



Master's Programme Marketing

**Thesis Final**

Finding a balance in urban tourism visitor numbers: Investigating different drivers of resident satisfaction

**Student Name:** Rutger Mitterdorfer, 361725

**Coach:** Prof: Dellaert, B.G.C.

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## Abstract

This article examined the influence the perceived number of tourists in combination with different drivers (Economical, Social, and Environmental) on resident satisfaction in urban regions. Data was collected from surveys in the Netherlands (Amsterdam, Utrecht, and Den Haag), Italy (Venice, and Rome), Portugal (Lisbon), and Spain (Barcelona). In total 378 surveys were taken. The questionnaire was based on 24 questions, most of them based on a seven point Likert scale. With the help of regression models five out of seven hypotheses were confirmed. Findings indicate that the perceived number of tourists has a high influence on the satisfaction of residents. The effect on resident satisfaction is influenced negatively when the perceived number of tourists is higher. Future research could include the clustering of seasonality's and the surveys should be taken in the native languages.

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## 1. Introduction:

The main research question for this article; *'finding a balance in urban tourism visitor numbers: investigating different drivers of resident satisfaction'*

Before the 1950s travelling to foreign cities was restricted to a small part of the population. It is only in the past forty years and perhaps in the past twenty years that there has been a massive expansion of visiting cities, mainly for short breaks. By 1990s the travel supplements of newspapers were featuring a different city every week and TV quiz programmes were offering city visits as prizes. In publishing there was an expansion in number of city guides while the tour companies were offering a wide variety of destinations from a wider variety of airports (Law, 2002).

The effect of globalisation is strengthening the effect that people are traveling more and more. The world is getting smaller and we notice it in all kinds of ways. This means that we also notice it in the tourism sector. Despite global economic downturn, the tourism market has grown between 4-5% each year over the past years and will continue to do so at an annual rate up to 4% over the next 10 years (Travel & Tourism in 2015 will grow faster than the global economy, 2015). In 2014, the total number of international tourists arrivals increased by 4.7%. The rise of the middle class in countries such as China will have a large influence on the future of tourism (Mapping China's middle class, 2013). The number of international travels from China increased by more than 10% in 2014 (UNWTO tourism highlights, 2015). In 2014 the total number of international tourists reached 1.14 billion, in 2020 the total number of international tourists is projected to be 2 billion (Jammed. Overcrowding at the world's most popular tourism sites, 2015).

Tourists are searching for different type of tourist destinations. When focussing on urban tourism tourists mainly coming for sightseeing, leisure, shopping, religion, business venues and entertainment. Urban tourism is getting more popular and the main reasons for this is the world getting wealthier. The people that did not have the money to travel before now have the money and are interested to see the world. The wealthy people around the world also see traveling to major cities in Europe as a status symbol.

Globalisation also has a positive effect on the economy of the countries and cities. However, the increase in travellers around the world will also have negative effects on already overcrowded tourist destinations. The great tourist destinations of Barcelona, Lisbon, Rome and Venice already all have problems with tourists. What they have in common is that there are too many tourists, while the numbers are still increasing every year (European cities complain of too many tourists, 2015).

Global economic growth has increased the number of people in the middle class, which is leading to more international tourism, because more people have more disposable income and thus can afford luxuries such as long-distance travel (An emerging middle class, 2012).

It is getting overcrowded in certain cities in Europe, because there is a limited number of destinations, due to the many tourists local residents are getting dissatisfied and do not think it is possible to live in these cities anymore. This could lead to big problems in the society. In Barcelona the residents have already protested against the growing number of tourists (Pissed-off Barcelona residents ..., 2015). In Venice for example laws have changed because of the nuisance that tourists cause. A new law for example forbids trollies in the city centre. The residents of Venice were dissatisfied because of the noise that was created by the trollies (Venice bans wheelie suitcases ..., 2014). Tourism hereby becomes a victim of its own success, along with the potential revenues it creates. For effective decision-making, policy-makers require a good understanding of the drivers and whether there is an optimum that can be steered towards.

Several studies about the impact of tourism on residents have already been done (Young, 1973; Jafari, 1973; Pizam, 1976; Liu & Var, 1982; Ko & Stewart, 2002). What these articles all have in common is that they are purely focussed on one city or region. This means that they did not try to comparison between different cities or regions. In this way the generalizability can be questioned. These articles also show the negative effects and positive effects of tourism. The researches that have done so far all use the three main factors that influence resident satisfaction, namely Environmental, Social & physical and Economical factors. No research has been done on the topic whether there are differences in major cities that are overcrowded in Europe. Past researches also did not include the perceived number of tourists as a factor that could influence the satisfaction of residents. Furthermore a lot of governments are struggling with cities

that are not overcrowded yet but have the potential to become the next victim of its own success. Governments can use the information about which factors play a major role in influencing resident satisfaction to create plans and come up with solutions to prevent cities becoming overcrowded and residents becoming unsatisfied.

## 2. Literature review & Hypotheses

### 2.1 Resident satisfaction

Resident satisfaction is clearly not only influenced by tourism, but due to the focus on tourism of this research we did not consider other factors that influences resident satisfaction. Seeing what influences the satisfaction of people in a broader sense can be clarified by looking at Maslow's Hierarchy of Needs. The hierarchy of needs consists of five-stages. One must satisfy lower level basic needs before processing on to meet higher level needs. The five stages of the model from the bottom to the top are biological and physiological needs, safety needs, love and belongingness needs, esteem needs and self-actualization needs. Maslow's hierarchy of needs shows that there are a lot of factors that influence residents (MCLeod, 2007).

More specific applying this to cities, factors that have a significant impact on resident satisfaction in cities are housing, safety, social, and possibilities, realizing personal potentials. The local government influences most of these factors, the way the local government controls and manages the region has a big influence on the quality of life for residents. The residents of cities where the government do not have good policies and clear plans for the future seem to be more unsatisfied then in cities where the government is well organized (Government has vital role in creating happier society, 2012). Some cities are threatened by a high rate of corruption. People in these cities do not feel safe. Less corrupt countries and regions receive more foreign investments, which influences the quality of life. Foreign investments boost local economies, which lead to a healthier economical climate. These factors of corruption influence the happiness of living in this region (Podobnik, Boris, et al., 2008).

### 2.2 Urban tourism

European cities are often small in area whereas the number of tourists will appear in large numbers. As mentioned before people started traveling around forty years ago and globalisation and the world getting richer are strengthening this effect. This is already a first reasons why a lot of tourist coming to major European cities. The large amounts of people that are traveling are causing evident problems in these cities. Understanding what tourists are doing in certain cities could lead to important insights in urban tourism. This can lead to special planning concepts conducive to an ideal

balance of tourism and local life. In an urban region everything is concentrated, lots of people living in a small area. It is assumed that the spatial distribution of the same number of tourists in these urban cores differs substantially, and that tourism related socioeconomic problems are less probable in a more even network of tourists routes and attractions (Kádár, 2013).

