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Lai, Ying-Hsiao (Rebecca); Chen, Chun-Chu; and Petrick, James F., "The Economic Impact on Leisure Activities" (2016). *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 18.

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## **The Economic Impact on Leisure Activities**

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### **ABSTRACT**

*This study explores the influence of the economic recession on leisure activities because economic impact is a significant factor that can change people's travel decisions. A methodology, Ridit analysis, is applied in this study, and it adopts cumulative probability scores instead of ordinal scores. Results show that current economic crisis has had an impact on people's ability to take time away from work.*

**Keywords:** *economic impacts, recession, travel decisions, Ridit analysis.*

### **INTRODUCTION**

Economic impact is a significant factor that can change people's travel decisions. According to the U.S. Bureau of Economic Analysis (2008), tourism spending declined 7.2 percent in the fourth quarter of 2007, and the first quarter of 2008 was the first yearly decline since 2001. Two surveys examined the U.S. economy: the Conference Board (Index of Consumer Confidence) and the University of Michigan Survey Research Center (Index of Consumer Sentiment). Both surveys explored U.S. households' financial status and their expectations future economic situations. Several studies have also revealed that consumer confidence can predict future household spending (Acemoglu and Scott, 1994; Carroll et al., 1994). The latest Index of Consumer Confidence shows that the labor market is still negative, which can affect how people use their budgets, especially on tourism spending. Therefore, exploring the influence of the economics recession on leisure activities has become an important issue in the tourism industry because it affects marketing goals.

### **LITERATURE**

Previous studies have shown that leisure activity experiences come with many benefits and that the benefits of leisure can help people improve their physical and mental well-being (Azjen, 1991; Driver et. al., 1991). According to Bammel & Burrus-Bammel (1996), there are six benefits of leisure factors: physiological, social, relaxation, educational, psychological, and aesthetic. Evidence has shown that leisure activities are essential, however, the economic crisis has forced people to sacrifice some of their leisure activities.

Veblen (1899) discussed the “leisure class” and argued that leisure has a strong relationship with social status. Until the 20<sup>th</sup> century, leisure was only for the higher class, which meant that not everyone could enjoy their free time equally (Cordes & Ibrahim, 1996). Now, people can have their free time and enjoy what they pursue. Two essential indicators of socioeconomic status are income and education, and these variables have been applied extensively in leisure studies (Manning, 1999). Previous studies show that occupation and income are related to opportunities and constraints to leisure activities (Kelly, 1996; Gladwell, 1990; Floyd et al., 2006).

A methodology called Ridit analysis adopts cumulative probability scores instead of ordinal scores (Bross, 1958). “Rid” stands for “Relative to an Identified Distribution,” and Ridit analysis represents a new application of an old idea, which is closely related to distribution-free methods based on ranking. In other words, Ridit analysis uses cumulative probability scores to emphasize the order of items. Given the marginal distribution  $\pi_j, j = 1, 2, 3, \dots, 9$  of the response variable  $Y$ , and the  $j$ th of Ridits value (R-Value) could be presented  $r_j = \left[ \frac{j}{10} \right] \pi_j$ ,  $r_j = \sum_{k=1}^{j-1} \pi_k + \left[ \frac{j}{10} \right] \pi_j, j = 2, 3, \dots, 9$  or  $r_j = \frac{(\sum_{k=1}^j \pi_k)}{10}$ ,  $F_j = \sum_{k=1}^j \pi_k, j = 1, 2, 3, \dots, 9$ , and  $r_1 < r_2 < \dots < r_9$ . The mean Ridit of  $i$ th term is  $R_i = \sum_{j=1}^9 r_j \pi_{j(i)}$ , and  $\pi_{j(i)}$  is the  $j$ th ordinal probability of the  $i$ th item. Compared to multiple comparison procedures, Ridit analysis overcomes the most significant shortcoming because it is easy to compute the R-value.

Agresti (1984) indicated that Ridit analysis is based on the same concepts as Confidence Intervals (C.I.), which means the R-value could examine each item and find whether or not differences exist. Given  $\alpha = 0.5$ , the 95% C.I. for  $R_i$  is  $R_i \pm 1.96 \hat{\sigma}_{R_i}$ , Agresti suggests using the maximum value of  $\hat{\sigma}_{R_i}, \frac{1}{\sqrt{10n}}$ . Consequently, when  $n$  approaches infinity,  $(1.96 \times \frac{1}{\sqrt{10}}) \approx \frac{1}{\sqrt{3}}$ , the C.I. could be simplified to  $R_i \pm \frac{1}{\sqrt{3n}}$  (p.184).

