissatisfaction; (c) harmony; and (d) conflict. Five-point scales were used and a total score was computed aggregating across relations and dimensions. A higher score indicated greater "good" experiences in one's significant social interactions.

5. SWB
The 9-item Life Satisfaction Inventory (Lu, 1995) was used to assess one's satisfaction with life in eight major domains: (a) romantic relationship with
spouse or lover; (b) family life; (c) career/job or academic work; (d) health; (e) finance; (f) living environment; (g) social life; and (h) leisure. In addition, there was one item assessing overall satisfaction with “life in general.” Respondents rated their degree of satisfaction on 7-point scales. A higher total score (aggregating all 9 items) indicated a higher level of satisfaction with life.

All scales underwent a standard procedure of back-translation to yield two equivalent versions in Chinese and English. For some items in the Social Interactions Inventory and Life Satisfaction Inventory, slight modifications in wording were made to accommodate the different circumstances of university students and community adults.

As stated earlier, a scale evaluation study (N = 606) was conducted prior to the main model-testing study. Reliability for the four new scales were generally very good, with Cronbach’s α of .86 (Independent self), .89 (Interdependent self), .86 (Primary control beliefs), and .76 (Secondary control beliefs).

Concurrent validity was examined via relationships among scores of our measures of self and control beliefs and those of established measures of I-C and locus of control. As full results can not be reported here, it will suffice to indicate that our measures of self and control beliefs showed good convergent and divergent validity. For example, results showed that interdependent self strongly correlated with collectivism (r = .75, p < .001), whereas independent self correlated with individualism (r = .43, p < .001). Primary control beliefs correlated with internal locus of control (r = .34, p < .01), whereas secondary control beliefs did not (r = .08, ns). However, primary control beliefs did not correlate with individualism (r = .04, ns) and secondary control beliefs only weakly correlated with collectivism (r = .27, p < .01). These relations confirmed that our new measures of self were related to IC and those of control beliefs were related to locus of control but not to IC.

Construct validity of our new scales were checked with confirmatory factor analysis (maximum likelihood in SEM). Again, as space does not allow full details to be presented here, it will suffice to indicate that neither “null model” nor “single common factor model” could be accepted in any model comparison trials. In each case, the “multi-trait model” was superior among rival models. The final CFA models all had good fitting indices and small residuals. Hence, these CFA results confirmed the construct validity of all four new scales.
Finally, the possibility of social desirability bias was checked by correlating scores of the new scales with that of Crowne and Marlowe's (1964) scale. Neither the independent and interdependent self correlated with social desirability \( r = .06 \) and \( r = -.05 \). Primary control beliefs did not correlate with social desirability \( r = -.03 \) either, but secondary control beliefs did so weakly \( r = .13, p < .05 \). Overall, results indicated that such bias was negligible. Thus far, strong support was found for good reliability and validity of the new scales as applied to Chinese people to justify their subsequent use in the main study.

Although such extensive scale evaluation work is yet to be carried out with British or indeed other Western samples, some preliminary supporting evidence is available to justify the use of these new scales with the British samples 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 scales, researchers from both individualist (U.K.) and collectivist (Chinese) 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 new scales following the Chinese scale evaluation study were verified and slightly revised by the British researcher (second author) and his fellow cultural members through informal discussions. However, these were linguistic stylistic polish rather than substance changes.

Results

Descriptive Analysis, Scale Reliability and Comparisons of Means

Demographic characteristics of the Taiwan (TW) and British (UK) samples were first compared. The two samples were similar in terms of age (mean for TW: 30.70, UK: 28.43; \( t = 1.89, \) ns) and years of education (mean for TW: 15.09, UK: 15.58; \( t = 1.64, \) ns). Compared with the TW sample, the UK sample had more males (TW: 50%, UK: 64.7%; \( \chi^2 = 146.35, p < .001 \)), more single people (TW: 59.7%, UK: 68.3%; \( \chi^2 = 109.30, p < .001 \)), and more people in alternative (mainly single-parent) family types (TW: 7.2%, UK: 27.1%; \( \chi^2 = 196.98, p < .001 \)). Although the
two samples were different in these respects, further statistical analyses ascertained that gender, marital status and family types were not significantly and consistently related to the main research variables. We therefore proceeded with further analyses.

