Leisure Participation and Leisure Satisfaction: Moderating Effects of Personality Traits

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Abstract

This study explored relationships among personality traits, leisure participation, and leisure satisfaction in a representative sample of community adults in Taiwan. We found that (1) personality traits of extraversion (E) and sensation-seeking (SS) were significantly related to greater overall leisure participation; (2) SS was significantly related to higher leisure satisfaction; and (3) personality traits of N and SS significantly moderated leisure participation–leisure satisfaction relationships. Implications of these findings for developing a Chinese psychology of leisure were discussed.

Keywords: extraversion, neuroticism, sensation-seeking, leisure participation, leisure satisfaction
休閒參與及休閒滿意－人格特質之調節作用

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摘要
本研究意在以台灣一般社區民眾之代表性樣本，探討人格特質、休閒參與、及休閒滿意之間的關係。結果發現：(1)人格特質之外向性及刺激尋求與休閒參與有正向相關；(2)刺激尋求與休閒滿意有正向相關；(3)人格特質之神經質及刺激尋求顯著地調節了休閒參與與休閒滿意之間的關係。本文討論了這些發現對華人休閒心理學發展之意義。

關鍵字：外向性、神經質、刺激尋求、休閒參與、休閒滿意
1. Introduction

Research on leisure with Chinese people is in the rarity, partly because hardworking has always been a highly regarded Confucius virtue. However, with economic development, the statutory working hour is now only 40 per week in Taiwan. The introduction of two-day weekend in 2000 further released more free time and stimulated a “fashion of leisure” in Taiwan (Lu & Hu, 2002). Enjoying relative material abundance, the vast Chinese population in Taiwan, Hong Kong, and coastal areas of mainland China are now taking increasing interest in pursuing higher quality and wider variety of leisure activities. Thus, understanding the subjective experiences of leisure of contemporary Chinese people will not only shed light on some interesting issues in leisure research, but also contribute to better leisure policies and management. The present study thus focused on the role of personality as an individual difference factor in leisure experiences, empirically testing the generalizability of some relevant Western findings in the cultural context of Taiwan using a national representative sample.

2. Personality and Leisure Participation

Given the wide variety of possible and available leisure activities, personal choices determine which ones are selected. Such choices might be influenced by individual personality differences. However, Furnham (2004) concluded in his review that “the literature on the relation between personality and leisure is disappointing despite both its theoretical and practical implications” (p.167).

Despite the paucity of literature, there have been studies looking at the association between particular leisure activities and specific personality traits in the West. Personality traits of extraversion (E) and neuroticism (N) have received the most attention. For instance, researchers found that E was associated with participation in various sports (Hills & Argyle, 1998; Kirkcaldy & Furnham, 1991). Neurotic people however, shied away from team sports (Lu & Argyle, 1994). Researchers also found that extraverts chose social activities more than introverts (Argyle & Lu, 1990; Furnham, 1981). Neurotic people again, stayed away from social activities (Lu & Argyle, 1994). Apart from sports and social activities, Lu and Argyle (1993) found that extraverts were more likely regular watchers of TV soap operas. Hills and Argyle (1998) however, found no personality correlates for music as a leisure pursuit.

Zuckerman’s (1993, 1994) sensation-seeking (SS) is another personality trait that has been explored in the context of leisure. Sensation-seeking is defined as “a desire for varied,
novel, complex, and intense sensations and experience, and the willingness to take physical,
social, legal, and financial risks for the sake of such experience” (Zuckerman, 1994, p.27).
Although people who are high in sensation-seeking tend to be drawn to many novel and
exciting activities, they don’t necessarily pursue dangerous leisure pursuits (Zuckerman,
1993). Furnham’s (2004) literature review corroborates this view: the sensation-seeking
personality was related to a wide variety of leisure activities, not as commonly assumed
limited to dangerous sports.

