Locus of control and subjective well-being – a cross-cultural study

Abstract

These analyses explore the differences in locus of control and subjective well-being in China and Southern Africa, including how these variables relate to each other in each region and how demographic variables relate to both subjective well-being and locus of control. One hundred and eleven professionals were studied across Southern Africa and China and the hypothesis that the different regions would yield different locus of control and subjective well-being profiles was supported, with different demographic variables affecting each region differently. Furthermore, locus of control and subjective well-being were differently correlated to one another, with China showing significant negative correlation between subjective well-being and locus of control and Southern Africa showing no significant correlation. Findings also indicate that gender has a significant relationship with locus of control in Southern Africa but not in China; whereas China has a strong link between subjective well-being and gender.

Keywords: locus of control, subjective well-being, China, Southern Africa, gender, age.

JEL Classification: M10, M14, N30.

Introduction

Many authors have noted that the days of ‘one size fits all’ management theories are over (e.g., Spector et al., 2002; Theimann, April & Blass, 2006; Peng, Peterson, & Shyi, 1991; Trompenaars & Hampden-Turner, 1998). Given ever-increasing globalization, the need for cross-cultural and cross-national management research is more important than ever, as we can no longer assume that American-developed concepts and theory are globally applicable (Spector et al., 2002; April & April, 2007).

Two main perspectives exist regarding how globalization affects cultural values. The convergence perspective suggests that economic ideology will drive cultural values and thus a company exposed to Western thinking will start to behave in a Western, manner (Ralston, Gustafson, Cheung & Terpstra, 1993). This means that common values with regard to economic activity and work-related behavior will develop amongst developed nations (Theimann, April & Blass, 2006).

The second perspective is known as divergence, which indicates that culture is the primary driver of values in any society and thus not economic ideology (Theimann, April & Blass, 2006).

Hofstede (2007, p. 413) defines culture as “the collective programming of the mind, which distinguishes the member of one human group from another.” Thus, it is not surprising that significant differences exist between Eastern thinking and Western thinking.

Chinese people tend to use holistic thought when problem-solving, whereas Westerners tend towards analytic thought (Nisbett, Peng, Choi & Norenzayan, 2001). It has been shown that Westerners tend to pay attention to an object, whereas Chinese pay more attention to the whole or field (Masuda & Nisbett 2001; Park, Nisbett & Hedden, 1999). In other words, Westerners focus on items separate from the contexts in which they occur, whereas Chinese focus on the situation-meaning of the object (Yama, Nishioka, Horishita, Kawasaki & Taniguchi, 2007). The result of this thinking is that Westerners attribute causality to an object, and Chinese attribute causality to a situation (Yama, Nishioka, Horishita, Kawasaki & Taniguchi, 2007).

Both locus of control and subjective well-being have been well-studied in Western contexts, but not in Eastern contexts (Spector et al., 2002; White, 2007); nevertheless, there is evidence to suggest that the different nature of China (Far Eastern) and Southern Africa (South Western) should produce different profiles and relationships between these variables. Notably, the differences between individualism and collectivism have been shown to have an effect on both locus of control (Spector et al., 2002) and subjective well-being (Diener, Diener & Diener, 1995).

1. Individualist and collectivist cultures

The difference between individualist and collectivist cultures is a hypothetical concept, proposed to explain the observation that people from the Eastern hemisphere (notable Confucian Asians) are more likely to prefer sociability and interdependence, require stronger discrimination between in-group and out-group, and have stronger encouragement to infer another’s needs than their Western counterparts (Yama, Nishioka, Horishita, Kawasaki & Taniguchi, 2007).

Markus and Kitayama (1991) also connected this distinction, postulating that Westerners have an independent self, whereas Easterners have an interdependent self – the fundamental difference being in how people view themselves. They further state that Westerners are more likely to view themselves as individuals –

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1 Such as those living in China, Japan, Korea and Taiwan.
egocentric and separate from society in general, whereas Easterners tend to view themselves as part of a collective, as socio-centric, and as related to others or society (Markus & Kitayama, 1991).