For all scales, mean, standard deviation, internal consistency Cronbach's alpha as well as direct TW-UK comparisons are presented in Table 1.

Considering the standard deviation to mean ratio, the two samples were very comparable. Those for self ranged from .12 to .14, for beliefs from .13 to .20, for social interactions were .13 (TW) and .12 (UK), and for SWB were .17 (TW) and .16 (UK). We could therefore conclude that distributions for main research variables were cross-culturally similar.

Reliability and factor structure for all scales were also generally comparable across the two samples, the latter being confirmed by EFA (data not reported here but can be obtained on request). Replicating our results in the scale evaluation study, all but one scale had very good reliability, with alpha coefficients ranged from .73 to .93. Although the alpha for secondary control beliefs was the lowest in the UK sample (.67), it was just below the benchmark of .70 set for acceptable reliability (Nunnally, 1978). In addition, the pattern of item-total correlation for each scale was exactly the same for both samples, further ensuring that the various scales were equivalent for cross-cultural comparisons.

T-tests revealed that the Chinese scored higher on virtually all scales except SWB, where the British reported higher life satisfaction. With regard to feelings about social interactions, there were no significant cross-cultural differences.

<table>
<thead>
<tr>
<th>Samples</th>
<th>Taiwan Chinese</th>
<th>UK</th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent self</td>
<td>112.27</td>
<td>12.94</td>
<td>.82</td>
<td>.01</td>
<td>.97</td>
<td>12.37</td>
<td>.85</td>
<td>.05</td>
<td>8.47</td>
<td>502</td>
</tr>
<tr>
<td>Interdependent self</td>
<td>114.73</td>
<td>15.57</td>
<td>.87</td>
<td>.01</td>
<td>.64</td>
<td>12.86</td>
<td>.81</td>
<td>.01</td>
<td>17.42</td>
<td>397</td>
</tr>
<tr>
<td>Primary control beliefs</td>
<td>44.50</td>
<td>7.63</td>
<td>.88</td>
<td>.05</td>
<td>35.04</td>
<td>6.38</td>
<td>.77</td>
<td>.05</td>
<td>15.03</td>
<td>429</td>
</tr>
<tr>
<td>Secondary control beliefs</td>
<td>38.21</td>
<td>7.50</td>
<td>.75</td>
<td>.03</td>
<td>33.70</td>
<td>6.58</td>
<td>.67</td>
<td>.05</td>
<td>6.70</td>
<td>512</td>
</tr>
<tr>
<td>Harmony beliefs</td>
<td>112.39</td>
<td>15.50</td>
<td>.93</td>
<td>.02</td>
<td>92.64</td>
<td>12.67</td>
<td>.82</td>
<td>.02</td>
<td>15.08</td>
<td>417</td>
</tr>
<tr>
<td>Social interactions</td>
<td>78.09</td>
<td>10.24</td>
<td>.89</td>
<td>.07</td>
<td>77.97</td>
<td>9.43</td>
<td>.85</td>
<td>.07</td>
<td>0.12</td>
<td>380</td>
</tr>
<tr>
<td>SWB</td>
<td>44.05</td>
<td>7.56</td>
<td>.81</td>
<td>.06</td>
<td>46.58</td>
<td>7.25</td>
<td>.73</td>
<td>.06</td>
<td>-3.49</td>
<td>448</td>
</tr>
</tbody>
</table>

*** p < .001.
Cross-Cultural Analysis: Correlations and Structural Equation Modeling

As our hypothesized model incorporates a number of possible culture-based, self-regulated pan-cultural ways of achieving SWB (Figure 1), we started with mono-cultural analysis examining the Pearson correlation matrices for main research variables separately for the Taiwan Chinese and British samples. These results are presented in Table 2 and can be read with reference to the theoretical framework depicted in Figure 1.