## METHODOLOGY

People who requested information on the Florida Keys via the Monroe County Tourist Development Council (TDC) between January 1, 2009 and March 31, 2009 were the research target population. They requested information via TDC’s Visitor Information Service (visitor 1-800 and 305 call lines). According to these inquiries, 1,700 individuals were invited to participate in the mail survey.

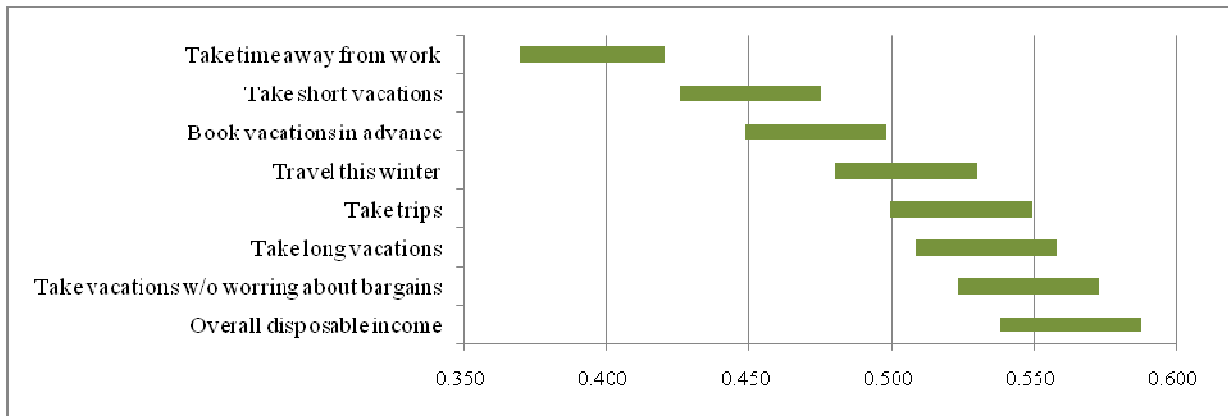
The survey was a six-page questionnaire, and it covered varied groups, including people who were not likely to visit the Florida Keys in the next year, people who had visited the Florida Keys in the past 12 months, and people who had not visited there in the past 12 months. Furthermore, the questionnaire included information related to the Florida Keys and Key West, value, experience with the Florida Keys, how the current economic situation has affected leisure activities, and demographic questions. After an initial mailing (modified Dillman), it was found that 149 addresses were undeliverable, and the effective sample was 1,551. A total of 565 responses were collected and the response rate for the mail survey was 36.4 percent. Among these responses, the average age was 55.4, the median household income was \$25,000 to \$49,999, and 62.4% were female.

## RESULTS AND DISCUSSION

Using the Kruskal-Wallis Test on all economic related questions, where  $H_0$  represents the eight items, there were not any differences between them. The W statistic,  $W = \frac{12}{n(n+1)} \sum_{i=1}^8 n_i (R_i - 0.5)^2$ ,

and  $\tau = 1 - \frac{1}{\sqrt{2n}}$ , which is the correction factor for Ties. When n approaches infinity, the T value approaches 1. More simply, the formula we used was  $W = 12 \sum n_i (R_i - 0.5)^2$  (Agresti 1984, p. 182), where the W value is 146.58. It was larger than  $\chi^2_7(0.05) = 14.07$ , which it means there were differences between the eight items. In other words, the differences indicate the economic crisis had dissimilar impacts on each of the leisure activities listed in Figure 1. The Cronbach's  $\alpha$ , which represents the reliability, was 0.90. Based on the Ridit analysis, when the economy is getting worse, leisure activities are affected by orders; if the intervals overlap, that means there are not any differences between those items (see Figure 1). Thus, according to the results, the current economic crisis has had an impact on people's ability to take time away from work (see Table 1).

**Figure 1**  
**R-Value Present by 95% Confidence Intervals**



**Table 1**  
**R Values and 95% Confidence Intervals for Leisure Activities**

	R value	Upper Value	Lower Value
Ability to take time away from work	0.395	0.421	0.370
Ability to take short vacations	0.451	0.475	0.426
Ability to book vacations further in advance	0.473	0.498	0.449
Ability to travel this winter	0.505	0.530	0.480
How often you want to take trips	0.524	0.550	0.499
Ability to take long vacations	0.533	0.558	0.509
Ability to take vacations w/o worrying about bargains	0.548	0.573	0.524
Household's overall disposable income	0.563	0.588	0.538

In order to compare different levels of socio-economical status, we had three levels of income: "low," "medium," and "high." We also had three levels of education: "high school and

below,” “college level,” and “graduate school and above.” According to the survey of the U.S. Census Bureau in 2008, the median household income was \$50,740. Therefore, this was the criteria used to divide income into three levels. The results are shown in Tables 2 and Table 3.