To sum, research in the West has found limited evidence linking particular personality
traits to specific leisure preferences, rather they seem to suggest that E and SS are associated
with a variety of leisure pursuits. In contrary, neurotic people tend to stay away from leisure
activities in general. In a series of studies with Taiwanese undergraduate students, Lu and Hu
(2002; 2005) found that extraversion did correlate with almost all kinds of leisure
participation, while neuroticism did not correlate with any particular leisure activities.
Eysenck’s (1967) personality theory may provide a possible explanation for such individual
differences in leisure involvement: extraverts are low in cortical arousal and in compensation,
get heavily involved in leisure for physical or social excitement. The same can be said about
people who are high in sensation-seeking, which too has a strong biological basis and is
described as ego-centric extraversion (Zuckerman, 1994). In contrary, neurotic people seem
to shy away from leisure activities to avoid too much stimulation (Lu & Argyle, 1994).

Most research looking at the relationship between personality and leisure participation
were confined to students in Taiwan (e.g., Lu & Hu, 2002; 2005), we intended to extend such
research to the general adult population in the country. To achieve this goal, we surveyed a
nationwide representative adult sample using a comprehensive list of leisure activities
commonly engaged in by Taiwanese people, basing on scholarly research (e.g., Lu & Hu,
2002) and government nationwide surveys. Specifically, we proposed:

Hypothesis 1: E and SS would be positively associated with overall leisure participation,
whereas N would be negatively associated with leisure participation.

3. Method

3.1 Data & Participants

Data for the present paper came from the first phase of 2007 “Taiwan Social Change
Survey” (TSCS). With more than 80,000 interviews completed over the past 22 years, the
TSCS is the largest nationwide social survey in Taiwan. The TSCS adopts three-stage
stratified probability proportional to size (PPS) sampling using household registration data.
Trained interviewers conducted face-to-face interviews at participants’ homes to ensure a high quality of data collection. As the first phase was aimed to refine questionnaires for subsequent large scale survey, a smaller sample (N = 201) was used, which was still representative of the national population and adheres to every protocol in the formal nationwide survey (Fu & Lu, 2006).

The current sample had 44.27% males and a mean age of 42.24 (SD = 10.50, range = 20-89). A twin-peak distribution was observed in education attainment (37.81% had education attainment below junior high school and 40.80% had education attainment above college degrees). The majority (62.69%) was married, having full-time jobs (56.72%), and living in urban areas (65.17%).

3.2 Measures

As TSCS is a nationwide survey which has to cover a large number of topics, constraints on interview time and questionnaire length are great. It is regrettable that we had to keep questionnaire items to a minimum. Therefore, we had to select only a few items from standardized scales, which may compromise reliability of our measures.

3.2.1 Personality Traits

E and N were measured by subscales of the Ten-Item Personality Inventory (TIPI) for Big Five (Gosling, Rentfrow, & Swann, 2003). Internal consistency reliability is not to be expected high with only two items each for a trait, but both item pairs measuring E and N were significantly correlated (r = .30 and r = .35 respectively). SS was measured by 4 items from the Sensation-Seeking Scale (SSS) (Zuckerman, 1993). They mainly tap the “experience seeking” component, such as “I get bored seeing the same old faces”. For all the personality measures, 5-point rating scales were used (1 = not at all like me, 5 = very much like me).

3.2.2 Leisure Participation

The “Leisure participation scale” (Lu & Hu, 2002) was adopted, listing 22 common leisure activities for Taiwanese people. Subjects were required to indicate the frequency they took part in each particular activity (1 = never, 6 = daily). All 22 items were aggregated to represent the overall level of leisure participation ($\alpha = .83$).