First, there were significant positive correlations between independent self and primary control beliefs as well as interdependent self and harmony beliefs in both samples. Interdependent self also significantly correlated with primary control beliefs in both samples. As predicted, interdependent self significantly correlated with secondary control beliefs in Taiwan, but not in the United Kingdom. It is worth noticing that independent and interdependent self were positively correlated, although the magnitude of the correlation coefficients was small. Again, these correlations mostly replicated what we found in the previous scale evaluation study, confirming the robustness of relations between these constructs.

Table 2. Zero-Order Correlation Matrices for All Variables in the Pooled Taiwan Chinese and UK Samples

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
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<th>4</th>
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<th>7</th>
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<tr>
<td>Taiwan Chinese</td>
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<td>1. Independent</td>
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<tr>
<td>self</td>
<td></td>
<td>.33***</td>
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<tr>
<td>2. Interdependent self</td>
<td></td>
<td></td>
<td>.64***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Primary control beliefs</td>
<td>.12***</td>
<td></td>
<td>.32***</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Secondary control beliefs</td>
<td>.17***</td>
<td></td>
<td>.28***</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Harmony beliefs</td>
<td>.31***</td>
<td>.23***</td>
<td>.48***</td>
<td>.27***</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Social interactions</td>
<td>.19**</td>
<td>.38***</td>
<td>.21***</td>
<td>.12</td>
<td>.31***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>7. SWB</td>
<td>.13</td>
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<td>.29***</td>
<td>.01</td>
<td>.26***</td>
<td>.58***</td>
<td>1.00</td>
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<tr>
<td>UK</td>
<td></td>
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<td></td>
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<tr>
<td>self</td>
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<td></td>
<td>.26**</td>
<td>.06</td>
<td>.02</td>
<td>1.00</td>
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<td>4. Secondary control beliefs</td>
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<td>.60***</td>
<td>.44***</td>
<td>.19**</td>
<td>1.00</td>
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<td></td>
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<tr>
<td>5. Harmony beliefs</td>
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<td>.60***</td>
<td>.44***</td>
<td>.19**</td>
<td>1.00</td>
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<td>6. Social interactions</td>
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<td>.11</td>
<td>.12</td>
<td>.24**</td>
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<td>7. SWB</td>
<td>.05</td>
<td>.15</td>
<td>.09</td>
<td>.06</td>
<td>.07</td>
<td>.44***</td>
<td>1.00</td>
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</table>

*p < .05. **p < .01. ***p < .001.
Second, for Chinese, both primary control and harmony beliefs were positively correlated with good feelings of social interactions. For the British however, only harmony beliefs were positively correlated with good feelings of social interactions. Finally, these good feelings of social interactions positively correlated with SWB in both samples. Overall, more statistically significant relations among research variables were achieved for Chinese than for British respondents.

We proceeded with a direct test of the model specified in Figure 1 using the structural equation modeling (SEM) technique. This was done separately for data from the Taiwan Chinese and British samples. On the basis that the samples used represent rather typical Western and Eastern cultures in relevant respects, we argue that the fitting of the model to both cultural groups would suggest its pan-cultural applicability. The SEM was conducted by applying the Maximum Likelihood technique provided in AMOS 3.6. The model depicted in Figure 1 was tested with a total of 9 paths and 1 covariation. Composite scores rather than items were used. Results as presented in Table 3 and plotted in Figures 2a and 2b.

Model evaluation has to strike a balance between simplicity and complexity, and no single procedure, or descriptive index seems to be superior to the others (Bentler, 1990; Raykov, Tomer, & Nesselroade, 1991). Criteria have been suggested to accept a CFA model (e.g. Raykov et al., 1991), namely the fitness indices (GFI and CFI) need to be in the upper .90s, the relative chi-square (χ²/df) need to fall between 2 and 5, and residuals (RMSEA) need to be small (< .08). Judging from these criteria, the SEM model for the Taiwan Chinese sample had good fitting (GFI = .97, CFI = .93, χ²/df = 3.11, RMSEA = .08). However, the SEM model for the British sample had less than satisfactory fitting (GFI = .94, CFI = .91, χ²/df = 3.96, RMSEA = .12). Overall, our theoretical model was well supported by the Chinese but tentatively supported by the British.