Triandis (1995) defines individualism as a social pattern that consists of loosely-linked individuals that consider themselves independent of collectives. They are motivated by their own preferences, needs, rights, and the contracts they have established with others, giving priority to their own goals over the goals of others, and they emphasize rational analysis of the advantages and disadvantages of associating with others.

By contrast, collectivism is a social pattern that consists of closely-linked individuals that consider themselves part of one or more collectives, and who are motivated by the norms and duties of those collectives (Triandis, 1995). Collectivists often give priority to the goals of these collectives over their own personal goals, and they emphasize their connectedness to other members of these groups (Yama, Nishioka, Horishita, Kawasaki & Taniguchi, 2007); and Kagitgibasi (1994) notes that collectivism expresses the need for relatedness, whereas individualism expresses the need for self-sufficiency.

2. Culture and locus of control

Perceived control1 is expressed differently in collectivist cultures compared to individualist cultures, showing either primary or secondary control. Primary control refers to when an individual attempts to control his or her environment through direct intervention, whereas secondary control occurs when an individual experiences feelings of control through alignment with a more powerful individual or party, or through mediation of his or her emotional response (Weisz, Rothbaum & Blackburn, 1984). Primary control is likened to internal locus of control and secondary control is likened to external locus of control (Spector et al., 2002).

Spector et al. (2002) note that collectivists develop secondary control because they have been socialized to subordinate personal control, rather than the primary control exhibited by individualist cultures. Moreover, collectivists do not find this secondary control distressing, given their expectation that their direct personal control will be limited.

It is further observed that behavior driven by stable dispositions has its roots in individualism, whereas collectivist societal behavior tends to be more context-specific and driven by the environment (Markus & Kitayama, 1998).

Diener, Diener and Diener (1995) have found that wealthier countries that emphasize individualism and have a greater focus on freedoms and human rights tend to have citizens with higher subjective well-being. However, Diener and Suh (1999) note that these countries also have very high rates of divorce and suicide.

Diener, Suh and Oishi (1997) suggest that individualist cultures are able to pursue their desires and thus gaining self-fulfilment, but that they may also lack the cohesive social support structures present in collectivist cultures, thus amplifying the effects of troubled times. They suggest that the safety of the social structure in collectivist cultures may mean that the extremes of subjective well-being and happiness (or unhappiness) that is seen in individualist cultures are mitigated.

An interesting difference between individualist and collectivist cultures is the way in which each determines their life satisfaction. In a study conducted on college students, individualists made judgements on their happiness based on recent emotions, whereas collectivists based their decisions on both their emotions and the perceived cultural values of satisfaction (Suh, Diener & Triandis, 1998).

White (2007) produced a global map of relative levels of subjective happiness, and which found strong correlations between health, wealth and access to education (White, 2007). For the purposes of this study, the researchers note that China has higher levels of subjective well-being than South Africa.

3. Locus of control and subjective well-being

Internal locus of control has been linked with academic success (Gifford, Briceño-Perriott & Mianzo, 2006), higher self-motivation and social maturity (Nelson & Mathias, 1995), lower incidences of stress and depression (Garber & Seligman, 1980), and longer life span (Chipperfield, 1993). Psychological and physical well-being has also been shown to be moderated by perceived control (Brandstädter & Renner, 1990).

One of the main effects of locus of control on subjective well-being lies in how it affects coping strategies (Brandstädter & Baltes-Gotz, 1990). External locus of control is correlated with higher levels of stress (Garber & Seligman, 1980), and Grob (2000) notes that stress is often caused because an individual perceives the situation as beyond his or her coping abilities; with ongoing stress having a negative effect on subjective well-being. Someone with an internal locus of control who, who believes that the situation is within his or her control, may find the same situation stimulating (Owusu-Ansah, 2008).

