Moderating Effect of Growth Mindset on the Relationship between Attitude toward Tourism and Meaning in Life

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Abstract

Background/Objectives: This study aims to measure the moderating effect of growth mindset on how attitude toward tourism affects meaning in life for working people who have high job stress and are tired of life, and to suggest a way to improve meaning in life.

Methods/Statistical analysis: The subjects of the study were 284 employees, and a survey was used for data collection. SPSS Win. 21.0 and SPSS MACRO PROCESS were used for data analysis. Reliability analysis, descriptive statistics analysis, correlation analysis, and moderating effect analysis were performed.

Findings: First, attitude toward tourism, meaning in life, and growth mindset showed statistically significant and positive correlation coefficients; attitude toward tourism and meaning in life showed the highest correlation coefficient. Second, the growth mindset did help to improve the relationship between attitude toward tourism and meaning in
Improvements/Applications: Based on the results of this study, we suggest a research direction to improve meaning in life and to increase use of growth mindset.

Key Words: Moderating Effect, Growth Mindset, Attitude toward Tourism, Meaning in Life, SPSS MACRO PROCESS.

1 Introduction

Tourism refers to traveling in order to experience natural landscapes and diverse cultures of other regions, anticipating leaving one’s daily life and returning to it. Such tourism is a lifelong education method that many people can enjoy on their own[1]. The number of tourists is increasing exponentially. In 2016, the world’s tourist population increased by 123.9% over the previous 6 years, reaching 1,237 million, compared to 998 million in 2011. The number of overseas tourists in Korea has increased by 176.4% over the past 6 years, from 12.7 million in 2011 to 22.4 million in 2016[2]. In particular, the number of domestic tourists aged between 20 and 60, who are at work, is about 2.7 million as of 2016, accounting for 51.0% of the total domestic tourist population. This increase in tourist population has resulted because tourism has a way to escape from stress and conflict, in that it is an experience that escapes the time and space limitations of everyday life[3].

Although most studies have focused on the economic effects of tourism[4,5], research on social and psychological effects have been increasing recently[6-8]. The study of these sociological and psychological effects shows that tourism has a positive effect on improving social bonds, interpersonal skills (understanding and empathy), social identity[9], and life satisfaction and loyalty[10], restoring emotional stability, alleviating of stress, reducing depression and unrest, and improving sleep quality[11-14]. Tourism has also been shown to improve the quality of life. In other words, much research has reported that tourism contributes to well-being in several dimensions such as the physical dimension related to various physical activities through travel, the intellectual dimension of lifelong learning activities, the social dimension of interchange with others, the men-
tal dimension of discovery of meaning and purpose in life, and the environmental dimension of experiencing nature and heritage[15]. However, there are no studies on meaning in life as a psychological effect of tourism.

Meaning in life is defined in many ways, such as consistency in life[16,17], goal orientation or purpose [18], the ontological significance of life[19], or the intention to act or the reason for action[20]. Having meaning in life has been regarded as important in that it can alleviate the effects of suffering, even from unhappiness, trauma, or negative events, and it can change attitudes toward life itself as well as toward suffering[21-23]. And meaning in life is a source of happiness that provides a reason for living and has received much attention in psychology as well as religion and philosophy[24,25].

People with higher meanings of life experience greater happiness, satisfaction, and positive emotions[26-28]. They are also sincere, open to experience, outgoing, caring for others, and experience little depression, anxiety, loneliness, and neurosis[29]. In addition, meaning in life is an important indicator of well-being, and is related to positive attitudes toward life, such as enjoying work and having high self-esteem[30]. Meaning in life is negatively correlated with depression[31-34] and with suicidal ideation and future suicidal behavior[35,32]. Therefore, it is very important for people to have a clear idea of what to live for in life, that is, to find the purpose of their existence[24,25].