Discussion

Culture-Based Self-Regulated Ways to Achieve SWB

Our central thesis of a cultural theory of SWB is as follows. Culture can be a major force constructing the conception of happiness and consequently shaping its subjective experiences. In particular, members of different cultures may hold diverse views of happiness, covering its definitions, nature, meaning and ways to strive for SWB (Lu, 2001). Culture also
Table 3. Structural Equation Modeling (SEM) Results for the Pooled Taiwan Chinese and UK Samples

<table>
<thead>
<tr>
<th>Samples</th>
<th>N</th>
<th>χ²</th>
<th>df</th>
<th>χ²/df</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
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<td>Taiwan Chinese</td>
<td>340</td>
<td>34.21</td>
<td>11</td>
<td>3.11</td>
<td>.97</td>
<td>.93</td>
<td>.08</td>
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<td>British</td>
<td>196</td>
<td>43.56</td>
<td>11</td>
<td>3.96</td>
<td>.94</td>
<td>.91</td>
<td>.12</td>
</tr>
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</table>

Note: Standard errors are given in parentheses.
* p < .05. ** p < .01. *** p < .001.

Figure 2a. A Model of SWB: SEM Results for the Taiwan Chinese

Note: Standard errors are given in parentheses.
* p < .05. ** p < .01. *** p < .001.

Figure 2b. A Model of SWB: SEM Results for the British
constrains preferences for different types of SWB (individual-oriented vs. social-oriented), and thus prescribes different sources and conditions of SWB for its members (Lu & Gilmour, in press). Beyond such direct impact, culture also influences SWB in the way it gives shape and form to the self. Different self views (e.g. independent vs. interdependent self) function as regulatory mechanisms when the individual attempts to judge his/her well-being. These self-regulatory mechanisms guide the individual to attend to and process information pertaining to certain aspects of the environment emphasized by the culture. These mechanisms also determine how people think, feel and behave to achieve SWB. Finally, in a time of cultural fusion, people living in the collectivist East are learning to adopt cultural values, self views, beliefs, attitudes and behaviors from the West. Consequently, they may now have access to both the Eastern and Western repertoires of striving for SWB. A similar but reversed trend in the individualist West may be less salient due to an asymmetry in cross-cultural impact, not least because the very nature of core values at issue inclines Westerners to a more aggressive impact on their environment, including other cultures.

Based on this theory, we proposed various ways of achieving SWB for people in individualistic and collectivist societies as depicted in the model in Figure 1. All of these pathways start from a particular self-system, going through its corresponding beliefs about social interactions, and further through subjective experiences generated in actual social interactions to lead to SWB. This pan-cultural multiple-way SWB model was generally supported in the present study (see Figures 2a and 2b). For both Chinese and British people, interdependent self was a very strong determinant of harmony beliefs, as well as primary and secondary control beliefs, whereas independent self was a strong determinant of primary and secondary control beliefs. Furthermore, for both groups, beliefs about social interactions did impact on experiences of daily interactions, although secondary control beliefs had a negative effect in contrast to the positive effects of both harmony and primary control beliefs. Finally, experiences of social interactions did contribute to SWB. Thus, it was shown that these various ways of achieving SWB were independent and pervasive across the two markedly contrasting cultural groups. The two self views were co-determinants of SWB, acting through the mediating variables of belief systems and social relationships.

The nature of this relationship between culture and SWB needs to be discussed in more details. Researchers have concluded that individualism
is the only reliable predictor of happiness (Diener & Diener, 1995). However, we believe that rather than map a direct relationship between culture at macro level and SWB, as Diener and Diener did, it is more important to understand subjective experiences of SWB for people living in individualist as well as in collectivist cultures. A viable strategy is to explore the possibility of multiple mediators within each cultural tradition. As self is the hypen between culture and subjective well-being (Suh, 2000), we accord the self an active regulatory role in the pursuit of SWB. Through individual identification with the larger cultural tradition, the self selects and pursues specific pathways to SWB, in accordance with core cultural values. This is exactly what we have found in our series of studies. In the present study, we have demonstrated that beliefs and aspects of social relations are important mediators between culture and SWB (indexed by life satisfaction). Our previous study found corroborative evidence when a measure of happiness was used (Lu, Gilmour, Kao, & Eng et al., 2001). Earlier Kwan et al. (1997) also found that self-esteem and relationship harmony were mediators between culture and life satisfaction.

