Mechanisms Linking Nationality and Subjective Well-being in Managers in China and the United States

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Subjective well-being (SWB) refers to satisfaction with one's life and experience of more frequent pleasant emotions as compared to unpleasant emotions (Diener et al., 1999). In the workplace, SWB affects the productivity of employees, their ability to make decisions, and attendance (Danna and Griffin, 1999). Because employees spend a substantial part of their lives at work, and are dependent on their job to meet several personal needs, their work and personal lives are intertwined. As a result, stressors may originate from the conflict between these roles and that conflict may affect the overall well-being of an employee (Danna and Griffin, 1999). Yet despite the causes and effects of SWB related to the workplace, SWB remains an under-explored subject in the work domain. As Danna and Griffin noted in their review of past research, "Indeed, for a variety of reasons these [health and well-being] issues should occupy a much more prominent niche in mainstream organizational research" (1999: 357; words in brackets added).
While cross-cultural studies on SWB have found differences in average SWB scores of respondents across countries and have attributed it to various factors including individualism-collectivism, status of human rights, and wealth (Diener et al., 1995), not much research has been conducted to examine the mechanisms that link nationality to SWB. Accordingly, our study aims to extend past research by identifying the role of two work domain factors—work locus of control and family-work conflict—in explaining cross-cultural differences in SWB. We examine these linkages in the case of managers in the United States and the People’s Republic of China.

With a population of nearly 1.3 billion and a gross domestic product of nearly $18.86 trillion (Central Intelligence Agency, 2006), the People’s Republic of China (referred to as “China” in the subsequent text) has emerged as an important player in the world economy. The international marketplace recognizes significant business opportunities in China: joint ventures, outsourcing partnerships, low-cost suppliers of a wide variety of goods from toys to high-tech electronic products, and significant and largely untapped markets (e.g., Erickson, 2001). Cross-cultural researchers have highlighted the difficulties managers face when seeking to transfer management techniques such as human resource management practices and policies into the Chinese context (Teagarden and Von Glinow, 1990) and have documented the myriad ways that the eastern culture in China differs dramatically from western cultures such as the U.S.

In addition to differing economic, legal, political, and educational systems in the U.S. and China—such as the smaller proportion of private sector jobs (Lu et al., 2002) and the intensely competitive educational system (Tang, 1999) in China—research over the past 20 years demonstrates that Chinese and U.S. managers differ considerably on a number of cultural dimensions such as individualism-collectivism, power distance, and long-term orientation (e.g., Chen, 1995; Earley, 1989, 1993; Hofstede, 1991, 1993; Hofstede and Bond, 1988; Ralston et al., 1993; Schwartz, 1994; Shenkar and Ronen, 1987; Smith et al., 1996). Of these dimensions, a greater volume of research has focused on the differences between the U.S. and China related to individualism-collectivism, which refers to the extent to which individuals are connected to their society (Earley and Gibson, 1998). Pursuing individual goals is more important than pursuing group goals in an individualist society. A meta-analysis of individualism-collectivism research (Oyserman et al., 2002) supported Hofstede’s (1991) assertion that people in the U.S. were higher in individualism and lower in collectivism compared to the Chinese.

Another cultural dimension with significant differences between the two nations is power distance. In high-power distance societies, employees are thought to accept hierarchy and power differences and comply quickly and automatically with the decisions of the powerful (Hofstede, 1980, 1986). Studies have supported the idea of greater acceptance of hierarchy in East Asia than in low-power distance, Western countries (Bond et al., 1985; Schwartz, 1994; Westwood and Everett, 1987). Similarly, China is characterized by a long-term orientation, while people in the U.S. tend
to be more focused on the short term (Bond, 1987).

These cultural differences are also manifested in employee well-being. Spector’s results indicated that employees in China have lower psychological and physical well-being and reduced job satisfaction relative to their U.S. counterparts (Spector et al., 2001, 2004). Similarly, Diener and his colleagues found lower SWB among people in China compared to people in the U.S. (e.g., Diener and Suh, 1995). However, there is a growing recognition that research needs to focus also on the mechanisms that explain how nationality affects SWB (Diener et al., 2003; Hong et al., 2000; Joplin et al., 2003). The purpose of our research is to fill this gap by uncovering additional mediating variables between nationality and employee well-being in the U.S. and China. In particular, we focus on work locus of control and family-work conflict as the primary factors that differ between the U.S. and China and are instrumental in explaining differences in SWB. We argue that the effects of work locus of control and family-work conflict on SWB will be further mediated by social support and active coping. The relationships are depicted in Figure I, and are explained in the following sections.