Mindset is divided into growth mindset and fixed mindset. Growth mindset is a belief that experience and effort can improve one’s ability and intelligence. Fixed mindset means a belief that you cannot change, even if you try, because ability and intelligence are fixed. For example, a person with a fixed mindset tends to show low resilience when faced with obstacles. That is, an obstacle means a lack of ability, and if you face an obstacle, you are frustrated or defensive[36,37]. On the other hand, people with growth mindset show high resilience when there is an obstacle. That is, they perceive obstacles as part of learning, not criticism of self[38]. In addition, a person with a fixed mindset reacts helplessly with maladaptive coping behaviors, such as negative responses to challenges, lack of patience, and the desire to avoid challenges[39,40]. Conversely, a person with a growth mindset will have a positive combination of his or her resources (intelligence, talent, time, etc.) in the face of
challenges, will anticipate positive results, and strive hard with innovative strategies and high sustainability[41]. Thus, the growth mindset predicts success in academic achievement, aging conflict resolution, aggressiveness reduction, improving racial relations and willpower, improvement, and in adult and child social relations, work, and emotional and physical health[36,38,42,43].

According to a previous study on the role of growth mindset[44], growth mindset has a mediating role for mother’s parenting stress and hope, and a double mediating role for hope in the relationship between a mother’s parenting stress and a child’s happiness. In other words, the growth mindset had an indirect effect on the relationship between mother’s parenting stress and child’s happiness. However, there is no paper on the moderating effect of growth mindset, even though the relationship between tourism and meaning in life will probably differ depending on high and low growth mindset. In other words, people with a high growth mindset are expected to experience more meaning in life because of tourism than do people with a low growth mindset. Conversely, people with a lower growth mindset are expected to experience less meaning in life because of tourism. Thus, this study aims to measure the moderating role of growth mindset.

Workers are reported to have more difficulties than other population groups. For example, 87.8% of workers experience abnormalities such as lethargy and digestive diseases because of job stress, and 74.4% suffer from depression[45]. In addition, Korean workers felt the greatest job stress among the OECD member countries and the least job satisfaction[45]. The number of Koreans experiencing physical disabilities due to stress increased by 24%, from 649,991 in 2004 to 800,410 in 2009[45]. Especially, SME workers were more vulnerable to job stress because of a poor job environment than were employees of the large enterprises[46]. Public officials in their twenties experienced more stress in their relationship with their peers, and stress over promotion and remuneration was higher[47]. Moreover, dual-income families experience time pressure as they perform their obligations at work and at home, resulting in role tension and overload[48]. Therefore, employees need meaning in life, and it is very meaningful to find ways to promote that through tourism, which is an interesting lifelong education method. In addition, growth mindset, which should be a predictor of recent suc-
cess[38,49,50], will double the meaning of life and the quality of life by understanding how these relationships moderate. Therefore this study aims to measure the moderating effect of growth mindset on how attitude toward tourism affects meaning in life, targeting employees who have high job stress and are tired of life, and to suggest ways to improve the meaning of life in the workplace through tourism and growth mindset.

In order to accomplish these research goals the following research questions were set. First, what is the correlation between attitude toward tourism, growth mindset, and meaning in life. Second, is there a moderating effect of growth mindset on attitude toward tourism and meaning in life?

2 Method

2.1 Research model

Based on the previous research, the research model to verify the relationship between attitude toward tourism and meaning in life, and the moderate effect of growth mindset is shown in Figure 1.

![Figure 1: Research Model](image)

2.2 Survey subject and data collection method

The survey area was limited to Seoul, Gyeonggi, and Chungnam, which were purposely selected. The subjects of the survey were about 300 employees, including civil servants and industrial workers. The researchers visited the institutions and companies them-
selves and collected data through surveys. Except for the unfair questionnaires, 284 subjects were used in the analysis.

The subjects were 74.2% men and 25.8% women. The average age was 37.4 years. For marriage status, the married were 56.2%, single 42.7%, and other 1.1%. Production workers were 45.5%, 22.2% were white-collar workers, 19.2% sales workers, 4.9% managers, and 5% others.