Empirical evidence of multiple mediators readily exists but the theoretical implications may be more profound. Firstly, as we have argued earlier, culture alone is insufficient to account for SWB, and most current research in the field needs to be more theoretically sophisticated. Secondly, we have demonstrated that mediators should be constructed from divergent cultural vantage points: Self-esteem and primary control beliefs are core elements of psychological well-being for members of individualist cultures, whereas harmony beliefs and harmonious social relationships are critically important for members of collectivist cultures. These sophisticated models delineating pathways from culture to SWB highlight the necessity of locating theory and research on SWB in the larger contexts of the culture. With more concerted research efforts, we should eventually achieve a more balanced understanding of subjective experiences of people living in diverse cultural traditions. This is essential if we are to develop a properly satisfactory psychology of well-being.

Nonetheless, a note of caution is necessary due to certain limitations of the present study. We have to concede that the model was fitted less than satisfactorily to the British sample. One reason might be the relatively small sample size. Bearden, Sharma, and Teal (1982) suggested that SEM analysis needs a sample of at least 200 to obtain a stable estimation of coefficients, and our current British sample size was only marginal. Another more serious problem might be the omission of self-esteem in our
model. As existing literature has documented that self-esteem is vital for the SWB of members of individualistic cultures (Kwan et al., 1997; Myers & Diener, 1995), the inclusion of this construct might help improve the fitting for the British sample. Future elaborations of our theoretical model should certainly incorporate self-esteem to explore another possible pan-cultural pathway to SWB. In addition, it should be noted in Table 2 that interdependent self, secondary control beliefs and harmony beliefs were intercorrelated, especially that between interdependent self and harmony beliefs. This correlational pattern may affect the results leading to small relationship between interdependent self and secondary control beliefs. Such a limitation should be reckoned with.

Societal Modernization and Coexistence of Cultures

In the present study, independent and interdependent self-systems were viewed as important characteristics of culture at the individual level. Markus and Kitayama (1991) have pointed out that theoretically the two self-systems could coexist within an individual. Empirically, the covariation between independent and interdependent self was found to be significant in both cultural groups (see Figures 2a and 2b). This coexistence of contrasting self-systems was particularly pronounced among the Taiwan Chinese. We found among Taiwanese a weak but significant relationship ($r = .33$) between independent and interdependent self, and a strong one between primary control and harmony beliefs ($r = .68$). Also, their scores for interdependent self were higher than those for independent self (paired $t = 2.65$, $df = 305$, $p < .01$). The trend was reversed among British (paired $t = -7.30$, $df = 162$, $p < .001$). Taiwanese then, seem to share an interdependent view of self somewhat more strongly than an independent view of self, whereas British do the reverse. The overall conclusion seems to be that for Taiwanese, interdependent self does not rule out the presence of independent self, though they are differently weighted in the organization of personhood.

Similarly, British respondents reported higher primary control beliefs than harmony beliefs (paired $t = 3.58$, $df = 166$, $p < .001$). Chinese, on the other hand, reported equivalent levels of the two sets of beliefs (paired $t = 1.39$, $df = 265$, ns). It seems that while the British hold on to their cultural tradition in this respect, the Chinese may be undergoing some fundamental psychological transformations. Our previous study found similar patterns: seemingly contrasting cultures can coexist within individuals, although
dominance of one’s "native" culture still remains (Lu & Gilmour, 2001; Lu & Kao, 2002).

Evidence for the existence of contrasting values has also been reported from another Eastern culture, India. Mishra (1994) found that Indians showed a disposition for both individualistic and collectivistic values; and young, highly educated, urban people tended to be less collectivist. Given that our Taiwanese sample was young, well educated and urban dwellers, they may well be the most likely segment of the population to be influenced by Western culture. In an earlier study (Lu & Gilmour, 2001), we found that older age and older cohort were predictive of more traditional harmony beliefs.