**NATIONAL CULTURE AS PREDICTOR OF WORK LOCUS OF CONTROL, FAMILY-WORK CONFLICT, AND SUBJECTIVE WELL-BEING**

Work locus of control (WLOC) is an extension of Rotter’s (1966) concept of locus of control which asserts that individuals differ in terms of their beliefs about whether they control the outcomes in their lives (i.e., internal locus of control) or the outcomes are controlled by factors such as luck and other people (i.e., external locus of control). Building on the argument of Paulhus and Christie (1981) that there might be a generalized perception of control for various spheres of an individual’s life, Spector (1988) formulated the work locus of control scale. The notion of WLOC has frequently been linked with increased job satisfaction and psychological well-being (Karasek, 1979; Spector, 1986; Spector et al., 2002).

While WLOC differs greatly among individuals, cross-cultural research suggests national culture can have an impact on the level and the ways in which WLOC is experienced (e.g., Lu et al., 2003). Individualism-Collectivism is one dimension of national culture that can influence WLOC. Individualism is an expression of the need for independence and self-sufficiency whereas collectivism is an expression of the need for affiliation (Hofstede, 1980). For example, members of individualistic societies perceive themselves as having primary control over events in their lives and place value on autonomy and achievement as the result of one’s actions. On the other hand, in collectivist societies individuals give primacy to group goals over personal goals. Consequently, in a collectivist society, it may be considered appropriate to grant power to the group (or social institutions) for actions and outcomes in one’s personal life. Thus, it has been suggested that members of collectivist societies experience secondary control through their emphasis on interpersonal relationships and the social environment (Triandis, 1994). In a study comparing the U.S. and Japan, another collectivist society, research-
MECHANISMS LINKING NATIONALITY AND SUBJECTIVE WELL-BEING

Figure 1
Conceptual Model

Subjective Well-being

Social Support
H4a (+)
H4b (+)
H2a (+)
H2c (+)

Internal WLOC
H1a (+)
H1c (+)

Family-Work Conflict
H2b (+)
H3 (-)

Active Coping
H5 (+)

Country
H1b (+)

Note: Country is a dichotomous variable: U.S. = 1; China = 0.
ers found that individuals in Japan were more likely to form alliances with powerful people so as to be better assured of outcomes. In such a society, a feeling might generate among individuals that their fate rests in the hands of powerful others rather than in their own hands (Weisz et al., 1984). Given the emphasis on primary control in individualist cultures such as the United States, and the emphasis on secondary control in collectivist cultures such as China, our hypothesis is:

Hypothesis 1a: Employees in the U.S. are likely to report a higher internal work locus of control than employees in China.

Collectivist societies tend to be comparatively more homogeneous because people have a common heritage going back several centuries causing the perception of the society to be that of a big family (Earley and Gibson, 1998). Triandis et al. (1988) used the terms idiocentric and allocentric to refer to people in individualist and collectivist cultures, respectively. Idiocentric people have a self-concept independent of others whereas allocentric people have an inter-dependent self-concept. In individualist societies the concept of kinship refers to immediate family (spouse and children), while people in collectivist societies extend the concept of kinship to distant relations, neighborhood, and other institutions of the society. In the United States nuclear families are often located a great distance from parents and siblings, while in China it is more likely that families will live near the extended family. As Hofstede argued, "individualism implies a loosely knit social framework in which people are supposed to take care of themselves and of their immediate families only" (1980: 45). Thus, one would expect higher importance being accorded to the family in an individualist society compared to a collectivist society where the family is on level ground with other institutions in the society, including the workplace. As Gannon (2001) noted in his work on global cultures, the U.S. culture depicts a profound belief in family. On the other hand, as Yang et al. (2000) argued, work in China might be seen as something for which the family must be ready to sacrifice because it is for the collective good of the society.

In a pioneering work, Kahn et al. defined role conflict as the "simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other" (1964: 19). Family-work conflict refers to lack of compatibility between the roles one plays at work and in the family such that family-related role pressures obstruct work performance. The conflict could be of three kinds: time-based, behavior-based, and role-based (Greenhaus and Beutell, 1985). For example, an individual may not be able to find the required time to meet work requirements due to more time demanded by his or her family role. However, in China there is less separation of the two domains (Ishii-Kuntz, 1994). The Chinese employees regard work as contributing to the welfare of the family and consider it to be more important than leisure (Redding, 1993). Thus, it is less likely that the Chinese employees will view the family as interfering with their work.
Subjective well-being refers to a state of being in which individuals experience general happiness and are relatively free of worry and depression. Both internal and external factors have been found to influence SWB. For example, extraversion (Lucas and Fujita, 2000), neuroticism (Fujita et al., 1991), and the pursuit of goals (Emmons and Diener, 1986) have been found to be correlated with SWB.