The general factors that are influenced by tourism, which are also applying to urban tourism are discussed in several studies. There are three main factors that are discussed in classical studies, namely economical, physical and environmental and social effects on the society. The three factors mentioned are influenced by urban tourism as well. The first studies were focussing on the negative impact these three factors had on the residents. Places becoming overcrowded from a physical and environmental perspective, the dependence on a single industry from economical perspective and from a social perspective the introduction of undesirable activities (Young, 1973; Jafari, 1973). Later in time more studies have been done on these three domains, but focussing more on the perception of the residents. In these studies there was shown that residents overall felt a more negative effect than positive effect on the tourism in the region (Pizam, 1976). This was a new insight, because before there was no focus on the residents. After this focus several studies were done with the same three factors on resident satisfaction. Liu & Var (1986) undertook a similar study in Hawaii. The participants of this study agree on the factor that tourism is a major source of income but is not more important than the importance of protecting the environment. The importance to maintain the environment was bigger than the importance of the positive effect on the economic benefits.

The perceived positive and negative impact of tourism was also researched by Ko & Stewart (2002). The study showed that community satisfaction was influenced by the perception of tourism impacts, and may be useful in planning for additional tourism development. These studies show that in the beginning residents are satisfied with the tourism, but over time when too much tourists are coming to a region the satisfaction of residents decrease. This leads to the first hypothesis of this research:

*H1: The number of tourists has an inverted u-shaped influence on the satisfaction of residents*



## 2.3 Economic

There are two ways of looking at the economic consequences of urban tourism. First we will discuss the positive effect of urban tourism on residents. The most positive consequence of tourism in an urban region is job creation. Due to tourism there are a lot of new job opportunities in several factors. In a lot of sectors there will be more jobs needed for example supermarkets, bakeries, etc. There are also new jobs created that before could not exist because of no demand for it for example tour guides (Gilbert and Clark, 1997). The creation of jobs leads to a lower percentage of unemployment and higher incomes (Young 1973). For the government there will be higher tax incomes, which will also have a positive effect on the region (Andereck et al., 2005). This leads us to the second hypothesis of this research:

H2a: The perceived economic advantages have a positive moderating effect on the relationship between perceived number of tourists and residents satisfaction.

There are also negative economic effects that arise from urban tourism. The main concern for residents are the rising costs of living, which refers to properties getting more expensive as the usual costs of living (supermarkets) in cities were there is a lot if tourism. The main reason for the rising prices is one of the basic principles of the economy; higher demand leads to higher prices (Brunt and Courtney, 1999). Residents that are not able to lift on the success of the tourism branch are forced to leave the city, because prices are rising and the costs of living are rising more than the wages in other branches. Other negative sides of tourism on the economy are the dependence on a single industry and seasonality, which leads to fluctuations in the level of local and regional employment (Mathieson and Wall, 1982). This leads us to the third hypothesis of this research:

H2b: The perceived economical disadvantages have a negative moderating effect on the relationship between perceived number of tourists and residents satisfaction.

## 2.4 Social/Cultural

The positive side of urban tourism on a social and cultural perspective is mainly focussing on the improved quality of life of residents. Another positive effect can be a focus on cultural activities. Tourists are searching for a local identity, which improves the maintenance of cultural factors in the society (Brunt and Courtney, 1999). Another strong support for positive effect on a sociocultural level includes entertainment, historical, and cultural exhibits (Liu and Var, 1986). This leads us to the fourth hypothesis of this research:

H3a: The perceived Social benefits have a positive moderating effect on the relationship between perceived number of tourists and residents satisfaction.

Tourism has an impact on the sociocultural characteristics of residents such as habits, daily routines and values. On the long run these factors may lead to psychological tension (Dogan, 1989). If there is a high growth rate and this comes with a bad management and planning of the city it will increase the impact on the psychological tension even more. Other consequences on sociocultural level are the increase in undesirable activities. This can be an increase in crime rates, social conflicts, illegal activities as gambling, Prostitution. This leads us to the fifth hypothesis of this research:

H3b: The perceived social disadvantages have a negative moderating effect on the relationship between perceived number of tourists and residents satisfaction.

## 2.5 Physical/Environmental

From this perspective there are also two sides a positive and a negative one. Starting with the positive side of tourism on physical and environmental factors. Studies have showed that there is an improvement on community appearance and that there is a major influence on recreational activities and park opportunities (Perdue et al, 1990; McCool and Martin, 1994). There are more recreational activities in the city, which influences the residents in a good way. The positive side of tourism is that there are

more activities organized for residents. The improvement of infrastructure is also one of the main improvements for residents, which will have a positive effect on the residents. This leads us to the sixth hypothesis of this research:

H4a: The perceived environmental benefits have a positive moderating effect on the relationship between perceived number of tourists and residents satisfaction.

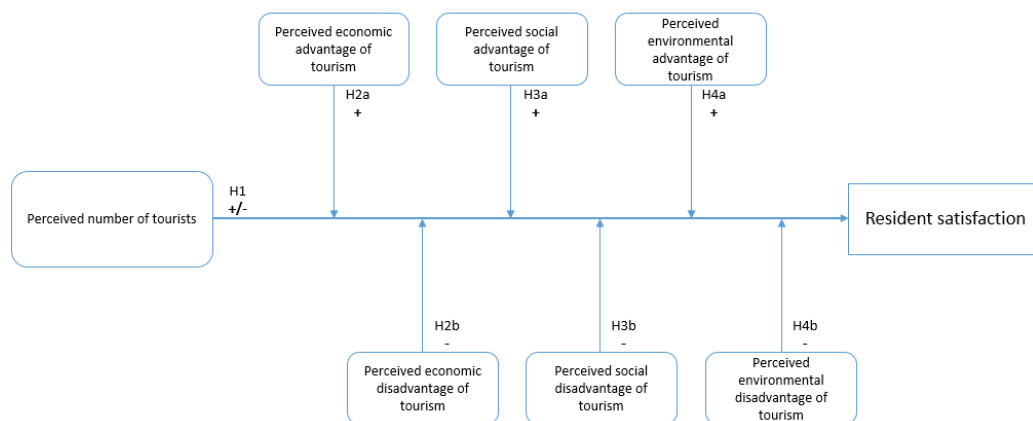
The negative impact of tourism on residents living in several cities in Europe has more to do with the number of tourists. To simplify it, there are just too many tourists. The cities are becoming overcrowded. The excess of tourists is a problem, because there are not enough infrastructures to allocate the tourists in a proper way (Young, 1973; Jafari, 1973). Even though cities are trying to improve infrastructure it is not always sufficient. Another negative environmental influence of tourism is pollution. The increase in number of tourists is coming with air pollution, because of the rise in emission from vehicles and airplanes. Another kind of pollution is noise pollution. The cities are becoming very noisy, which comes with the increase of vehicles and tourists. Another consequence is the increase in large buildings, which can destroy views and also unfitting the original architectural styles (Andereck et al., 2005). This leads us to the seventh hypothesis of this research:

H4b: The perceived environmental disadvantages have a negative moderating effect on the relationship between perceived number of tourists and residents satisfaction.