In the present study, we conducted additional analyses exploring cohort differences within culture. Among Chinese, the older cohort (community adults, mean age = 45.26) scored significantly higher on interdependent self \( (t = 9.11, df = 317, p < .001) \) than the younger cohort (university students, mean age = 19.86). The older cohort also reported higher harmony beliefs than the younger cohort \( (t = 4.47, df = 264, p < .001) \). Among the British however, the older cohort (community adults, mean age = 39.35) scored higher on independent self \( (t = 2.13, df = 179, p < .05) \) than the younger cohort (university students, mean age = 20.09). The older cohort nonetheless reported lower harmony beliefs than the younger cohort \( (t = -2.44, df = 168, p < .05) \). This suggests that traditionalism may be decreasing among the younger generations across cultures. Such empirical evidence also supports our assertion regarding the coexistence of cultures.

In the face of a significant cultural invasion from the West, along with the rapid transition from an agricultural and autocratic society to an industrial and democratic society, Taiwanese people have not relinquished traditional Chinese ideology, philosophies, values and practices. Instead, they have made pragmatic use of Western culture, adopting and assimilating useful ideology, philosophies, values and practices to enhance adjustment in the modern world. Yang (1996) proposed a comprehensive theoretical framework for the conceptualization of the dynamic process of attitude and value change under the impact of societal modernization, which could also be applicable to the pursuit of SWB. For contemporary Chinese, the neglected, even suppressed, independent self may be nurtured, developed, elaborated and even emphasized in certain domains of life. The notion of an autonomous, initiating, striving, and achieving personhood fits well with the efficiency-emphasizing, achievement-
orienting and competition-based urban existence. An attitude favoring the coexistence of independent and interdependent self as well as primary control and harmony beliefs for dealing with the apparent conflicts between strong traditionality and requisite modernity might well be argued to be the most favorable outcome for people in Taiwan, and possibly other Asian societies.

In a recent paper, Lu (2003) proposed that in the background of cultural fusion and societal modernization, contemporary Chinese people have already developed a system of "composite self" which combines the Chinese traditional "self-in-relation" and the Western style "independent and contained self." With both cultural theoretical analysis and rich qualitative data, the emergence of the composite self was shown to be an effective way of expressing both the "independence" and "interdependence" needs among the contemporary Chinese people.

However, it is not just a matter of Eastern cultures learning from the West and now living a life of cultural coexistence; members of Western cultures are undergoing some kind of value and attitude change as well. Young people in the West may also be increasingly receptive to values and attitudes rooted in Eastern cultural traditions, such as harmony. Sampson (1989) suggests that Western traditional liberal individualism (i.e., self-contained, independent, and self-sufficient) will give way to an alternative insitutive individualism (i.e., relational and communal). Theoretically, a process of psychological de-individualization and re-collectivization is implied. Empirically, our study is among the first to observe a psychological transformation of attitudes and values from "rugged" individualism to Eastern collectivism within a Western population. Although cultural asymmetry may persist for a long time in a globalizing era, the coexistence or fusion of cultures can be advantageous to the achievement of SWB, as new repertoires are added. However, more systematic analysis is needed to reveal the exact process of such changes as well as its functional value to SWB.

Primary Control: The East Asian Style

Empirical evidence in the present study has demonstrated a strong relationship between the interdependent self and primary control beliefs (Figures 2a and 2b). Although this association was predicted in the original model (Figure 1), its strength was unexpected and even stronger than that of the association between interdependent self and secondary control.
beliefs. One particularly interesting aspect of this is that the Chinese cultural tradition has generally been presented as promoting attitudes of subjugation to nature or living harmoniously with nature (Chiang, 1996; Lao, 1968). Although it is not made explicit, Markus and Kitayama's (1991) analysis implies that an interdependent view of self would place more emphasis on fitting in with the surrounding environment, rather than asserting oneself. A tone of subdued passivity is clearly present here, and this is reinforced by empirical evidence about cross-cultural differences in primary versus secondary control demonstrating that East Asians generally scored higher on external control than Westerners (Hui, 1982; Lu, Kao, Cooper, & Spector, 2000).

Following the same rationale, we originally hypothesized the association between interdependent self and primary control beliefs to be only additional and secondary links in the model.