The influence of national culture may provide a better explanation for the differences in SWB. Using multiple samples of college students from various nations, Diener and Oishi (in press) compared Asian and non-Asian countries on life satisfaction, emotions, and happiness. Students in the U.S. consistently reported higher levels than students in China on these dimensions. Specifically, in the experience of pleasant emotions and happiness, on a ten-point scale, the U.S. respondents averaged 6.1 and 8.1, while Chinese respondents averaged 4.6 and 7.3, respectively. Additional research using adults has shown similar findings. For example, Veenhoven (1993) found the average life satisfaction score for Denmark, a country closer to the U.S. on individualism, was close to 8 whereas the Japanese life satisfaction score was closer to 6 on a scale of 1 to 10. Similarly, Oishi (2002) found that Asian Americans reported lower SWB than European Americans in the U.S. Consistent with past research, we predict:

Hypothesis 1c: Employees in the U.S. will report a greater level of subjective well-being than employees in China.
trol were more likely to seek advice and assistance. Further, internals are more likely to engage in pro-social behavior, thereby receiving something in return from co-workers (Taylor and Brown, 1988). The initiative shown by people with a higher internal WLOC (Spector, 1988) will make them more likely to seek social support from their supervisors and co-workers. Thus,

Hypothesis 2a: WLOC will be related to social support such that internals will report higher levels of social support than externals.

Active coping strategies, as the name indicates, involve actively controlling the stressor. It is the attempt to tackle the problems by “cognitively analyzing the situation and/or by concrete action” (de Rijk et al., 1998: 1). Individuals with a high internal locus of control not only perceive greater control but also seek situations in which control is possible (Julian and Katz, 1968; Kahle, 1980), exert more effort to control their environment in any given situation, seek new information and make better use of it (Phares, 1976). Thus, such individuals are likely to be more naturally inclined and better equipped to directly confront the challenges rather than avoid them (Latack, 1986). Individuals with an internal locus of control are more likely to engage in the active coping strategies of working harder, longer, and more efficiently than those with an external locus of control (Ito and Brotheridge, 2003). We believe work locus of control will operate similarly to the broader construct of locus of control in the prediction of active coping. Consequently,

Hypothesis 2b: WLOC will be related to active coping such that internals will engage in more active coping than externals.

Internals believe they control the outcomes and so, in order to be consistent with these beliefs, they will make an attempt to deal with work-related challenges (including stress) to achieve a higher state of well-being. Externals, on the other hand, tend to be more prone to anxiety in the face of daily challenges (Spector, 1982). In research exploring whether the relationship between work locus of control and well-being is universal, Spector et al. (2002) analyzed data from 5,185 participants in 24 geopolitical entities. No support was found for the universality of the relationship between work locus of control and physical well-being as non-significant values were found for seven of the samples (e.g., France, Hong Kong, South Africa, U.K.). However, support was found for the universality of the relationship between work locus of control and psychological well-being in all but three of the samples (i.e., U.K., Romania, and Bulgaria). The authors did not find the moderating effect of individualism-collectivism on the relationship between work locus of control and psychological well-being, thereby indicating that the positive relationship between internal WLOC and well-being can be generalized across nations. This allows us to argue that the relationship between WLOC and SWB will hold in both the U.S. and China, even though these two countries differ on the individualism-collectivism dimension.

Hypothesis 2c: WLOC will be positively related to subjective well-being such that internals will report higher levels of subjective well-being than externals.

Numerous physical and psychological negative outcomes have been associated with family-work conflict. These have included increased de-
pression (Googins, 1991), stress (Jex and Elacqua, 1999), increased somatic complaints (Burke, 1988), physical ailments (Frome et al., 1997) and lower energy levels (Googins, 1991). Previous research has also acknowledged the detrimental effects of family-work conflict on SWB (Judge and Colquitt, 2004; Martins et al., 2002). Consistent with past research, we predict:

Hypothesis 3: Family-work conflict will be negatively related to subjective well-being.

Social support bolsters a feeling of self-worth and positive thinking (Williams and House, 1985). Thus, people receiving social support might look upon problems as opportunities and think of themselves as potential winners. The information support from co-workers in terms of new strategies to overcome problems would enable an individual to successfully confront the challenges. As Daniels and Guppy (1994) argued, social support can be viewed as a means of control over some aspects of the working environment, although through the actions of others. Further, Marcelissen et al. (1988) argued that social support could modify the cognitive interpretation and analysis of the problem on hand. Social support in the workplace may prevent role overload and provide new strategies to solve the problems. Thus, individuals who receive social support will be able to use active coping strategies in dealing with stress.

Hypothesis 4a: Social support will be positively related to active coping.

Chay (1993) argued that irrespective of the stress level faced by a person, supportive relationships generally enhance well-being. This could be because social support is likely to fulfill the need for affiliation of employees and raise one's self-evaluation (Caplan et al., 1975). Payne's (1980) literature review found evidence for a direct relationship between social support and well-being. Similar findings were echoed by Henderson (1984) in a subsequent review. As Cohen and Wills concluded in another review article, "This kind of support could be related to overall well-being because it provides positive affect, a sense of predictability and stability in one's life situation, and a recognition of self-worth" (1985: 311).

Hypothesis 4b: Social support is positively related to subjective well-being.