3.2.3 Leisure Satisfaction

This was measured by 6 items from the “Leisure satisfaction scale” (Beard & Ragheb, 1980), representing six aspects of perceived leisure satisfaction: psychological, social, physical, educational, relaxation, and aesthetic. A higher total score indicated a higher level.
4. Results

The top three most frequently engaged leisure activities for Taiwanese adults were watching TV (M = 5.67, SD = 0.77), listening to music (M = 4.51, SD = 1.75), and taking a walk (M = 3.68, SD = 1.52), followed by playing sports (M = 3.63, SD = 1.51), eating out (M = 3.63, SD = 1.28), and reading magazine (M = 3.62, SD = 1.71). Table 1 presents a correlation matrix among all research variables, incorporating means, standard deviations, and internal consistency alpha coefficients. E and SS were related to leisure participation. SS was related to leisure satisfaction. Therefore, Hypotheses 1 and 2 were partially supported. As for demographic variables, sex did not correlate with any main research variables, while age, education, and income had some significant correlations. In general, younger, better educated and wealthier people took greater part in leisure and reported higher leisure satisfaction.

Table 1. Intercorrelations among all research variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Age</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.Sex</td>
<td>.02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.Education years</td>
<td>-.61***</td>
<td>.05</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.Income</td>
<td>-.36***</td>
<td>-.17*</td>
<td>.66***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.Extraversion</td>
<td>.07</td>
<td>-.05</td>
<td>.08</td>
<td>.15*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.Neuroticism</td>
<td>-.01</td>
<td>.10</td>
<td>-.01</td>
<td>-.04</td>
<td>-.41***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.Sensation-seeking</td>
<td>-.59***</td>
<td>-.03</td>
<td>.58***</td>
<td>.47**</td>
<td>.15**</td>
<td>.02</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.Leisure</td>
<td>-.63***</td>
<td>.05</td>
<td>.55***</td>
<td>.42**</td>
<td>.23 ***</td>
<td>-.07</td>
<td>.59***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>9.Leisure satisfaction</td>
<td>-.22**</td>
<td>.03</td>
<td>.20**</td>
<td>.18*</td>
<td>.13</td>
<td>-.03</td>
<td>.21**</td>
<td>.49***</td>
<td>1.00</td>
</tr>
<tr>
<td>Mean</td>
<td>42.24</td>
<td>/</td>
<td>12.70</td>
<td>58.10</td>
<td>5.87</td>
<td>5.35</td>
<td>10.40</td>
<td>63.77</td>
<td>18.75</td>
</tr>
<tr>
<td>SD</td>
<td>10.50</td>
<td>/</td>
<td>3.39</td>
<td>16.89</td>
<td>1.80</td>
<td>1.71</td>
<td>3.75</td>
<td>13.61</td>
<td>3.57</td>
</tr>
<tr>
<td>Cronbach’s α</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>.46</td>
<td>.51</td>
<td>.75</td>
<td>.83</td>
<td>.84</td>
</tr>
</tbody>
</table>

Notes: Sex: M=1, F=2
* p < .05, ** p < .01, *** p < .001

We then conducted a series of three hierarchical regression analyses (Cohen & Cohen, 1983) to test the moderating effects of personality on the leisure participation–leisure satisfaction relationship while controlling for demographics. We conducted three steps to
Leisure Participation and Leisure Satisfaction: Moderating Effects of Personality Traits

predict leisure satisfaction. First, we entered demographic variables. Second, we entered one personality trait (E, N, and SS respectively) and leisure participation. Finally, we entered the interaction terms (personality traits × leisure participation, one combination for each regression).

Table 2. Hierarchical regression analysis predicting leisure satisfaction with personality traits as moderators