## 2.6 Conceptual model

As mentioned before there are seven hypotheses, which will be investigated in this research. The conceptual model is shown below. The hypotheses will contribute in answering the main question of this research. Residents will outweigh the pros and cons of tourism, in this way they will determine if they are happy with the influence that is caused by tourism in the region.

**Main question:** *'finding a balance in urban tourism visitor numbers: investigating different drivers of resident satisfaction'*



## 3. Methodology

### 3.1 Research design

This research is focussing on two groups of cities. Whereas the first group (Group 1) exists of five major cities in Europe, that are having problems with the number of tourists visiting according to news articles. The core problems addressed by these news articles are in line with each other. The main concern of these articles is that living in these cities dissatisfies residents, because tourists overcrowd the cities. The five cities that will be studied in this article are; Venice, Rome, Lisbon, Barcelona and Amsterdam. The second group (Group 2) contains cities in the Netherlands where there are no complaints about the number of tourists.

The data required for this research is gathered by doing questionnaires (Appendix A). The questionnaires have been taken in English. There are two main concerns by performing surveys in the cities where they have a different native language. Harzing (2005) did a research on this topic and showed that cross-country differences were smaller when the questionnaires were in English. The second concern for this research is the validity. The main problem of the validity of this research was the group of respondents. A majority of the older natives in the researched cities were not able to answer the questionnaire, because of a lack of knowledge of the English language. For this reason most of the respondents were students, which is not representative for the population.

In Appendix B we can see the different variables and the way that the variables will be measured. It also gives an overview of test that needs to be performed to analyse the potential relationships between the variables. A linear regression will be undertaken using data on the aforementioned variables from tourist databases and from questionnaires on seven different cities (Amsterdam, Venice, Barcelona, Lisbon, Rome, The Hague and Utrecht). The last two cities are included in the dataset to see if there are differences between the cities and their level of *resident satisfaction*. In this manner an optimal balance in the number of tourists and resident satisfaction can be determined. In addition, the influence of a number of key indicators can be tested for significance.

### 3.2 Factor analysis

The first step to analyse the data collected by the questionnaires is to perform a dimension reduction test. A Factor analyses allows to investigate concepts that are not easily measured directly by collapsing a multiple observed questions in the survey into a few interpretable underlying factors. In this way certain correlated variables can be reduced as one 'factor'. Appendix C shows that there are 6 factors found. There is a great similarity when comparing the results from the factor analysis with the groupings made in the questionnaire that is showed in Appendix A. There is no need to leave out a question after creating the six variables.

For the next step it is necessary to create new variables. When investigating moderating effect interaction variables need to be created. Six new variables are created by multiplying the variable *PercNTour* with the six variables that where created earlier. The interaction variables are shown in the regression model below.

### 3.3 Regression models

For clarity every hypotheses will be tested before the overall regression model will be performed. This will have no value for the overall model in the end. Below the explanation of how the hypotheses will be tested.

The first step to test Hypothesis 1: "*The number of tourists has an inverted u-shaped influence on the satisfaction of resident*" is to see if there is a curvilinear effect. The way to do this is to square the X variable which in this case is *Perceived Number of Tourists*. The second step is to perform curve estimation in SPSS test. When selecting Quadratic it will give us a curve that we will need.

The following model will perform us with the information, which is needed to see if the model has value.

$$\text{Resident Satisfaction} = \alpha + \beta \text{PercNTour}^2$$

H2: The perceived economic advantages have a positive moderating effect on the relationship between perceived number of tourists and residents satisfaction.

$$\text{Resident Satisfaction} = \alpha + \beta \text{PercNTour} + \beta \text{EconAd} + \beta (\text{PercNTour} * \text{EconAd}) + \epsilon$$

H3: The perceived economical disadvantages have a negative moderating effect on the relationship between perceived number of tourists and residents satisfaction.

$$\text{Resident Satisfaction} = \alpha + \beta \text{PercNTour} + \beta \text{EconDis} + \beta (\text{PercNTour} * \text{EconDis}) + \varepsilon$$

H4: The perceived Social benefits have a positive moderating effect on the relationship between perceived number of tourists and residents satisfaction.

$$\text{Resident Satisfaction} = \alpha + \beta \text{PercNTour} + \beta \text{SocBen} + \beta (\text{PercNTour} * \text{SocBen}) + \varepsilon$$

H5: The perceived social disadvantages have a negative moderating effect on the relationship between perceived number of tourists and residents satisfaction.

$$\text{Resident Satisfaction} = \alpha + \beta \text{PercNTour} + \beta \text{SocDis} + \beta (\text{PercNTour} * \text{SocDis}) + \varepsilon$$

H6: The perceived environmental benefits have a positive moderating effect on the relationship between perceived number of tourists and residents satisfaction.

$$\text{Resident Satisfaction} = \alpha + \beta \text{PercNTour} + \beta \text{EnvironAd} + \beta (\text{PercNTour} * \text{EnvironAd}) + \varepsilon$$

H7: The perceived environmental disadvantages have a negative moderating effect on the relationship between perceived number of tourists and residents satisfaction.

$$\text{Resident Satisfaction} = \alpha + \beta \text{PercNTour} + \beta \text{EnvironDis} + \beta (\text{PercNTour} * \text{EnvironDis}) + \varepsilon$$

To see the right direction of the individual regression models a few steps need to be undertaken. The first step is to determine which values to use in the regression model to see in which direction the regression is going. The values that will be used for determining the direction of the regression results are the minimum, first quartile (25%), second quartile (50%), third quartile (75%), and maximum (Appendix D). After determining these values for every variable the regression models can be filled in for every opportunity. The results can be compared when every option has been calculated (Appendix E).

With the help of SPSS a linear regression model will be performed to investigate the effect of the perceived number of tourists on resident's satisfaction. The main model that will be used:

$$\text{Resident Satisfaction} = \alpha + \beta\text{Gender} + \beta\text{Group} + \beta\text{PercNTour} + \beta\text{EnvironDis} + \beta\text{EnvironAd} + \beta\text{SocDis} + \beta\text{SocBen} + \beta\text{EconDis} + \beta\text{EconAd} + \beta(\text{PercNTour} * \text{EnvironDis}) + \beta(\text{PercNTour} * \text{EnvironAd}) + \beta(\text{PercNTour} * \text{SocDis}) + \beta(\text{PercNTour} * \text{SocBen}) + \beta(\text{PercNTour} * \text{EconDis}) + \beta(\text{PercNTour} * \text{EconAd}) + \varepsilon$$

### 3.4 Summary statistics

To commence this section a number of general graphs and tables will be presented to obtain some feeling for the data used. The first table will show an overview of the whole sample size.