Koeske, Kirk, and Koeske (1993) found that active coping served as a buffer against the effect of job stressors on negative job-related outcomes such as burnout and dissatisfaction. Individuals following active coping might be able to resolve their problems through the effective use of information, material, and social resources. Leana and Feldman (1988) argued that even if the problem cannot immediately be resolved, individuals following active coping might be able to control their stress through other forms of constructive behavior (e.g., seeking counseling, physical exercise). On the other hand, a person engaging in escapist or avoidance coping would continue to suffer from negative emotions because he/she does not address the source of stress (Zellars et al., 2004). Thus, our final hypothesis is as follows:

Hypothesis 5: Active coping will be positively related to subjective well-being.

METHOD

Participants

For the U.S. sample, 153 surveys were distributed to Executive MBA
students at two large public universities. These students were working professionals. We received 136 completed responses, thereby giving us a response rate of 88.9%. Due to a clerical error, we received demographic responses on only about 50% of the U.S. sample. Of those U.S. responses, 53 percent were male and the average age was 29.53 years with a standard deviation of 6.92. For the Chinese sample, we distributed surveys to 232 middle- and senior-level managers working in state-owned companies in the Tianjin and Shanghai areas of China who were attending executive business education classes. We received 155 completed surveys for a response rate of 67%. Sixty-nine percent of the Chinese respondents were male and the average age was 37.2 years, with a standard deviation of 7.64. All the respondents were assured anonymity.

Measurement Equivalence

In cross-national research, it is important to ascertain whether a survey item has the same meaning for respondents from different countries (Cheung and Rensvold, 1999). As a first step, it is important to maintain conceptual equivalence of the measures across two cultures and two languages. We translated the English version to Chinese and translated back into English with the help of two independent, bi-lingual graduate students (Brislin, 1980) to ensure consistency (in word and interpretation) across the two versions. The format and response options of the surveys were identical for the English and Chinese surveys.

One of the methods to verify measurement equivalence of scale items is factorial invariance. Factorial invariance exists when the factor loadings of scale items in relation to the underlying latent constructs are not significantly different between the two groups (Cheung and Rensvold, 1999). If certain items are not factorially invariant, then one recommendation is to drop these items from subsequent analysis. Accordingly, we dropped seven items from the work locus of control scale and five items from the SWB scale. All the items on the other scales demonstrated measurement invariance. The differences in factor loadings between the two samples on work locus of control and SWB scales are shown in Tables 1 and 2.

Measures

Nationality. In line with prior comparative research across nations (e.g., Spector et al., 2004; Yang et al., 2000), we did not directly measure the complex socio-cultural differences but instead relied on past findings of country differences (Hofstede, 1984; Spector et al., 2002) to capture the nationality differences through a dichotomous measure. In the present study, the U.S. managers were coded as “one” and the Chinese managers were coded as “zero.”

The justification for using a dichotomous variable to capture cultural differences is as follows. As Oyserman et al. noted, a major contentious assumption in using the direct assessment approach (i.e., using scales of Individualism-Collectivism) is that “cultural frame is a form of declarative knowledge (e.g., attitudes, values, beliefs) that respondents can report on rather than some set of more subtle and implicit practices and social structures that respondents cannot report on because these practices are
### Table 1
Comparison of Factor Loadings between the U.S. and Chinese Samples

*Work Locus of Control Scale*

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Scale Item</th>
<th>Factor Loading U.S. Sample</th>
<th>Factor Loading China Sample</th>
<th>Factorial Loading Invariance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A job is what you make of it.</td>
<td>.21*</td>
<td>.13</td>
<td>Invariant</td>
</tr>
<tr>
<td>2</td>
<td>When it comes to landing a really good job, who you know is more important than what you know.</td>
<td>.54**</td>
<td>.42**</td>
<td>Invariant</td>
</tr>
<tr>
<td>3</td>
<td>Promotions are given to employees who perform well on the job.</td>
<td>.43**</td>
<td>.16</td>
<td>Invariant</td>
</tr>
<tr>
<td>4</td>
<td>To make a lot of money you have to know the right people.</td>
<td>.73**</td>
<td>.11</td>
<td>Variant</td>
</tr>
<tr>
<td>5</td>
<td>It takes a lot of luck to be an outstanding employee on most jobs.</td>
<td>.65**</td>
<td>.56**</td>
<td>Invariant</td>
</tr>
<tr>
<td>6</td>
<td>People who perform their jobs well generally get rewarded.</td>
<td>.45**</td>
<td>-.01</td>
<td>Variant</td>
</tr>
<tr>
<td>7</td>
<td>Most employees have more influence on their supervisors than they think they do.</td>
<td>.25**</td>
<td>.02</td>
<td>Invariant</td>
</tr>
<tr>
<td>8</td>
<td>The main difference between people who make a lot of money and people who make a little money is luck.</td>
<td>.76**</td>
<td>.62**</td>
<td>Variant</td>
</tr>
<tr>
<td>9</td>
<td>On most jobs, people can pretty much accomplish whatever they set out to accomplish.</td>
<td>.24**</td>
<td>-.07</td>
<td>Variant</td>
</tr>
<tr>
<td>10</td>
<td>If you know what you want out of a job, you can find a job that gives it to you.</td>
<td>.23*</td>
<td>.17</td>
<td>Invariant</td>
</tr>
<tr>
<td>11°</td>
<td>If employees are unhappy with a decision made by their boss, they should do something about it.</td>
<td>.15†</td>
<td>.01</td>
<td>Invariant</td>
</tr>
<tr>
<td>12</td>
<td>Getting the job you want is mostly a matter of luck.</td>
<td>.73**</td>
<td>.52**</td>
<td>Invariant</td>
</tr>
<tr>
<td>13</td>
<td>Making money is primarily a matter of good fortune.</td>
<td>.71**</td>
<td>.62**</td>
<td>Invariant</td>
</tr>
<tr>
<td>14</td>
<td>Most people are capable of doing their jobs well if they make the effort.</td>
<td>.31**</td>
<td>-.10</td>
<td>Variant</td>
</tr>
<tr>
<td>15</td>
<td>In order to get a really good job, you need to have family members or friends in high places.</td>
<td>.71**</td>
<td>.45**</td>
<td>Variant</td>
</tr>
<tr>
<td>16</td>
<td>Promotions are usually a matter of good fortune.</td>
<td>.70**</td>
<td>.73**</td>
<td>Invariant</td>
</tr>
</tbody>
</table>