Kulshrestha and Sen (2006) have noted significant negative correlation between locus of control and subjective well-being, which is to say that individuals

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1 The capacity an individual has to influence and predict some aspect of the environment (Perry, 1991; Perry et al., 2005, as cited in Stupnisky, Renaud, Perry, Ruthig, Haynes & Clifton, 2007).
with an external locus of control are significantly less happy than their internal counterparts. It is noted that internals actively manipulate their environments, thus acting to take control of events and to change dissatisfactory conditions (Kulshresta & Sen, 2006). In contrast, externals feel powerless to control their successes or failures (Nielsen, 1987) and, thus, are unable to remove themselves from dissatisfactory situations (Kulshresta & Sen, 2006).

### 4. Hypotheses

As noted previously, individualism and collectivism affect both locus of control (Spector et al., 2002) and subjective well-being (Diener, Diener & Diener, 1995); and existing literature predicts that China will have a different locus of control and subjective well-being profile to Southern Africa (Jackson, 2002; Theimann, April & Blass, 2006; White, 2007). Given these differences, we postulate that demographic variables will yield different effects in each culture and thus we formulate our first hypothesis as follows.

**Hypothesis 1:** Southern Africa and China will yield different locus of control & subjective well-being profiles to each other and will be differently affected by demographic variables.

Pervin (1999) noted that there is reason to expect that cultural and cross-national heterogeneity will result in differences in the way locus of control relates to well-being. The differences between the two countries lead us to our second hypothesis.

**Hypothesis 2:** Locus of control and subjective well-being will be correlated differently in Southern Africa than in China.

### 5. Method and subjects

Our self-completion questionnaire was administered electronically to participants at the China European International Business School (CEIBS) and the Graduate School of Business at the University of Cape Town (UCT). One hundred and sixty nine responses were received for the questionnaire, 97 from China and 72 from Southern Africa. Fourteen responses were eliminated from the Southern African results because not all questions were completed by the respondents, resulting in incomplete data, and a further nine were eliminated from this set because the respondents fell outside the geographical and cultural area being tested. This resulted in a total of 49 responses (n = 49) for the Southern African set.

Twenty-nine responses were eliminated from the Chinese set because of incomplete data resulting from non-completion of all questions. A further six responses were eliminated because the respondents fell outside the geographical and cultural area being tested, resulting in a total of 62 responses (n = 62) for the Chinese set.

The Chinese set consisted of staff and students at the China European Business School, in Shanghai, China. The Southern African set consisted of varying types of full-time and part-time students at the Graduate School of Business, University of Cape Town, South Africa. These samples are thus not representative of the populations as wholes, but rather represent a well-educated, professional sub-population.

Both cultural sets showed similar levels of education, with 85% and 87% of each sample having at least 16 years of formal education; but an unequal gender distribution was noted in each sample with males constituting 63% of the Southern African sample, but only 39% of the Chinese sample.

The samples also differed with respect to age and vocation, with the Chinese sample showing much younger individuals (87% of respondents 29 years and younger) than the Southern African set (59% of respondents between 30 and 39 years of age, and 35% under 30 years of age), and also far fewer managers and senior managers. 55% of the Southern African sample consisted of managers to senior managers, whereas only 21% of the Chinese sample was in management positions. Furthermore, the Southern African sample showed fewer generally- or vocationally trained individuals (4%) than the Chinese sample (29%).

To maximize validity in this study, each demographic variable was individually tested against Rotter’s (1966) locus of control scale and Diener et al.’s (1985) satisfaction with life scale.

In order to have parity between samples, the researchers did not request that race be disclosed on the questionnaire and rather requested nationality and nationality of origin (if different from current nationality) as per Hofstede’s (1994) Value Survey Model. Thus racial demographics for the South African set were not taken into account in this study.

### 6. Measures and procedures

Our questionnaire included Rotter’s (1966) original internal-external locus of control scale, the satisfaction with life scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985), and the demographic questions from the Value Survey Module (Hofstede, 1994).