**Table 1: Descriptive statistics total sample group**

*Table 1: Descriptive Statistics total sample group*

Variable	N	Range	Minimum	Maximum	Mean	Std. Deviation
Gender	378	1	0	1	0.44	0.497
Perc. N. Tour.	378	95	5	100	66.48	21.187
Resident Satisfaction	378	90	10	100	75.98	24.948
Age	378	39	17	56	24.21	4.709

As we can see the mean of the gender is more towards 0 than towards 1, which in this sample size means that there are more woman than men in the sample size. The variables *Perceived Number of Tourist* and *Resident Satisfaction* show a big difference between the minimum and maximum. In this case it is possible that the differences arise due differences in the cities researched. The main difference between group 1 and group 2 will play a role in this. The mean and the Std. Deviation of the variable *Age* show that the main group respondents is between 20-30, which is the case, because the main group respondents are students.



**Table 2: Research groups**

Group 1		Group 2	
City 1	Lisbon	City 6	The Hague
City 2	Barcelona	City 7	Utrecht
City 3	Rome		
City 4	Venice		
City 5	Amsterdam		

Gender is also divided in two groups.

**Table 3: Gender**

	Gender
0	Female
1	Male

To go further into these descriptive statistics we will look at the two groups separately.

**Table 4: Descriptive statistics divided in groups**

Group		Age	Gender	Perc. number of tourists	Resident satisfaction
<b>1</b>	Mean	23.81	0.44	83.31	69.79
N = 273	St. Deviation	4.265	0.497	17.402	26.583
<b>2</b>	Mean	24.21	0.45	22.71	92.10
N = 105	St. Deviation	4.709	0.500	7.501	6.715

The main aspects of the results shown in table 2 are the big differences in the variables *Perceived Number of Tourists* and *Resident Satisfaction*. Group 1 shows a mean of 83.31 while group 2 only has a mean of 22.71. This difference in means between the groups was expected before the research. The variable *Resident Satisfaction* also has a difference between group 1 and group 2, whereas group 2 has a higher satisfaction than group 1.

In table 3 the statistics will be shown on a city level.

**Table 5: Descriptive statistics divided in cities**

*Table 3: Descriptive Statistics divided in cities*

City		Age	Gender	Perc. Tour	N. Resident Satisfaction
1	Mean	21.75	0.39	71.20	82.63
N = 56	St. Deviation	2.962	0.493	20.752	17.503
2	Mean	25.18	0.48	95.57	37.73
N = 56	St. Deviation	3.800	0.504	8.182	29.403
3	Mean	24.04	0.54	86.70	72.73
N = 56	St. Deviation	3.162	0.503	15.905	21.697
4	Mean	23.77	0.32	91.42	70.53
N = 53	St. Deviation	6.182	0.471	11.023	17.469
5	Mean	24.37	0.44	71.25	86.54
N = 52	St. Deviation	3.891	0.502	11.240	9.050
6	Mean	26.15	0.48	20.58	92.12
N = 52	St. Deviation	7.368	0.505	7.900	6.668
7	Mean	24.32	0.42	24.81	92.08
N = 53	St. Deviation	2.786	0.497	6.502	6.824
Total	Mean	24.21	0.44	66.48	75.98
N = 378	St. Deviation	4.709	0.497	31.187	24.948

The table shows especially for city 2 that the *Resident Satisfaction* strongly deviates of the other cities in the group. The cities in group 2 are in line with one another.

The correlation matrix in Appendix F shows that there are no variables that are highly correlated. This means that in this case there are no cases of multicollinearity.

Given these variables and the regression model that has been specified in the previous chapter the next section will provide the regression results.

## 4. Research Results and Analysis:

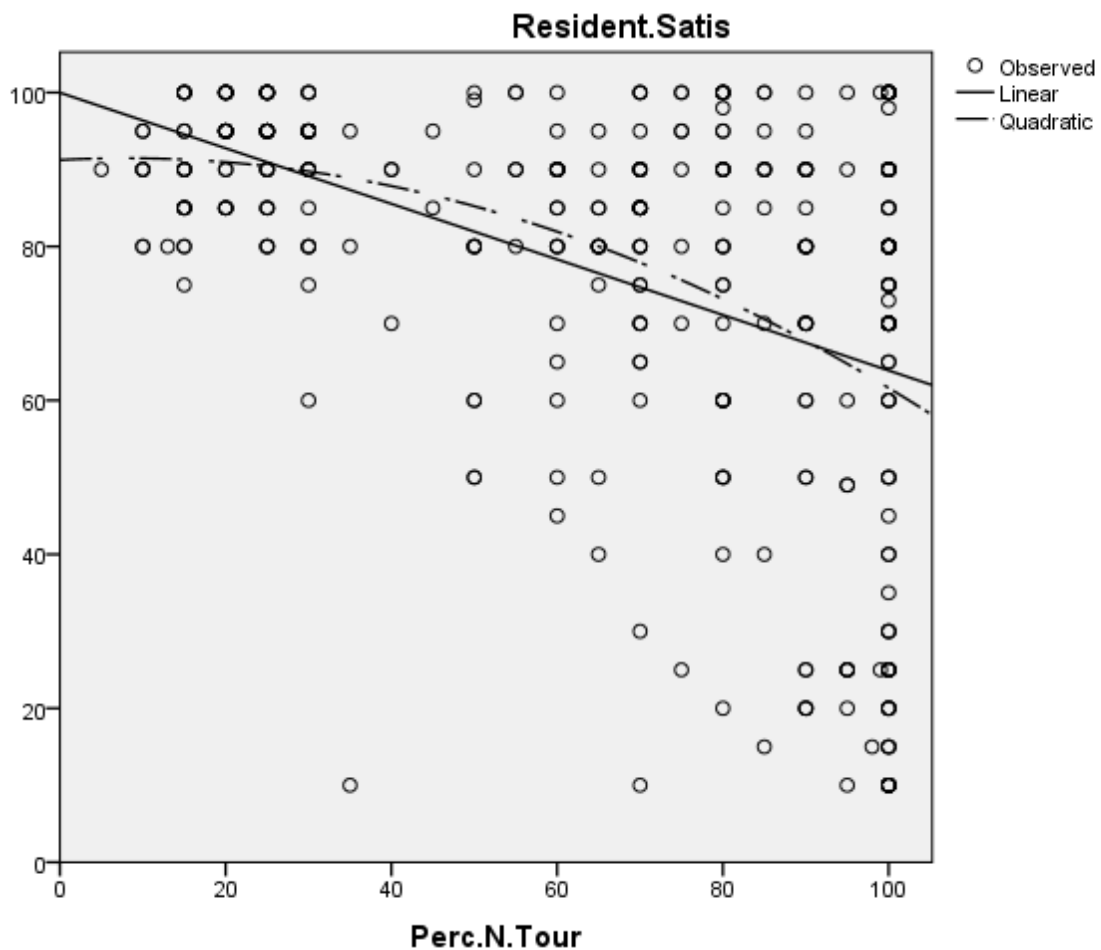
### 4.1 Regression results

#### 4.2.1 Individual Regression Results

First each of the hypotheses will be researched individually. This means that in the regression performed only the variables of the hypothesis will be included. This will not have any value for the overall model. This will purely investigate the connection between the variables included in regression model. This means that the model does not include the effect of the other variables that could influence resident's satisfaction and are included in this research.