° This item was dropped from computing the work locus of control scale score due to resulting increase in scale reliability in both the samples.

The items where the factor loadings were invariant between the two samples were retained for computation of the scale.

**p < .01 (two-tailed); *p < .05 (two-tailed); †p < .10 (two-tailed).

On similar lines, Peng, Nisbett, and Wong (1997) argued that even a tiny bit of individualism in the Chinese context would stand as an outlier and might be given the highest possible rating on a Likert-type scale by a Chi-

**"deeply woven into everyday life and are a normal part of living"** (2002: 7).
Table 2
Comparison of Factor Loadings between the U.S. and Chinese Samples
Subjective Well-being Scale

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Scale Item</th>
<th>U.S. Sample</th>
<th>China Sample</th>
<th>Multi-group Invariance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Affective Well-being</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often have you experienced the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>following emotions in the last two weeks?</td>
<td>.52**</td>
<td>.54**</td>
<td>Invariant†</td>
</tr>
<tr>
<td>2</td>
<td>Pride</td>
<td>.34**</td>
<td>-.02</td>
<td>Variant</td>
</tr>
<tr>
<td>3</td>
<td>Stress</td>
<td>.42**</td>
<td>.21†</td>
<td>Invariant†</td>
</tr>
<tr>
<td>4</td>
<td>Guilt/Shame</td>
<td>.61**</td>
<td>.59**</td>
<td>Invariant†</td>
</tr>
<tr>
<td>5</td>
<td>Contentment</td>
<td>.92**</td>
<td>.83**</td>
<td>Invariant†</td>
</tr>
<tr>
<td>6</td>
<td>Joy</td>
<td>.47**</td>
<td>.39†</td>
<td>Invariant†</td>
</tr>
<tr>
<td>7</td>
<td>Sadness</td>
<td>.87**</td>
<td>.80**</td>
<td>Invariant†</td>
</tr>
<tr>
<td>8</td>
<td>Happiness</td>
<td>.68**</td>
<td>.37†</td>
<td>Invariant†</td>
</tr>
<tr>
<td>9</td>
<td>Depression</td>
<td>.13</td>
<td>.05</td>
<td>Invariant†</td>
</tr>
<tr>
<td>10</td>
<td>Anger*</td>
<td>.50**</td>
<td>.28†</td>
<td>Variant†</td>
</tr>
<tr>
<td>11</td>
<td>Elation</td>
<td>.57**</td>
<td>.61**</td>
<td>Invariant</td>
</tr>
<tr>
<td>12</td>
<td>Anxiety/Worry</td>
<td>.58**</td>
<td>.37**</td>
<td>Invariant</td>
</tr>
<tr>
<td></td>
<td>Life Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>In most ways my life is close to my ideal.</td>
<td>.83**</td>
<td>.71**</td>
<td>Invariant</td>
</tr>
<tr>
<td>14</td>
<td>The conditions of my life are excellent.</td>
<td>.85**</td>
<td>.62**</td>
<td>Variant†</td>
</tr>
<tr>
<td>15</td>
<td>I am satisfied with my life.</td>
<td>.85**</td>
<td>.67**</td>
<td>Invariant†</td>
</tr>
<tr>
<td>16</td>
<td>So far I have gotten the important things I</td>
<td>.76**</td>
<td>.58**</td>
<td>Invariant†</td>
</tr>
<tr>
<td>17</td>
<td>want in life.</td>
<td>.52**</td>
<td>.61**</td>
<td>Invariant</td>
</tr>
</tbody>
</table>

**p < .01 (two-tailed); *p < .05 (two-tailed).
†The items where the factor loadings were invariant between the two samples were retained for computation of the scale.
*This item was dropped because it had non-significant loading on the common factor in both the samples.