The locus of control scale used was a 29-item questionnaire including the six filler questions designed to disguise the purpose of the test, which were not scored. Each question gave the participant two options from which to choose, one representing an attitude typical of internal locus of control, and the other representing an attitude typical of external
locus of control. The choices were extremes of each other, and participants were required to choose the option most closely aligned with their preferences (Klein & Wasserstein-Warnet, 2000), or in which they more strongly believed (Lefcourt, 1976). Points were given for external answers only (one point per answer), thus a higher score indicated a more external locus of control and a lower score indicated a more internal locus of control (Rotter, 1966).

SWLS (Diener, Emmons, Larsen & Griffin, 1985) is a widely-used tool “designed to assess an individual’s overall level of life satisfaction” (Eid & Larsen, 2008, p. 128). The SWLS measures global subjective well-being (Park, Peterson & Ruch, 2009), which means that it looks at individuals’ opinions of their happiness over long time periods based on their memories of those periods (Diener, Suh & Oishi, 1997). This is in contrast to an online subjective well-being measure, which determines how happy an individual feels at the moment of testing (Diener, Suh & Oishi, 1997).

The SWLS is a self-report survey consisting of five statements that a respondent must rate on a seven-point Likert scale, wherein 1 corresponds to “strongly disagree” and 7 to “strongly agree.” Results are then summed to give a total satisfaction score.

The measure is highly reliable over time (Magnus, Diener, Fujita & Pavot, 1993) and has “a large network of sensible correlates” (Park, Peterson & Ruch, 2009). Sandvik, Diener and Seidlitz (1993) also note that subjective well-being self-reports usually correlate with one another, and show convergence with subjective well-being scores measured by other methods. Diener, Suh and Oishi (1997) note that the self-report design is appropriate for measuring subjective well-being as only the respondent can gauge how satisfied he or she is with his or her life, based on internal experiences.

Demographic questions from the Value Survey module (Hofstede, 1994) required participants to choose from a selection of pre-existing answers, resulting in ranged answers for variables such as age and level of education.

All questionnaires were completed in English.

7. Data analysis

Raw scores for locus of control and subjective well-being were calculated per respondent, thereafter mean scores were calculated for each sample set, and then for each demographic variable within each sample set. Tests of location were conducted for each variable to determine whether a relationship existed between either locus of control or subjective well-being and the demographic variable under study. Regression analysis was also conducted to determine what relationship existed, if any, between locus of control and subjective well-being in either cultural set. In all cases, a 95% confidence level was used to assess the significance of the results.

8. Results

Test of Hypothesis 1. Southern Africa and China will yield different locus of control and subjective well-being profiles and will be differently affected by demographic factors.

8.1. Locus of control. China was found to have external loci of control unrelated to variables such as age, gender, level of education, or career type, suggesting that the general culture and behavioral norms affect the locus of control construct in this region. In contrast, Southern Africa exhibited very internal loci of control, despite literature indicating that this region should display both internal and external expectancies (Jackson, 2002). This suggests that the population sampled is more homogenous in terms of ethnic or cultural background. Figure 1 and 2 shows the histograms for Chinese and Southern African locus of control.

Fig. 1. Histogram showing distribution of locus of control for Southern African sample
Southern Africa also showed strong relationships between various demographic variables and locus of control, notably gender, age, and management status. Women were found to have more external control than men, people over 30 were found to have more internal control than their younger counterparts, and managers were found to be more internal than non-managers.

Table 1 shows the mean externality scores for each culture and their correlation coefficients (p-value) with each variable.

Table 1. Summary of locus of control data

<table>
<thead>
<tr>
<th></th>
<th>Southern Africa</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample mean locus of control</td>
<td>7.3</td>
<td>13.4</td>
</tr>
<tr>
<td>Sample standard deviation</td>
<td>3.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Locus of control &amp; culture (p-values)</td>
<td>$4.3 \times 10^{-13}$</td>
<td></td>
</tr>
<tr>
<td>Locus of control &amp; gender (p-values)</td>
<td>0.009</td>
<td>0.44</td>
</tr>
<tr>
<td>Locus of control &amp; age (p-values)</td>
<td>0.014</td>
<td>0.235</td>
</tr>
<tr>
<td>Locus of control &amp; level of education (p-values)</td>
<td>0.532</td>
<td>0.308</td>
</tr>
<tr>
<td>Locus of control &amp; post graduate studies (p-values)</td>
<td>0.14</td>
<td>0.168</td>
</tr>
<tr>
<td>Locus of control &amp; general career type (p-values)</td>
<td>0.239</td>
<td>0.12</td>
</tr>
<tr>
<td>Locus of control &amp; management status (p-values)</td>
<td>0.025</td>
<td>0.161</td>
</tr>
<tr>
<td>Locus of control &amp; subjective well-being (p-values)</td>
<td>0.35</td>
<td>0.032</td>
</tr>
</tbody>
</table>