H1: Perceived number of tourists has an inverted U-shaped relationship with resident's satisfaction. The results are shown in the scatter plot and the table below.

We can see that there is an inverted U-shape relationship when analysing the scatter plot showed below. Table 6 shows the quadratic results. The quadratic formula shows a difference in parameter in the beginning and the end. In the beginning the parameter is slightly positive number, while in the end the parameter is slightly negative. This confirms there is a positive effect in the beginning of the perceived number of tourists on the resident satisfaction, while the second parameter gives and negative effect. This means that on a certain point the perception of number of tourists will have a negative effect on the resident satisfaction. As expected the resident satisfaction is high when the perceived number of tourists is low and getting lower when the perceived number of tourists is growing after a certain point. As we can see the R Square is 0,213, which means that the independent variable '*perceived number of tourists*' does have a high explanatory value for the dependent variable '*Resident Satisfaction*'. Both the linear as the quadratic equations are highly significant. This means that on an individual level we can confirm the first hypothesis.



The linear effect shows a slightly smaller R Square than the quadratic model, but it still has a high explanatory value. The parameter is  $-0,361$ , which means that the higher the number of perceived tourists the lower the resident satisfaction. Both the linear as the quadratic equations are highly significant. The first hypothesis is confirmed when looking at the quadratic model.

**Table 6: Model summary and parameter estimates**

Equation	Model Summary		Parameter Estimates		
	R Square	Sig.	Constant	b1	b2
Linear	0.204	0.000	99.977	-0.361	
Quadratic	0.213	0.000	91.240	0.056	-0.004

The results of the regression of H2a: ‘Economic advantages of tourism have a positive effect on resident satisfaction’ are presented in the table below.

**Table 7: Results regression hypothesis 2a**

Variable	Coefficient	Sig.
Constant	96.701	(0.00)
Perceived Number Tourists	-0.332	(0.00)
Econ. Adv.	-8.117	(0.01)
ECONAINT	0.217	(0.00)
N / Adjusted R	377 / 0.356	

The variable *perceived number of tourist* has a negative coefficient, which means that the higher the perceived number of tourists the lower the resident satisfaction. Econ.Adv has a negative effect on resident satisfaction. This is not the expected effect. The main reason for this unexpected outcome could be that there is a correlation between the variables. Both variables are coded from low to high and only positive numbers are involved. The outcome that economic advantages will have a negative effect on resident satisfaction is not in line with the research. For this reason another analysis will be performed. Table 8 shows for the 25, 50, 75 quartiles how the resident satisfaction is influenced, when inserting the quartiles in the regression model. For the first quartile of perceived number of tourists we still see that the economic advantage has a negative influence on resident satisfaction, when reaching a higher quartile, but the second and third quartile show that a higher economic advantage causes a higher resident satisfaction. The explanation for the decline of perceived economic advantage of tourism in the first quartile can be that the perceived number of tourists is that low that there is almost no influence and other factors influence there resident satisfaction more.

**Table 8: Quartile method for hypothesis 2a**

		Perceived number of tourist		
		25	50	75
Economic Advantage	25	87.86	66.10	54.01
	50	86.60	72.53	64.71
	75	85.60	77.60	73.16

The interaction variable *Economic advantage \* Perceived number of tourists* (*ECONAINT*) has a positive coefficient. This means that the higher the outcome of the interaction variable the higher the resident satisfaction. All the variables are significant, which means it has value for this regression model. The model has a high explanatory value with an adjusted R-square of 0.356.

The results of H2b: ‘Economic disadvantages of tourism have a negative effect on resident satisfaction’ are presented in the table below.

**Table 9: Results regression hypothesis 2b**

Variable	Coefficient	Sig.
Constant	98.647	(0.00)
Perceived Number Tourists	-0.316	(0.00)
Econ. Dis.	2.601	(0.45)
ECONDINT	-0.102	(0.02)
N / Adjusted R	377 / 0.237	

The coefficient of the *perceived number of tourists* is negative and significant. The *Economic Disadvantage* has in this regression model a positive coefficient, but this has no significance. This means that this variable has no explanatory value for this model. The model is also tested by a quartile method of which the outcome is showed in table 10. Looking at the first quartile of perceived number of tourists we still see that the economic disadvantage has a negative influence on resident satisfaction, but when reaching the second and third quartile a higher economic disadvantage causes a lower resident satisfaction. The lower resident satisfaction is in line with the literature and the hypothesis. The explanation for the small decline in the first quartile of perceived number of tourists is that the perception of tourists is very low that there is almost no influence on resident satisfaction and other factors have a bigger influence on resident satisfaction.

**Table 10: Quartile method for hypothesis 2b**

		Perceived number of tourist		
		25	50	75
Economic Disadv.	25	89.52	78.80	72.85
	50	89.12	74.85	66.91
	75	88.77	70.61	60.52

The interaction variable *Economic disadvantage \* Perceived number of tourists* has a negative coefficient. This means that this interaction variable has a negative effect on resident satisfaction. The resident satisfaction will be lower when the value of the interaction variable is getting higher. This variable is significant.

The results of H3a: ‘Social advantages of tourism have a positive effect on resident satisfaction’ are presented in the table below.

**Table 11: Results regression hypothesis 3a**

Variable	Coefficient	Sig.
Constant	96.334	(0.00)
Perceived Number Tourists	-0.335	(0.00)
Social advantage	-10.180	(0.01)
SOCAINT	0.256	(0.00)
N / Adjusted R	377 / 0.380	

The coefficient of the *perceived number of tourists* is negative and significant. The perceived *Social Benefit* of tourism gives a negative coefficient. This means that Social benefits have a negative influence on the resident satisfaction. This is caused by the correlation between the variables. The interaction variable *SOCBINT* has a positive coefficient. Table 12 shows the outcome of the regression model using the quartile method. For the first quartile of perceived number of tourists we still see that the social benefit has a negative influence on resident satisfaction, when reaching a higher quartile. The main reason for this phenomenon is that there is a small influence of the tourists, because the perceived number of tourists is low, which means that other factors will have a bigger influence on resident satisfaction. The second and third quartile show that a higher Social Benefit causes a higher resident satisfaction.