Thus, the comparison of scaled scores between the U.S. and China might be misleading. Peng et al. found that the rating method (for a scale of cultural values) of measuring differences between people in China and the U.S. had low convergence with the cultural difference assessed by independent experts. Accordingly, we relied on a large body of previous research that has used diverse methods and measures to conclude that the U.S. respondents would rank much higher on individualism and much lower on power distance compared to the Chinese. Therefore, we used a dichotomous variable to indicate the cultural contrast between the two countries.

Work Locus of Control (WLOC). We used Spector’s (1988) scale consisting of 16 items to measure WLOC. A sample item from this scale is “If you know what you want out of a job, you can find a job that gives it to you.” The items were coded such that
higher scores reflect an internal work locus of control while lower scores reflect an external work locus of control. The reliability of the scale for all respondents was .83.

Even though seven items that were factorially variant between the two samples were dropped and one item dropped in order to increase the magnitude of reliability coefficient (Table 2), the remaining eight items captured equally the aspects of internal and external control, thereby preserving the content validity of this scale.

**Family-Work Conflict.** This five-item scale was developed by Netemeyer, Boles, and McMurrian (1996) with data collected from three samples. A sample item from this scale is “I have to put off doing things at work because of demands on my time at home.” The reliability of this scale for all respondents was .90.

**Social Support.** We measured the individual respondent’s self-reported social support from four sources: former co-workers, spouse or significant other, friends, and relatives. There was a four-item scale for each source of social support. A sample item is “How much do each of these people go out of their way to make your life easier for you?” There was also an item for social support from any source other than the four mentioned earlier. This scale was adapted from Caplan et al. (1975). The reliability of this scale for all respondents was .84.

**Active Coping.** We measured active coping with a 17-item scale taken from Latack (1986). A sample item is “When things go wrong at work, I try to be very organized so that I can keep on top of things.” The reliability of this scale for all respondents was .86.

**Subjective Well-being (SWB).** Following the earlier work of Diener and colleagues (Diener et al., 1995; Diener et al., 1995), SWB was measured through the scales for affective well-being and life satisfaction. Both scales were five-point Likert type and had the same anchors. In the affective well-being scale, respondents indicated how frequently over the past two weeks they had experienced twelve different (positive and negative) emotions, such as pride, anger, and joy. The life satisfaction scale had five items and a sample item is “In most ways my life is close to my ideal.” The reliability of the scale for all respondents was .85.

Based on factorial invariance analysis, four items that were variant between the two groups were dropped from affective well-being and one item was dropped from the life satisfaction scale, as shown in Table 2.

**RESULTS**

Descriptive statistics and correlations between variables are reported in Table 3. As can be seen, there is a positive correlation between nationality and SWB such that the U.S. managers reported higher SWB than Chinese managers.

We tested the hypothesized model in Figure I through structural equation modeling. Single indicators of latent variables (not shown in Figures I and II) were used for WLOC, family-work conflict, social support, active coping, and SWB to account for the measurement error in respective scales (Jöreskog and Sörbom, 1988). Error variances of these variables were fixed at \((1-\alpha)\) times variance.

First, we tested the conceptual model shown in Figure I. The fit indices were: \(\chi^2 = 15.07, \text{df} = 4, p <\)
Table 3
Descriptive Statistics and Correlations between Variables (N = 292)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Country</td>
<td>.47</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Internal Work Locus of Control</td>
<td>4.08</td>
<td>.61</td>
<td>.49</td>
<td>.15</td>
<td>-.10</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Family-Work Conflict</td>
<td>2.15</td>
<td>.70</td>
<td>.15</td>
<td>-.10</td>
<td>.23</td>
<td>-.14</td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>4. Social Support</td>
<td>2.99</td>
<td>.49</td>
<td>.04</td>
<td>.23</td>
<td>-.18</td>
<td>.21</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>5. Active Coping</td>
<td>3.72</td>
<td>.47</td>
<td>-.01</td>
<td>.14</td>
<td>-.18</td>
<td>-.20</td>
<td>.38</td>
<td>.31</td>
</tr>
<tr>
<td>6. Subjective Well-being (SWB)</td>
<td>3.32</td>
<td>.56</td>
<td>.21</td>
<td>.42</td>
<td>-.20</td>
<td>.38</td>
<td>.31</td>
<td>.85</td>
</tr>
</tbody>
</table>

Note. The diagonal elements are the scale-reliability estimates, where applicable.

* Dichotomous variable: U.S. = 1; China = 0.
** p < .01 (two-tailed); * p < .05 (two-tailed); ' p < .10 (two-tailed).