**Table 2**  
**R Values of Different Income Levels for Leisure Activities**

	Low	Medium	High
Ability to take time away from work	0.399(1)	0.389(1)	0.398(1)
Ability to take short vacations	0.451(2)	0.457(2)	0.444(2)
Ability to book vacations further in advance	0.469(3)	0.466(3)	0.488(3)
Ability to travel this winter	0.512(4)	0.503(4)	0.490(4)
How often you want to take trips	0.519(5)	0.521(5)	0.537(6)
Household’s overall disposable income	0.544(6)	0.559(7)	0.585(8)
Ability to take long vacations	0.548(7)	0.537(6)	0.514(5)
Ability to take vacations w/o worrying about bargains	0.550(8)	0.563(8)	0.543(7)

Note :“( )” indicates the rank of the item, “1” means economic situation affects the most change.

**Table 3**  
**R Values of Different Education Levels for Leisure Activities**

	High School and below	College level	Graduate level and above
Ability to take time away from work	0.415(1)	0.392(1)	0.396(1)
How often you want to take trips	0.449(2)	0.527(5)	0.529(7)
Ability to take short vacations	0.449(3)	0.459(3)	0.451(2)
Ability to book vacations further in advance	0.510(4)	0.462(2)	0.473(3)
Ability to travel this winter	0.512(5)	0.502(4)	0.525(5)
Household’s overall disposable income	0.526(6)	0.566(8)	0.577(8)
Ability to take long vacations	0.555(7)	0.533(6)	0.525(5)
Ability to take vacations w/o worrying about bargains	0.581(8)	0.551(7)	0.521(4)

Note :“( )” indicates the rank of the item, “1” means economic situation affect the most change.

Generally speaking, the economic crisis is related to travel decisions and household income distributions; interestingly, there was the least effect on overall disposable income. After being divided into three income levels, the ranking for each level was slightly different. For the low-income level, the ability to take vacations without worrying about bargains was the least impacted by the economic situation. Compared to the low-income level, the results for the medium-income level were similar. The high-income level was different, however, showing the least impact was the household’s overall disposable income. It could be imagined that people who are low-income or medium-income do not have the ability to get away from work and take a vacation. Hence, these groups are not sensitive to vacation bargains. No matter the income level, people said the current economic situation affected their decisions about taking short vacations.

Another significant socio-demographic factor was education and there were three levels to compare: high school and below, college level, and graduate level. The rank of all of the affected items in different education levels was found to vary. Except for the ability to take time

away from work, the frequency of taking trips and also the ability to take short vacations affected the people with a high school education level. People who were at the college and graduate levels considered the ability to book vacations further in advance and took short vacations.

### APPLICATION OF RESULTS

From an economic point of view, leisure activities could be defined as luxury or conspicuous goods, i.e. people usually give them up when the economic situation is getting worse. Florida is one of the top tourism states, and its tourism is highly related to the state's economy. Now, the external and unexpected economic environment has had a negative impact on the ability to travel to Florida. Lower salaries caused people to spend less money on leisure travel. In addition, fewer people travelling to Florida has caused a serious problem on the internal economic situation.

The findings showed that majority of Florida Keys tourists held a college degree, and most of them were medium-income. Therefore, Florida Keys can regard these groups of people as the target market. More specifically, these people did not have the confidence to book vacations further in advance under the tough economic climate. The flexibility of booking vacations in advance could be improved to increase the willingness of prospective vacationers. In addition, "last minute deals" could be considered for Florida Keys. During the economic recession, it was believed that smaller budget had negative impact on the ability of taking short vacations, but the least impact on long vacations. Tourism managers in Florida Keys could focus more effort on long vacations, such as Christmas or New Year vacation, and provide varied packages.

### CONCLUSIONS

In conclusion, results of this study have indicated that economic impact did affect leisure activities under the economic recession. Little research has been conducted about the relationship between the economic crisis and leisure activities, and current results have shown the economic situation should be considered when setting tourism marketing plans. Moreover, the findings can help tourism managers understand the importance of substitute plans for difficult economic conditions. With the use of this knowledge, the economic crisis impact on leisure activities can be minimized.

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