Table 12: Quartile method for hypothesis 3a

		Perceived number of tourist		
		25	50	75
Social Benefit	25	88.09	64.70	51.70
	50	85.77	73.09	66.04
	75	84.49	77.70	73.93

The results of H3b: ‘Social disadvantages of tourism have a negative effect on resident satisfaction’ are presented in the table below.

Table 13: Results regression hypothesis 3b

Variable	Coefficient	Sig.
Constant	101.181	(0.00)
Perceived Number Tourists	-0.364	(0.00)
Soc. Dis.	9.088	(0.00)
SOCDINT	-0.155	(0.00)
N / Adjusted R	377 / 0.235	

The coefficient of the *perceived number of tourists* is negative and significant, which means that a higher number perceived number of tourists will have a negative effect on resident satisfaction. The variable *SocDis* has a positive coefficient and is significant. This means that Social Disadvantages has a positive effect on resident satisfaction. The interaction variable *SOCDINT* has a negative coefficient and is significant. In table 14 the quartile method has been applied to the regression model. Looking at the first quartile of perceived number of tourists we still see that the Social Disadvantage has a positive influence on resident satisfaction. Reaching the second and third quartile a higher social disadvantage causes a lower resident satisfaction. The lower resident satisfaction is in line with the literature and the hypothesis. The explanation for the small decline in the first quartile of perceived number of tourists is that the perception of tourists is very low that there is almost no influence on resident satisfaction and other factors have a bigger influence on resident satisfaction.



Table 14: Quartile method for hypothesis 3b

		Perceived number of tourist		
		25	50	75
Social Benefit	25	87.08	75.70	69.38
	50	90.93	73.50	63.81
	75	93.42	72.07	60.22

The results of H4a: ‘Environmental advantages of tourism have a positive effect on resident satisfaction’ are presented in the table below.

Table 15: Results regression hypothesis 4a

Variable	Coefficient	Sig.
Constant	100.540	(0.00)
Perceived Number Tourists	-0.367	(0.00)
Environ. Adv.	1.960	(0.52)
EnvAINT	-.023	(0.56)
N / Adjusted R	377 / 0.198	

The coefficient of the *perceived number of tourists* is negative and significant. *Environ. Adv.* Has a positive effect on the resident satisfaction, but this variable is not significant so it has no explanatory value for this regression. The interaction variable *EnvAINT* has a negative coefficient, but is not significant.

The results of H4b: ‘Environmental disadvantages of tourism have a negative effect on resident satisfaction’ are presented in the table below.

Table 16: Results regression hypothesis 4b

Variable	Coefficient	Sig.
Constant	99.132	(0.00)
Perceived Number Tourists	-0.337	(0.00)
Environ. Dis.	1.368	(0.66)
EnvDINT	-0.076	(0.61)
N / Adjusted R	377 / 0.228	

The coefficient of the *perceived number of tourists* is negative and significant. *Environ. Dis.* has a positive coefficient. The interaction variable *EnvDINT* has a negative coefficient. Both *Environ. Dis.* and *EnvDINT* are not significant and do not have an explanatory value for this regression model.

In Appendix E the results of the regression models are provided. The findings will be discussed per hypothesis. The main focus of confirming or declining the hypothesis is the use of the quartile methods on the regression models.

Hypothesis 2a: The resident satisfaction goes down for the minimum and the first quartile of the variable economic advantage as the perceived number of tourists gets higher. When the economic advantage has a value of the second quarter or higher the resident satisfaction goes up when the perceived number of tourists go up.

Hypothesis 2b: The resident satisfaction has the same effect as H2 when looking at the variable economic disadvantage.

Hypothesis 3a: The resident satisfaction has the same effect as hypotheses two and three.

Hypothesis 3b: The resident satisfaction goes up for the minimum and the first quartile of the variable social disadvantage, as the perceived number of tourists gets higher. When the economic advantage has a value of the second quarter or higher the resident satisfaction goes up when the perceived number of tourists go up.

Hypothesis 4a: The resident satisfaction has the same effect as H5 when looking at the variable environmental advantage.

Hypothesis 4b: The resident satisfaction has the same effect as H5 and H6 when looking at the variable environmental disadvantage.

**Table 8: Overview hypotheses**

Hypothesis	Confirmed	Rejected
1	X	
2a	X	
2b	X	
3a	X	
3b	X	
4a		X
4b		X

## 4.2.2 Overall model regression results

In the model presented below all the variables are included.

**Table 18: Results of the total regression model**

Variable	STD	Sig.
Constant	59.430	(0.00)
Perceived Number Tourists	0.626	(0.24)
Perceived Number Tourists * Perc. N. Tourists	-0.006	(0.03)
Group	20.364	(0.01)
Gender	-1.857	(0.29)
Age	0.225	(0.24)
Econ. Adv.	-7.440	(0.23)
Econ. Dis.	1.112	(0.42)
Soc. Ben.	-6.230	(0.04)
Soc. Dis.	6.312	(0.02)
Environ. Adv.	1.438	(0.59)
Environ. Dis.	-0.953	(0.74)
(Econ. Adv. * Perc. N. Tourists)	0.210	(0.00)
(Econ. Dis. * Perc. N. Tourists)	-0.009	(0.83)
(Soc. Ben. * Perc. N. Tourists)	0.227	(0.00)
(Soc. Dis. * Perc. N. Tourists)	-0.090	(0.01)
(Environ. Adv. * Perc. N. Tourists)	0.018	(0.59)
(Environ. Dis. * Perc. N. Tourists)	0.002	(0.96)
N / Adjusted R	377 0.563	

As showed in the single regression models the variables are having the wrong direction, because of the high correlation. In the overall model this is still the case, but it has no influence on the outcome of the model. In the overall model the variable *perceived number of tourists* has a negative coefficient, which means that a higher *perceived number of tourists* have a negative effect on the resident satisfaction. With a  $p < 0.01$  it shows to be highly significant, which means that in this model a higher *perceived number of tourists* lead to a lower resident satisfaction. The *Group* has a positive significant influence on the resident satisfaction, which means that if you are living in one of the cities with no problems with tourists you are more satisfied. *Gender* has a negative influence, but is not significant. This means that this variable has no value for this model. In which can be concluded that there is no difference in the satisfaction of residents, which is related to gender. The same can be concluded on the variable *Age*. The *Economic advantage* has a negative coefficient on resident satisfaction, but is not significant so has no value to the model. The *Economic disadvantage* has a positive coefficient, but is not significant so has no value to the model. The *Social benefit* has a negative coefficient, but is not significant. *Social disadvantage* has a positive

coefficient and is highly significant. This is not as expected, while a disadvantage would not be expected to have a positive impact. *Environmental advantage* and *Environmental disadvantage* both have positive coefficients and both are not significant.