.05; NFI = .99; CFI = 1.00; RMSEA = .10. Chi square is significant and RMSEA is greater than .08, and this indicates that the hypothesized model does not fit the data and there is scope for improvement. It was possible to improve the model further by dropping two non-significant paths (from country to SWB, and from family-work conflict to SWB) and adding two new paths (from WLOC to family-work conflict, and from family-work conflict to active coping). Accordingly, the significant paths in the case of the best fitting model are shown in Figure II. The fit indices for this model were: \(\chi^2 = 8.67, df = 4, p > .05; NFI = 1.00; CFI = 1.00; RMSEA = .06\). Since chi square is non-significant, it implies that the revised model is consistent with the data.

Results revealed strong support for Hypotheses 1a and 1b. As predicted, U.S. managers reported a higher internal work locus of control and a higher level of family-work conflict. Though there was a significant zero order correlation between country and well-being, indicating that the U.S. managers reported higher well-being than the Chinese managers, there was no residual effect of country on SWB in Figure II. This implies that the effect of country on SWB (Hypothesis 1c) is completely mediated by other variables in the model. Though family-work conflict and SWB were negatively correlated, as shown in Table 3, there was no direct relationship between family-work conflict and SWB in Figure II. In a separate model (not shown) with country, family-work conflict, and SWB as the variables, we found a significant, negative relationship between family-work conflict and SWB. A new path showing negative relationship between family-work conflict and active coping also emerged in the best fitting model in Figure II. Taken together, this implies that the effect of family-work conflict on SWB was
Figure II
Standardized Path Coefficients for the Best Fitting Model

Subjective Well-being

Social Support

Active Coping

Internal WLOC

Family-Work Conflict

Country

Path Coefficients:
- Subjective Well-being: 0.29
- Social Support: 0.27
- Active Coping: 0.41
- Internal WLOC: 0.57
- Family-Work Conflict: 0.36
- Country: 0.36

Notes:
- Country is a dichotomous variable: U.S. = 1; China = 0.
- All path coefficients are significant at p < 0.05 (two-tailed).
negative, thereby supporting Hypothesis 3 but the effect was completely mediated through active coping. Hypotheses 2a and 2c were supported: internals reported greater social support than externals and displayed higher well-being. However, work locus of control was not related to active coping and, so, Hypothesis 2b was not supported. However, a new path emerged in the best fitting model indicating a negative relationship between internal work locus of control and family-work conflict. Thus, work locus of control has a direct effect on SWB as well as an indirect effect mediated through family-work conflict, active coping, and social support. Social support was positively related to active coping and SWB and, so, Hypotheses 4a and 4b were supported. Finally, active coping had a positive relationship with SWB, thereby supporting Hypothesis 5.

DISCUSSION

Our purpose was to examine the mechanisms that link the nationality of employees with their SWB. Though SWB has relevance for the workplace (Danna and Griffin, 1999), there has been little research on the role of work domain factors as the explanation of differences in SWB across cultures. Our focus was on the United States and China and we used mainly the cultural differences as the underlying dimension to predict family-work conflict as a stressor and WLOC as a personality-based resource to manage stress effectively. As one of the few studies that utilized data from public sector managers in China—a group that has so far been relatively difficult to access by U.S. researchers—we believe the findings from our comparative study will be useful for researchers as well as practitioners in the following ways.

Theoretical Implications

Consistent with prior research of Diener and colleagues, we found U.S. respondents to report higher SWB than the Chinese respondents, as indicated by the correlation between nationality and SWB. The effect of nationality on SWB was completely mediated by WLOC, family-work conflict, social support, and active coping. Consistent with the work of Spector and colleagues, the U.S. employees reported higher internal WLOC than the Chinese employees. Similarly, as suggested by Yang et al. (2000), we found that U.S. employees experienced greater family-work conflict compared to their Chinese counterparts.

Consistent with earlier research (Spector, 1982, 1988), work locus of control had an independent positive relationship with SWB. In addition, WLOC also had a relationship with SWB mediated through social support, family-work conflict, and active coping. Social support had a positive relationship with SWB, consistent with the direct effect theory of Cohen and Wills (1985). Though the path between family-work conflict and SWB was not significant, there was an indirect negative relationship between family-work conflict and SWB mediated through active coping. Thus, although not hypothesized, there was a direct negative relationship between family-work conflict and active coping.

Taken together, the findings imply that between-culture differences in SWB in the case of U.S. and China could be explained primarily by family-work conflict and WLOC, which,
in turn, have direct and indirect effects on SWB. The higher family-work conflict in the case of U.S. managers works towards lowering their SWB compared to Chinese managers. However, internal WLOC, being higher in the U.S. managers compared to the Chinese, has the balancing effect of improving their SWB. It may be noted that there were no differences between the two country samples in the extent of social support and active coping. Thus, our findings highlight that cultural differences are important only in affecting the nature of stressors and individual dispositions — family-work conflict and work locus of control, respectively, in our study. In other words, cultural differences might affect only the distal variables in the pathways to SWB.

