



# EXAMINING THE LINK BETWEEN INTANGIBLE CULTURAL HERITAGE AND TOURISM THROUGH CORRELATIONAL ANALYSIS

## INTRODUCTION

Intangible Cultural Heritage (ICH) or 'living heritage' refers to the practices, representations, expressions, knowledge and know-how, transmitted from generation to generation within communities, created and transformed continuously by them, depending on the environment and their interaction with nature and history (UNESCO, 2011)

Unfortunately, the potential of ICH in the tourism sector is often undervalued and underutilized. This is partly due to the fact that the relationship between ICH and tourism has not been extensively analyzed. The objective of our study was to analyze the connection between ICH and tourism based on official data.

## METHODS

The Pearson correlation measures the strength of the linear relationship between two variables. It has a value between -1 to 1, with a value of -1 meaning a total negative linear correlation, 0 being no correlation, and +1 meaning a total positive correlation.

$$r = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}}$$

$x_i$  – x variable samples     $\bar{x}$  – mean of values in x variable  
 $y_i$  – y variable samples     $\bar{y}$  – mean of values in y variable

## DATA SETS

### I. International tourism (World Tourism Organization) data set

- 218 Countries
- 1995 – 2020 Year

Country	Year	Arrivals
Albania	1995	304000
Albania	1996	287000
Albania	1997	119000

### II. Intangible Cultural Heritage (UNESCO) data set

- 128 countries
- 2008 – 2021 year
- 562 different ICH elements

Label	Year	Country	Primary concepts
Traditional Mauritian Sega	2014	Mauritius	Dance; Instrumental music
Turkish coffee culture and tradition	2013	Turkey	Beverages; Coffee; Food preparation
Cherry festival in Sefrou	2012	Morocco	Beauty pageant; Festivals; Fruit; Urban areas

## DATA PREPARATION

### 1. Grouping ICH elements by type

Five types of ICHs were distinguished. Each element is assigned to one or more types based on its primary concepts. The number of different types of ICH in each country was counted

Label	Primary concepts	Music	Dance	Spiritual	Events	Food
Traditional Mauritian Sega	Dance; Instrumental music	X	X			
Turkish coffee culture and tradition	Beverages; Coffee; Food preparation					X
Cherry festival in Sefrou	Beauty pageant; Festivals; Fruit; Urban areas				X	X

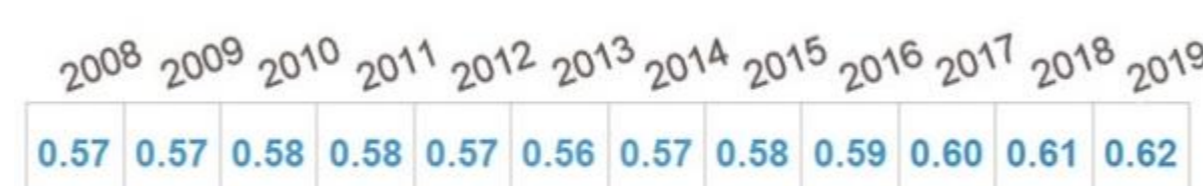
### 2. Combining datasets

- 128 countries
- 2008 – 2021 year
- 562 different ICH elements

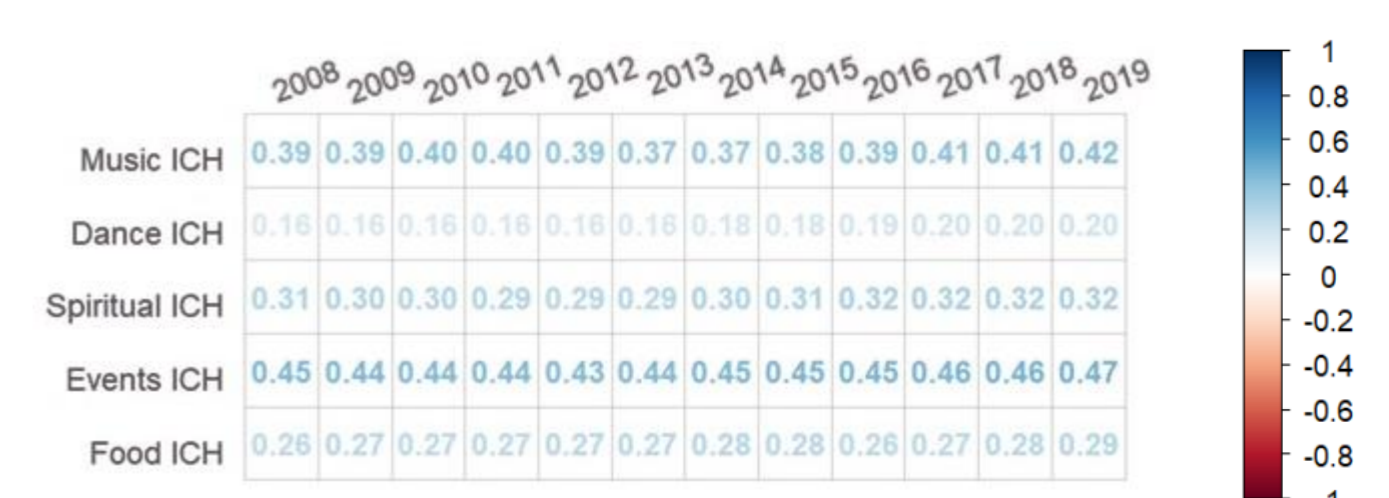
Country	ICH data						Tourism data							
	Number of ICH elements	Music ICH	Dance ICH	Spiritual ICH	Events ICH	Food ICH	2008	2009	...	2019	2008-2019	2010-2019	...	2016-2019
Albania	1	1	0	0	0	0	1420000	1856000		6406000	4986000	3989000		1670000
Algeria	7	3	1	2	3	0	1772000	1912000		2371000	599000	301000		332000
Andorra	1	0	0	0	1	0	10194000	9112000		8235000	-1959000	-316000		210000

## CORRELATION ANALYSIS

Correlation between the number of ICH and the number of tourists



Correlation between the number of specific ICH and the number of tourists



Correlation between the number of ICH and the change of number of tourists



Correlation between the number of specific ICH and the change of number of tourists



## CONCLUSIONS

The correlational analysis yields conclusive evidence pointing to a positive relationship between the quantity of Intangible Cultural Heritage (ICH) within a country and the volume of tourist arrivals. Notably, the analysis identifies a particularly robust correlation between Events ICH and tourist arrivals, followed by a slightly less pronounced yet significant correlation between Music ICH and tourist numbers.

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