The most important variables of this research are the interaction variables. The *Economic advantage \* Perceived number of tourists* has a positive coefficient and is significant. The *Economic disadvantage \* Perceived number of tourists* has a negative coefficient, but the variable is not significant and has no further value to the model. *Social benefit \* Perceived number of tourists* has a positive coefficient, which means that the higher the interaction model the higher the resident satisfaction and the variable is highly significant. *Social disadvantage \* Perceived number of tourists* has a negative coefficient, which means that the variable has a negative influence on resident satisfaction and the variable is highly significant. Both of the environmental interaction variables are not significant. The adjusted R square has a value of 0.553, which means that the independent variables explain about 55,3% of the dependent variable.

## 5. Conclusion, Limitation & Further Research

### 5.1 Conclusion

In Conclusion, we find that the perceived number of tourists has a statistically effect on the resident satisfaction. This is an inverted U-shaped effect when looking at the Perceived number of tourists on a standalone basis. When we take a look at the influence of the perceived number of tourists in the interaction variables this variable has a different influence. It strengthens or weakens the initial effect; because of the nature of the variable it is not possible to change the direction of the interaction variable. This is when we take a look from the whole model. When we only take a look at the model including number of tourists and resident satisfaction we can see at the quadratic formula that there is a slightly U-shape, this corresponds with the hypothesis of this research.

From the researches that already have been done we can see that there are positive and negative sides of tourism in overcrowded cities (Young, 1973; Jafari, 1973; Pizam, 1976; Liu & Var, 1982; Ko & Stewart, 2002). The main difference with this research and the researches done in the past is that in this research several cities are compared with one another to see the overlap and differences between overcrowded and normal cities.

The conclusion we can make from this research is that we can see that there is a significant difference between the resident satisfaction of the residents living in an overcrowded city or a city that is not overcrowded with tourists. The significant difference shows us that the group living in the overcrowded cities are way less satisfied than the cities that are not overcrowded.

The main question of this research remains still hard to answer. The main problem to answer this question is that the level on which a city is classified as 'perceived overcrowded' should be known. As Appendix E shows that resident satisfaction under hypotheses go up when the number of tourists maximize. The full regression model shows the directions of the variables, but this is not the only thing we need to determine the optimal balance between the positive and negative sides of tourism. Most of these variables influence one another. If there are no

tourists it is most likely that there are no jobs in this sector, when there are no tourists it will not be very likely that tourists influence the social environment. The main correlations between the levels of the different types of variables need to be investigated. In this way the right moves of the government could at least help the cities that are overcrowded to balance the number of tourists with the Economic, Social and Environmental advantages and disadvantages of tourism and so help the city in the right direction for the residents. This could help to prevent cities that are on the edge of getting overcrowded to stay on the right side of the line and maintain satisfied residents.

## 5.2 Limitations

The first limitation of this research is that there are different types of city that are being compared. The main problem of this is that there are different kinds of problems in the different cities. In Venice for example the people were dissatisfied, because of the prices of living and the tourists making a lot of noise in this small town, whereas in Rome other problems like traffic jams, public transport and the corrupt government were an extra reason to let of some steam blaming the tourists. Barcelona and Lisbon both had different problems, because these cities are especially overcrowded during the summer causing undoable situations in the summer, because of their popularity as summer and beach vacations.

The second limitation of this research is that there is a sampling bias. The sample group was not representative for the population of the city. The limited resources available for this research are one of the reasons. To find the right representative sample group would take a lot of time and would cost a lot of money. Another reason that it was not possible to have the right sample size is the next limitation.

The third limitation of the research was the language differences between the cities. The survey was done in English, which meant that the residents of these cities did not answer the surveys in their native language. Harzing (2005) did a research on this topic and showed that cross-country differences were smaller when the questionnaires were in English. People tend to be more moderate answering questions when it is not in their native language. Another problem with the English surveys was that most of the elderly native residents did not master the English language enough to fill in the survey.

The last limitation of this research is that the overcrowded cities were cross-country, whereas the cities that were not overcrowded were cities in the Netherlands. This could have caused some bias.

### **5.3 Further Research**

For further research it would be interesting to further group the cities. In this case it would be interesting to see if the cities have a more seasonal tourism or if the cities are overcrowded all year. When clustering cities together different variables could also be included like size of the area where tourists mainly go. This would mean that the density of tourists could be added.

It would be interesting to have a better sample of the society for further research. For this research mostly students were interviewed, which could quite have a different view on the situation in the cities.

To create the questionnaires in the native language would be interesting for future research. In that case you are sure the people understand all the questions and everything is clear. As mentioned before research has been done on this topic and cross-country differences are smaller when the questionnaire is in English.

For further research it could be good to see if there is a certain point on which the residents feel like the city is overcrowded. This could help in this research, to create profiles of people's perceptions on the bases of perceived number of tourists could help a lot in this case. There should be a relationship between a lot of tourists and employment in the tourist sector, which would mean that if you perceive an extreme number of tourists you would most likely see the economic benefits of the tourists and vice versa.

The last interesting thing for further research would be adding cities that are not overcrowded yet from other countries also. The countries where we investigate an overcrowded city we also should take a city that is not overcrowded. In this case the cross-country differences will be mapped.

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## 7. Appendix:

### Appendix A: Questionnaire

Question	Hypothesis	Indep	Dep	Scale
1. Perceived number of tourists?		Perceived number of tourists	Resident Satisfaction	1-100 continues
2. Tourism in the city influences my employment opportunities in a positive way?	2. Econ. Adv	Perceived Economic Advantage	Resident Satisfaction	1-5 Likert
3. Tourism contributes to my income in a positive way?	2. Econ. Adv	Perceived Economic Advantage	Resident Satisfaction	1-5 Likert
4. Tourism contributes to my standard of living in a positive way?	2. Econ. Adv	Perceived Economic Advantage	Resident Satisfaction	1-5 Likert
5. Tourism increases real estate costs and property taxes?	3. Econ. Disadv.	Perceived Economic Disadvantage	Resident Satisfaction	1-5 Likert
6. Tourism increases the costs of living?	3. Econ. Disadv.	Perceived Economic Disadvantage	Resident Satisfaction	1-5 Likert
7. Tourism increases the price of goods and services	3. Econ. Disadv.	Perceived Economic Disadvantage	Resident Satisfaction	1-5 Likert
8. Tourism positively influences the quality of life?	4. Soc. Benefits	Perceived social benefits	Resident Satisfaction	1-5 Likert
9. Tourism positively influences the availability of recreational facilities?	4. Soc. Benefits	Perceived social benefits	Resident Satisfaction	1-5 Likert
10. Tourism improves quality of police and fire protection	4. Soc. Benefits	Perceived social benefits	Resident Satisfaction	1-5 Likert
11. Tourism increases demand for historical and cultural exhibits?	4. Soc. Benefits	Perceived social benefits	Resident Satisfaction	1-5 Likert
12. Tourism encourages variety of cultural activities?	4. Soc. Benefits	Perceived social benefits	Resident Satisfaction	1-5 Likert
13. Tourism promotes restoration of historical sites?	4. Soc. Benefits	Perceived social benefits	Resident Satisfaction	1-5 Likert
14. Local traditions become more important because of tourism?	4. Soc. Benefits	Perceived social benefits	Resident Satisfaction	1-5 Likert
15. Tourism has a negative effect on crime/robberies/vandalism	5. Soc. Disadv.	Perceived social disadvantages	Resident Satisfaction	1-5 Likert
16. Tourism increases undesirable activities (drugs, alcohol, prostitution)	5. Soc. Disadv.	Perceived social disadvantages	Resident Satisfaction	1-5 Likert
17. Tourism causes an increase ins traffic accidents?	5. Soc. Disadv.	Perceived social disadvantages	Resident Satisfaction	1-5 Likert