8.2. Subjective well-being. The results for subjective well-being were surprising, given White’s (2007) global map of subjective happiness. Southern Africa showed a much higher mean subjective well-being score than expected from the map, as well as being higher than the Chinese subjective well-being, which White’s map shows as exceeding Southern Africa’s subjective well-being. Figure 2 shows a comparative histogram of Chinese versus Southern African scores.

Demographic variables were found to have no impact on subjective well-being with the exception of gender, wherein women were found to be significantly happier than men in China ($p < 0.05$); women were also happier than men in Southern Africa although the relationship between these variables was weaker than in China ($p < 0.10$).

Mean subjective well-being scores and correlation coefficients are detailed in Table 2.

Table 2. Summary of subjective well-being findings

<table>
<thead>
<tr>
<th></th>
<th>Southern Africa</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample mean subjective well-being</td>
<td>28.3</td>
<td>22</td>
</tr>
<tr>
<td>Sample standard deviation</td>
<td>4.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Subjective well-being &amp; culture (p-values)</td>
<td>1.2 x 10^{-9}</td>
<td></td>
</tr>
<tr>
<td>Subjective well-being &amp; gender (p-values)</td>
<td>0.053</td>
<td>0.02</td>
</tr>
<tr>
<td>Subjective well-being &amp; age (p-values)</td>
<td>0.323</td>
<td>0.455</td>
</tr>
<tr>
<td>Subjective well-being &amp; level of education (p-values)</td>
<td>0.613</td>
<td>0.282</td>
</tr>
<tr>
<td>Subjective well-being &amp; post graduate studies (p-values)</td>
<td>0.593</td>
<td>0.484</td>
</tr>
<tr>
<td>Subjective well-being &amp; general career type (p-values)</td>
<td>0.42</td>
<td>0.095</td>
</tr>
<tr>
<td>Subjective well-being &amp; management status (p-values)</td>
<td>0.653</td>
<td>0.106</td>
</tr>
<tr>
<td>Locus of control &amp; subjective well-being (p-values)</td>
<td>0.35</td>
<td>0.032</td>
</tr>
</tbody>
</table>

Test of Hypothesis 2. Locus of control and subjective well-being will be differently correlated to one another in each culture.

Figure 3 represents the relationship between subjective well-being and locus of control in the Southern African population.

A weak negative correlation of -0.137 between locus of control and subjective well-being was discovered in the Southern African sample, however this result was found to have no significance against the population ($p = 0.35$).
9. Discussion

9.1. Locus of control. According to Jackson (2002), Southern Africa exhibits both internal and external locus of control as well as both individualistic and collectivist aspects. However, the results yielded from the questionnaire indicate a far more internal locus of control for this population than would be expected given these facts. Mean locus of control for this group falls within the 95% confidence interval of 6.2 to 8.5, suggesting that the sub-population represented in this study is far more internal and thus individualistic than the population as a whole.

The data shows that China exhibits a much more external locus of control than Southern Africa. As China is a collectivist nation (Hamid, 1994; Hui, 1982) and thus expected to exhibit more external locality, this result is not surprising. The 95% confidence interval for Chinese mean locus of control is...
from 12.4 to 14.3 on the original Rotter scale (1966), a finding that is in line with previous researchers’ discoveries (Spector et al., 2002; Smith, Trompenaars & Dugan, 1995).