<table>
<thead>
<tr>
<th>Model/Step</th>
<th>Predictors</th>
<th>β</th>
<th>R²</th>
<th>R² change</th>
<th>F(df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1, Model 2 &amp;</td>
<td>Age</td>
<td>-.17*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 3/Step 1</td>
<td>Sex</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td>.12</td>
<td>.06</td>
<td>.06*</td>
<td>3.12* (4,185)</td>
</tr>
<tr>
<td>Model 1/Step 2</td>
<td>N</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LP</td>
<td>.60***</td>
<td>.26</td>
<td>.20***</td>
<td>10.57*** (6,183)</td>
</tr>
<tr>
<td>Model 1/Step 3</td>
<td>N × LP</td>
<td>-.14*</td>
<td>.28</td>
<td>.02*</td>
<td>9.89*** (7,182)</td>
</tr>
<tr>
<td>Model 2/Step 2</td>
<td>SS</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LP</td>
<td>.61***</td>
<td>.26</td>
<td>.20***</td>
<td>10.76*** (6,184)</td>
</tr>
<tr>
<td>Model 2/Step 3</td>
<td>SS × LP</td>
<td>-.13*</td>
<td>.27</td>
<td>.01*</td>
<td>9.88*** (7,183)</td>
</tr>
<tr>
<td>Model 3/Step 2</td>
<td>E</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LP</td>
<td>.59***</td>
<td>.26</td>
<td>.20***</td>
<td>10.68*** (6,185)</td>
</tr>
<tr>
<td>Model 3/Step 3</td>
<td>E × LP</td>
<td>.01</td>
<td>.26</td>
<td>.00</td>
<td>9.11*** (7,184)</td>
</tr>
</tbody>
</table>

Notes: N = neuroticism, SS = sensation-seeking, LP = leisure participation
* p < .05, *** p < .001

The results reported in Table 2 showed that personality traits of N and SS significantly moderated the leisure participation–leisure satisfaction relationships. Therefore, Hypothesis 3 was partially supported. These interactions are plotted in Figure 1a and 1b. However, none of the personality traits was significantly related to leisure satisfaction in all three regression models, thus Hypothesis 2 was not supported.
Figure 1: Personality traits moderating relations between leisure participation and leisure satisfaction.
5. Discussion

The purpose of the present study was to examine both direct and moderating effects of personality traits on leisure experiences among community adults in Taiwan. With a national representative sample, we found that E and SS were positively correlated with overall leisure participation, but N did not correlate with leisure participation. These findings were consistent with some previous findings. Limited evidence in the West suggested that E may be positively associated with leisure involvement in general, especially those incorporating physical and social elements, whereas N is generally not related to leisure (Argyle & Lu, 1990; Furnham, 1981; Hills & Argyle, 1998). The sensation-seeking personality trait is found to be associated with various leisure pursuits too (Furnham, 2004). Our current results thus serve to highlight that extraversion and sensation-seeking may be important personality facilitators of leisure participation, while neuroticism is not a major personality contributor to leisure participation for Taiwanese people.

Existing Western literature suggests that most people were pleased with their leisure life (Lu & Argyle, 1994). We nonetheless found personality differences in derived leisure benefits as shown in interactive effects. Specifically, low neuroticism combined with high leisure participation produced the highest leisure satisfaction (see Figure 1a). Low sensation-seeking combined with low leisure participation produced the lowest leisure satisfaction (see Figure 1b). Such moderating effects of personality are the first to be reported, and manifest on the most commonly-used index for leisure benefits, i.e. leisure satisfaction. Our results thus support the proposition that different people may benefit differently from leisure. People who are low in neuroticism can have the greatest benefits from their leisure if they get heavily involved. Similarly, people who are low in sensation-seeking may get the least benefits from their leisure if they don’t get heavily involved. The key personality traits for enhancing leisure satisfaction are (low) neuroticism and (high) sensation-seeking.

Finally, several methodological limitations should be kept in mind in the interpretation of results. First, our data came from a cross-sectional study, thus no causal conclusions are legitimate. Second, constrained by the length of questionnaire and interview time, only brief measures were used. Future studies should adopt more comprehensive instruments to better measure key constructs such as personality traits.

The present study examined relationships among personality, leisure participation, and leisure satisfaction. Testing Western findings with a representative Taiwanese sample to establish their generalizability is an important contribution to the literature of personality and...
leisure. Examining several important personality traits simultaneously with a wide variety of leisure activities is another distinct feature of the present study. Leisure is still a relatively new area of research in psychology, especially in Chinese societies, more concerted efforts are needed.

6. References


Leisure Participation and Leisure Satisfaction: Moderating Effects of Personality Traits