However, the unexpected finding prompted us to reexamine the cultural roots for interdependent self and its various possible links to primary control beliefs. In fact, the Chinese cosmology is far more complicated and subtle than generally presented in the Western psychological literature. The Chinese cultural tradition does emphasize a harmonious relation between humans and Nature. However, it also offers impetus for individuals to fulfill moral obligations in the course of actively striving to do the right thing — to create, maintain and sustain a psychosocial homeostasis. The Chinese proverbs such as “Man should do his work first, then leave the rest to Heaven” and “It is up to man to strive, but up to Heaven to grant” reflect a rather proactive attitude towards life in general. It must be said that the Chinese notion of human agency is fundamentally different from that advocated in the Western culture, and is pre-determined by fate. The Chinese strategies of executing human agency are also different from the Western ones, as they focus on accepting and coming to terms with the results, no matter how good or bad (Lu, 2001; Lu & Gilmour, in press). In conclusion, certain forms of primary control beliefs are fostered and even emphasized by traditional Chinese culture, and most likely also exist in other East Asian cultures under Confucian influences. Such East Asian style primary control beliefs reflect the rational aspect of cultural collectivism and individual views of an interdependent self. Viewed in this cultural perspective, the association between interdependent self and primary control beliefs is reasonable and psychologically meaningful, especially in a time of societal change in the East.
For some time now there have been suggestions and various pieces of empirical evidence showing that East Asians are becoming increasingly self-assertive as a result of societal modernization (Yang, 1996). For example, using a modified version of Kluckhohn and Strodtbeck’s Value Orientations Questionnaire (1961), Yang (1988) found that among Chinese college students, the dominant value orientation pertaining to the "relationship of man to nature" was "mastery over nature" (80.7%), with "harmony with nature" (13.0%) and "subjugation to nature" (2.0%) trailing far behind. This value orientation pattern is comparable to that of American college students (Nordlie, 1968). Nearly 20 years later, this present study found that Taiwan Chinese even surpassed British on their scores of independent self. Moreover, the pathway via secondary control beliefs actually reduced well-being and only pathways via primary and harmony beliefs raised well-being.

It seems that the current social milieu of culture fusion and societal modernization may have provided East Asians with a stronger impetus to develop more assertive self-expression and active control over the surrounding environment. Recall that contemporary Chinese now operate a complex system of "composite" self which incorporates elements of independent and interdependent self, also that interdependent self is still relatively stronger than independent self, it is understandable that interdependent rather than independent self better predicts primary control beliefs. The exact nature and mechanisms of the integration of self systems as well as those of the relationships between self systems and belief systems should be the target of concerted future research. Nonetheless, our series of studies (see also Lu & Gilmour, 2001; Lu, Gilmour, Kao, & Eng et al., 2001) may be the first systematically to demonstrate a substantial association between collectivist culture and primary control beliefs and to explore this in detail. The picture that emerges from all this research moves us a long way from the earlier portrayals of passive and pessimistic Asians, a mythology which needs urgently to be dismantled and abandoned.

References

Boudon, W., Sheinman, S., & Toel, J. (1982). Sample size effects on chi-square and


Appendix

The Independent Self Scale (獨立自我量表)

1. Being independent/unique and consistent 保持個人的獨立性/獨特性與一致性
   Example: Item 10
   I believe that people should be unique and different from others.
   我認為人應該獨特且與眾不同。

2. Expressing oneself 表達自我
   Example: Item 16
   I believe that people should express their feelings in interpersonal interactions.
   我認為在人際互動中應該表達自己的感受。

3. Realizing internal attributes 實現個人的內在特徵
   Example: Item 15
   I believe that people should fully live up to their capabilities in any circumstances.
   我相信人在任何處境中都應該充分利用自己的能力。

4. Promoting one’s own goal 促進個人目標
   Example: Item 21
   I believe that people should try to achieve their goals at any costs.
   我相信人應該不惜一切代價，去達成自己的目標。

5. Being direct 直接溝通 (面對環境)
   Example: Item 28
   I believe that people should be direct with others.
   我相信人與人應該直接一些。

6. Separation from in-group 或離團隊
   Example: Item 7
   I believe that family and friends should not influence my important life decisions.
   我認為重要的人生決定不應受到親友的影響。