9.2. Locus of control & gender. Given the more external control exhibited by Southern African females, we posit that historical gender roles have resulted in more secondary control in this population, whereby a woman expresses her control through alignment with powerful others or through emotional response mediation (Weisz, Rothbaum & Blackburn, 1984). This, in turn, suggests that women are more collectivist in nature than men.

Within China, we conclude that the lack of relationship between locus of control and gender can be attributed to the general collectivist nature of the state, arising from the communist beliefs of an equal, classless society.

9.3. Locus of control & age. Given the relationship between locus of control and age in Southern Africa with older individuals exhibiting more internal control, we consider it likely that life experience reinforces the idea that outcomes are based on what a person puts in rather than on external factors. We further suggest that younger individuals are less likely to have been in positions of power or control than older individuals, and thus their expectancy that they are under the control of powerful others is reinforced. Once an individual reaches a stage where he or she has more control over his or her environment, his or her internal expectancies are reinforced, resulting in more internal control.

China’s lack of relationship between locus of control and age suggests that culture is a more pertinent actor upon locus of control expectancy, however, the young mean age of the sample prevents solid conclusions from being drawn at this stage.

9.4. Locus of control & management status. The relationship between Southern Africa and management status showed that managers had more internal control than non-managers. As with age, we suggest that occupying a position of control reinforces internal expectancy and that experiencing limited control as a non-manager reinforces external expectancy. It is also possible that individuals with more internal locus of control more often apply for and receive management positions because they are comfortable taking charge of situations and making decisions.

This relationship does not hold true in the Chinese population, again suggesting that the collectivist cultural norms override individual expectancy reinforcement.

9.5. Locus of control & education. No relationship was found between locus of control and level of education in either population, leading us to conclude that education does not fundamentally reinforce either internal or external expectancy.

9.6. Subjective well-being. The results for subjective well-being were surprising given by White’s (2007) global map of subjective happiness. Southern Africa showed a much higher subjective well-being than expected from the map, as well as being higher than Chinese subjective well-being, which the maps shows as exceeding Southern Africa’s.

The fact that the educated, professional Southern African population researched is happier than the population of the country as a whole (White’s 2007 global map of subjective happiness) is likely explained by the better financial well-being, health, and/or levels of opportunity available to this subpopulation.

This Southern African population is also happier than the equivalent Chinese population, although in this case it is unlikely that White’s (2007) main correlates of subjective well-being – health, wealth, and access to education – are causes of the discrepancy, as the populations tested are reasonably homogenous with respect to those factors.

A possible reason for Southern Africa’s higher levels of subjective well-being could be related to its more internal locus of control. The literature has noted the negative correlation between locus of control and subjective well-being with externals being less happy than their internal counterparts.

9.7. Subjective well-being & gender. This study suggests that women are happier than men in both populations. This is an exciting finding, not well noted in the literature, which suggests that something in the feminine make-up results in women being happier with, and more accepting of, their lives than men in similar positions.

9.8. Subjective well-being & other demographic factors. This study indicated that subjective well-being is independent of age, level of education, and career type and that other factors are therefore responsible for happiness in these populations, or alternately that these factors in conjunction with other life experiences contribute to a person’s global well-being.

9.9. Hypothesis 2: subjective well-being and locus of control. As previously noted, there is significant negative correlation between locus of control and subjective well-being in the literature, however, this correlation was not borne out in this study.
Southern Africa did show a weak negative correlation between the factors, but this was shown not to be significant within the population as a whole. This contrary finding suggests that Southern African professionals’ subjective well-being is not dependent on how internal or external they are, and that they determine their happiness through other means.

The Chinese population under study showed significant negative correlation in line with existing literature, with people becoming less happy as their locus of control become more external.

This study has shown that Southern Africa and China do have different correlations between locus of control and subjective well-being, thus affirming Hypothesis 2.

**Conclusion**

Southern Africa and China show marked differences both in locus of control and subjective well-being, and in factors which affect these constructs. It appears that culture remains the overriding factor that differentiates the two, with the other factor differences providing exciting hints towards better understanding of these differences at a psychological level.

**References**