2.3 Survey tools

2.3.1 Attitude toward tourism
Tourism is measured by attitude toward tourism, defined as the reaction of the tourist to tourism, the reaction caused by the tourism experience, and individual thinking about the influence of tourism[51]. Therefore, attitude toward tourism is a concept that includes the reaction after the experience beyond the meaning of the sightseeing experience. Therefore, in this study, it was measured as attitude toward tourism instead of tourism. Attitude toward tourism as developed by Huh[52] was modified and used for this study. Originally this scale was 40 items, but we selected 19 items that fit the purpose of the study and had factor loadings of .4 or more. Each item had a 5-point Likert scale ranging from “not at all” to “very well”; the higher the score, the higher the attitude toward tourism. Cronbach’s of the reliability of attitude toward tourism was 0.774.

2.3.2 Meaning in life
This study used the meaning in life scale developed by Steger, Frazier, Oishi, and Kaler[53] and translated by Won et al.[29]. The scale is composed of two subfactors: the existence of a subjective sense that their life is meaningful, and the pursuit of meaning, which refers to orientation and motive for pursuing meaning in their lives. Each item was rated on a 5-point Likert scale ranging from ‘definitely no’ to ‘definitely yes’. The higher the score, the higher the meaning in life. The reliability of meaning in life was 0.791 for Cronbach’s $\alpha$. 
2.3.3 Growth mindset

The growth mindset scale developed by Dweck\cite{49} and translated by Lee, Park, and Hwang\cite{44} was used. The scale consists of 8 items, 4 items measuring beliefs about change in intelligence and 4 items measuring beliefs about personality change. Each item was on a 5-point Likert scale. The higher the score, the higher the growth mindset. The reliability of the Cronbach’s $\alpha$ of growth mindset was 0.831.

2.3.4 General characteristics

Gender, age, educational attainment, religion, residence (metropolitan, small city, rural), occupation, and income were investigated in terms of prior research and the researchers’ judgment.

2.4 Data analysis

In this study, SPSS Win. 21.0 and SPSS MACRO PROCESS were used for data analysis. SPSS Win. 21.0 was used to analyze the reliability, descriptive statistics, and correlations of the variables. The moderating effect of growth mindset in relation to attitude toward tourism and meaning in life was analyzed by applying SPSS MACRO PROCESS Model 1. To verify the moderating effect, the number of bootstrap samples was set to 5,000 and the confidence interval was set to 95%.

3 Results and Discussion

Table 1 shows the results of Pearson correlation analysis in order to analyze relationship between variables. Attitude toward tourism, meaning in life, and growth mindset were statistically significant and positively correlated. Attitude toward tourism and meaning in life were the highest in correlation coefficient ($r = .476$, $p < .01$), followed by growth mindset and meaning in life ($r = .217$, $p < .01$). Frequency analysis showed that attitude toward tourism, meaning in life, and growth mindset exceeded the middle score of 3.
To analyze the moderating effect of growth mindset in relation to attitude toward tourism and meaning in life, model 1 of SPSS MACRO PROCESS proposed by Hayes[54] was applied. First, R2 change was tested to see if the explanatory power of the variance of the growth mindset was significantly increased by the input of the interaction term. The results are shown in Table 2. The interaction input showed a significant (p = .0002) increase in the explanatory power of the variance of the growth mindset by 3.64%.

Figure 2 shows the statistical diagram of the moderating effect analysis. The independent variable (attitude toward tourism), the moderating variable (growth mindset), and the interaction term all had a statistically significant effect on the meaning in life of the dependent variable.

![Figure 2: Statistical diagram](image-url)

Table 1. Correlation and descriptive analysis

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward tourism</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaning in life</td>
<td>.470*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Growth mindset</td>
<td>.189*</td>
<td>.217**</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>3.5362</td>
<td>3.8456</td>
<td>3.990</td>
</tr>
<tr>
<td>SD</td>
<td>.47333</td>
<td>.62577</td>
<td>.63783</td>
</tr>
</tbody>
</table>

**p<.01

Table 2. R² increase due to interaction(s)

<table>
<thead>
<tr>
<th>R² Change</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>0.064</td>
<td>14.1857</td>
<td>1.0000</td>
<td>0.002</td>
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</tbody>
</table>

Figure 2: Statistical diagram
Table 3 shows the results of analyzing the conditional effects to find out whether the effect of attitude toward tourism on the meaning in life is significant in the M and M ± 1 areas, which are the values of the growth mindset, the moderate variable. The conditional effect of attitude toward tourism on meaning in life was significant in both the M and M ± 1 values of the growth mindset.