7. Self-reliance with hedonism 善於自立
   Example: Item 8
   I believe that people should be responsible for their own welfare.
   我相信人應該追求自己的福祉。

The Interdependent Self Scale (互依自我量表)

1. Belonging and fitting in 歸屬與適應 (團體)
   Example: Item 5
   Belonging to a group is important to my self-identity, or sense of myself.
   團體的歸屬對我的自我認同很重要。

2. Occupying one’s proper place 佔據適當的社會位置
   Example: Item 1
I believe that people should perform their social roles well.
我認為人應該扮演好自己的社會角色。

3. Engaging in appropriate action 表現適當的行為
   Example: Item 32
   Acting appropriately is an important principle for me.
   做事得當是我的重要準則。

4. Promoting others’ goal 東儒助人的目標
   Example: Item 19
   We should sacrifice our personal interests for the benefit of the group.
   我們應該犧牲自己的利益，為群體的利。

5. Being indirect 隱諱地
   Example: Item 23
   We should be concerned about other people’s dignity in interpersonal interactions.
   我們應該考慮到彼此的尊嚴。

6. Family integration 家庭整體
   Example: Item 33
   I believe that the family should be a life unit.
   我相信家庭是生命的單位。

7. Interdependence with sociability 互依的社會性
   Example: Item 56
   I believe that intimate relationships could reflect one’s self-identity.
   我認為親密關係能夠反映一個人的自我認同。

The Primary Control Beliefs Scale (初级控制信念量表)

1. Persistence 堅持
   Example: Item 18
   I believe that in social interactions, persistence will eventually pay off.
   我相信在人際互動中，堅持不懈，最終一定會有所回報。

2. Effort exertion 加倍努力
   Example: Item 9
   I believe that in social interactions, no matter how difficult it is, trying harder will lead to success.
   在人際互動中，不管遇到多少困難，只要加倍努力，最終一定能成功。

3. Effort attribution 正向努力歸因
   Example: Item 2
   I believe that interpersonal successes are the result of making an effort.
   我相信人際成功是付出努力的結果。

4. Task modification 改變努力的方法
   Example: Item 3
If we find our interpersonal relationships frustrating, we should look again at how we go about it.  
如果在人際互動中受挫，我們應重新檢討方法與策略。

The Secondary Control Beliefs Scale (次級控制信念量表)

1. Expecting less of oneself 降低自我期許
   *Example: Item 15*
   I can live with interpersonal failures, perhaps they are beyond my abilities.
   人際失敗也沒有關係，或許這本來就非我的能力所及。

2. Accepting personal limitations 接受自我局限
   *Example: Item 12*
   I believe that some relationships will not work no matter how hard I try, thus there is no point pushing myself.
   我相信有些關係不管我多努力也不會成功，所以不必勉強。

3. Downgrading task importance 降低目標的重要性
   *Example: Item 11*
   It is not worth pursuing a relationship that is beyond reach.
   無法達成的人際關係更是不值得追求的。

4. Perceiving benefits 正向思考
   *Example: Item 1*
   Finding positive meanings in interpersonal frustrations is a healthy attitude to life.
   尋求人際挫折中發現正面意義，是健康的生活態度。

5. Selection 選擇目標
   *Example: Item 16*
   A wise person should invest their efforts in the relationships most likely to work out.
   有智慧的人應選擇最可能達成的人際關係去努力。

The Harmony Beliefs Scale (和諧信念量表)

*Example: Item 14*
Not being competitive is the only way to maintain interpersonal harmony.
與人無爭才能保持人際和諧。
文化、自我與幸福人生：一項跨文化分析

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摘要
本文採文化心理學的觀點，視「獨立我」與「互依我」為個人層次上的文化特徵，視「初級控制信念」、「次級控制信念」、「和諧信念」及「人際感受」為追求幸福人生之自我調節之機制，構建出一項完整的文化理論模型。我們以結構式問卷，對140位台灣華人及196位英國人進行調查，實驗資料基本上支持了上述模式。本文強調唯有同時在個人主義與集體主義的文化中探索多元的調節因子，始能真正理解人們追求幸福人生的主觀體驗。
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