Our attempt to improve the model fit also indicated that internal WLOC helped in reducing family-work conflict. Thus, even though U.S. managers experienced higher levels of family-work conflict due to differences in the socio-economic setup, the personal disposition to feel more strongly in control of events does mitigate the family-work conflict. While our focus was on family-work conflict, it is quite possible that factors related to a person’s work may adversely affect how well he/she is able to perform family-related roles thereby lowering one’s subjective well-being. Examining work-family conflict (Boles et al., 2001) in the context of country differences in subjective well-being is an important area of future research.

Finally, it is important to note that the variables in our model accounted only for partial variance in SWB. There is ample scope for future research to examine other personality traits (e.g., self-esteem, emotional stability), work stressors (e.g., job insecurity), and coping mechanisms (e.g., avoidance coping) while examining the cultural differences in SWB. In addition, Diener et al. (1995) identified several factors not related to workplace that could explain differences in SWB across nations.

Practical Implications

First, our study highlights that work locus of control and family-work conflict are two important work-related concepts that differ across the U.S. and Chinese cultures and that they mediate the relationship between nationality and SWB. People with higher internal work locus of control are more likely to take responsibility for the outcomes in the workplace and work without close supervision (Spector, 1982, 1988). In our study we found a significant difference in the values of work locus of control between the employees in the U.S. and China. The U.S. employees reported higher internal work locus of control. Therefore, for U.S. companies operating in China, the U.S. managers may have to modify their style in order to be effective in dealing with employees in China. For example, they may have to more explicitly communicate the importance of employee behavior (as compared to extraneous factors beyond control) for work performance. We also found that internal work locus of control was positively related to subjective well-being. It implies that there may be some benefits of including work locus of control as one of the personality traits for employee selection. Similarly, based on the role of family-work conflict in mediating the effect of nationality on SWB, organizations that pro-
vide the work-family balance to minimize the family-work conflict are more likely to have happier employees.

Our findings indicate that though there may be differences between the U.S. and China on WLOC and family-work conflict that explain part of the differences in SWB, there are similarities in the mechanisms through which WLOC and family-work conflict affect SWB. That is, whether in the U.S. or in China, social support and active coping serve a similar role in enhancing SWB. Therefore, organizations that foster a culture where the shared norm is to support one’s co-workers are likely to find positive effect on employee well-being. Similarly, employee relationship management and employee assistance programs will be beneficial in the U.S. as well as in China. While avoidance coping might be appropriate in the case of certain life events such as death of a friend, it is likely that in the case of organizational stressors, active coping would work in the interest of the organization. Thus, the U.S. companies doing business in China must suggest strategies for individual employees to tackle the stressor rather than avoid it.

Limitations

It is important to note the limitations of our study. Firstly, being a cross-sectional study, the causal effects have to be interpreted with caution. We relied on the existing theory to argue the causation but our method does not augment the conclusions. Secondly, though SWB has traditionally been measured through self-report data because it is an internal, subjective evaluation, we realize that using self-report measures has its limitations. For example, respondents may have a tendency to give socially desirable responses. We countered this possibility to a great extent by keeping the responses anonymous. All the variables were measured by responses from the same survey. This creates the chances of common method variance accounting for some of the observed relationships. To examine this possibility, we conducted the Harmon one-factor test to see if there was a common factor running across all the items (Podsakoff and Organ, 1986). We did not find any such overarching method factor, thereby making it less likely that the observed relations are to a great extent due to common method variance.

It is important to acknowledge the demographic differences between the two samples. The average age difference between the two groups of respondents was nearly eight years. Also, female respondents constituted a bigger percentage in the case of the U.S. sample. As a result, a replication of our findings by future research consisting of closely comparable samples would be useful. In our U.S. sample, due to a clerical error, we were not able to obtain information on the demographic characteristics of half the sample. Statistically accounting for the demographic characteristics of the respondents would have helped us provide a more rigorous test of the conceptual model.

The issue of measurement invariance between the U.S. and Chinese cultures is in need of more research. While we omitted items from work locus of control and SWB scales that were factorially variant, more important is to understand the reasons underlying the variance and demonstrate empirical validity of translated
or newly developed scales for that culture. For example, a respondent’s agreement with work locus of control items that relate to other people being helpful or necessary in making more money or getting a job (that is, items 4 and 15 in Table 1) may not reflect external locus of control in China. It might simply mean that a person will have to build a network of friends and relatives in order to achieve these goals. In China, it is considered more important to have such a social network and may actually reflect an effort to control the outcomes.

Conclusion

Work locus of control and family-work conflict are two important work domain factors that explain the differences in SWB between the U.S. and Chinese managers. Social support and active coping, in turn, mediate the effects of WLOC and family-work conflict on SWB.

References