Table 3. Conditional effect of attitude toward tourism on meaning in life at values of the moderator(s)

<table>
<thead>
<tr>
<th>Growth mindset</th>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.6374</td>
<td>.3429</td>
<td>.0959</td>
<td>3.5751</td>
<td>.0004</td>
<td>.1541</td>
<td>.5316</td>
</tr>
<tr>
<td>.0000</td>
<td>.5955</td>
<td>.0681</td>
<td>8.7433</td>
<td>.0000</td>
<td>.4614</td>
<td>.7296</td>
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<tr>
<td>.6374</td>
<td>.8481</td>
<td>.0953</td>
<td>8.9018</td>
<td>.0000</td>
<td>.6066</td>
<td>1.0357</td>
</tr>
</tbody>
</table>

Table 4. Moderator value(s) defining Johnson-Neyman significance region(s)

<table>
<thead>
<tr>
<th>Value</th>
<th>% below</th>
<th>% above</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.9149</td>
<td>5.2817</td>
<td>94.7183</td>
</tr>
</tbody>
</table>

More specifically, Johnson-Neyman’s method was used to measure the extent to which the effect of attitude toward tourism on meaning in life increases gradually. If the growth mindset is less than -0.9149, this effect is no longer significant. As shown in Table 4, the significant ratio of these influences was 209 (94.72%), and nonsignificant ratio 5.28% (15). These results suggest that a program to strengthen growth mindset is needed to improve meaning in life for 15 people whose growth mindset is low and whose attitude toward tourism has no effect on meaning in life.

Table 5. Significance area of moderating effect

<table>
<thead>
<tr>
<th>Growth mindset</th>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2.2990</td>
<td>-.3157</td>
<td>.2518</td>
<td>-1.2541</td>
<td>.2109</td>
<td>-.8113</td>
<td>.1799</td>
</tr>
<tr>
<td>-2.0990</td>
<td>-.2165</td>
<td>.2116</td>
<td>-1.0211</td>
<td>.3081</td>
<td>-.6923</td>
<td>.2194</td>
</tr>
<tr>
<td>-1.8990</td>
<td>-.1572</td>
<td>.2115</td>
<td>-1.7431</td>
<td>.4581</td>
<td>-.5736</td>
<td>.2592</td>
</tr>
<tr>
<td>-1.6990</td>
<td>-.0779</td>
<td>.1917</td>
<td>-1.4064</td>
<td>.6848</td>
<td>-.4554</td>
<td>.2995</td>
</tr>
</tbody>
</table>
Since the moderating effect of the growth mindset was statistically significant, the moderating effect was visualized to confirm its shape, as shown in Figure 3. As the attitude toward tourism increases, meaning in life also increases, but the group with higher growth mindset had a higher tendency than the group with lower. These results showed that the growth mindset, a moderating variable, increased the relationship between attitude toward tourism and meaning in life. Therefore, it is effective to strengthen the growth mindset first when using tourism to improve meaning in life.

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![Figure 3: Statistical diagram](image-url)
4 Conclusion

Given that growth mindset was being studied as a predictor of success, this study was conducted with workers who experienced high stress in order to investigate the role of growth mindset in the relationship between attitude toward tourism and meaning in life. We found that growth mindset played an important role in how attitude toward tourism affected meaning in life. Therefore, it is meaningful to develop and apply the meaning in life improvement program using the growth mindset for the workers who have lost the meaning in life and are tired of work.

For further study, first of all, it would be very meaningful to extend this study to the elderly or housewives who are tired of life, not just workers. Second, this study aimed to provide basic data for improving meaning in life. However, further study should emphasize practical aspects and needs to study the development of programs using these results. Third, it is important to identify the role of growth mindset in various environments. A study on the role of growth mindset by applying various independent and dependent variables would be very meaningful.

5 Acknowledgment

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References