18. Tourism increases the exploitation of natives?	5. Soc. Disadv.	Perceived social disadvantages	Resident Satisfaction	1-5 Likert
19. Tourism improves public facilities (payment, traffic network)	6. Environ. Adv	Perceived Environmental advantage	Resident Satisfaction	1-5 Likert
20. Tourism improves the appearance of the city/region?	6. Environ. Adv	Perceived Environmental advantage	Resident Satisfaction	1-5 Likert
21. Tourism improves living utilities infrastructure? (Supply of water, electricity and telephone)	6. Environ. Adv	Perceived Environmental advantage	Resident Satisfaction	1-5 Likert
22. Increase environmental pollution (water, air and noise)	7. Environ. Disadv.	Perceived Environmental disadvantage	Resident Satisfaction	1-5 Likert
23. Tourism damages natural environment and landscape?	7. Environ. Disadv.	Perceived Environmental disadvantage	Resident Satisfaction	1-5 Likert
24. How satisfied are you with living in this city? (0-100)			Resident Satisfaction	1-100 continues

## Appendix B: Measurement Description

Independent Variable	Dependent Variable	Variable Measurement	Measurement way
Perceived number of tourists	Resident Satisfaction	Ratio	Linear Regression
Perceived social (pos/Neg)	Resident Satisfaction	Ordinal	Linear Regression
Perceived Economic (Pos/Neg)	Resident Satisfaction	Ordinal	Linear Regression / T-Test / Anova
Perceived environmental (Pos/Neg)	Resident Satisfaction	Ordinal	Linear Regression

## Appendix C: Rotated Component Matrix

Component	1	2	3	4	5	6
Q2	.332	<b>.843</b>	.132	-.001	.120	.081
Q3	.356	<b>.847</b>	.035	-.003	.086	.090
Q4	.339	<b>.841</b>	.031	.017	.115	.025
Q5	.125	.098	<b>.869</b>	.194	.092	.170
Q6	.088	.032	<b>.906</b>	.094	.147	.133
Q7	.205	.052	<b>.871</b>	.161	.153	.135
Q8	<b>.773</b>	.190	.245	.099	.104	.227
Q9	<b>.797</b>	.122	.135	.033	.205	.119
Q10	<b>.827</b>	.106	.068	.085	.072	-.028
Q11	<b>.863</b>	.239	.093	-.020	.153	.027
Q12	<b>.840</b>	.313	.054	-.019	.158	.028
Q13	<b>.831</b>	.271	.044	-.055	.162	.018
Q14	<b>.550</b>	.432	.005	-.013	.161	-.124
Q15	.020	.024	.201	<b>.748</b>	.024	.099
Q16	.067	.096	.073	<b>.842</b>	-.003	.099
Q17	-.008	-.016	-.018	<b>.811</b>	.125	.041
Q18	-.031	-.154	.260	<b>.682</b>	.252	.201
Q19	.205	.091	.089	.238	<b>.809</b>	.109
Q20	.302	.180	.174	.105	<b>.796</b>	.157
Q21	.201	.099	.156	.026	<b>.865</b>	.080
Q22	.114	.145	.182	.188	.211	<b>.827</b>
Q23	.032	-.011	.233	.198	.094	<b>.874</b>

## Appendix D: Descriptive Statistics useful for Regression

	N	Minimum	25%	50%	75%	Maximum
Perc.N.Tour	378	5	30	75	100	100
Resident.Satis	378	10	70	85	95	100
Econ.Adv	378	-2,806	-0,699	0,089	0,710	2,261
Econ.Dis	378	-2,598	-0,751	0,018	0,856	1,904
Soc.Ben	378	-2,840	-0,717	0,208	0,718	2,303
Soc.Dis	378	-2,273	-0,710	0,151	0,707	2,622
Environ.Adv	378	-2,962	-0,640	0,131	0,633	2,311
Environ.Dis	378	-2,730	-0,684	0,109	0,656	2,366

## Appendix E: Outcome Hypothesis, Resident Satisfaction

Variable 1	Variable 2	H2a	H2b	H3a	H3b	H4a	H4b
Perc. N. Tour.		Resident Satisfaction	Resident Satisfaction	Resident Satisfaction	Resident Satisfaction	Resident Satisfaction	Resident Satisfaction
Min	Min	114,78	113,31	119,94	80,47	96,31	94,75
25%	Min	99,95	100,32	101,04	93,46	94,04	96,77
50%	Min	94,41	94,91	92,81	100,61	100,45	97,55
75%	Min	90,05	89,02	88,26	105,23	104,63	98,10
Max	Min	79,14	81,66	74,17	121,16	118,57	99,78
Min	25%	91,25	90,92	93,38	80,17	77,12	91,51
25%	25%	87,86	87,95	88,08	87,11	87,42	89,65
50%	25%	86,60	86,71	85,76	90,93	90,84	88,92
75%	25%	85,60	85,37	84,49	93,40	93,07	88,42
Max	25%	83,11	83,68	80,53	101,90	100,52	86,86
Min	50%	48,91	50,60	45,59	79,65	81,40	85,68
25%	50%	66,10	65,68	64,74	75,68	75,51	76,82
50%	50%	72,53	71,95	73,08	73,50	73,55	73,38
75%	50%	77,60	78,79	77,69	72,09	72,27	71,01
Max	50%	90,25	87,33	91,98	67,23	68,02	63,61
Min	75%	25,38	28,21	19,04	79,35	83,77	82,45
25%	75%	54,01	53,30	51,78	69,34	68,89	69,69
50%	75%	64,71	63,75	66,04	63,81	63,94	64,75
75%	75%	73,15	75,13	73,91	60,25	60,72	61,34
Max	75%	94,21	89,36	98,34	47,97	49,96	50,69
Min	Max	25,38	28,21	19,04	79,35	83,77	82,45
25%	Max	54,01	53,30	51,78	69,34	68,89	69,69
50%	Max	64,71	63,75	66,04	63,81	63,94	64,75
75%	Max	73,15	75,13	73,91	60,25	60,72	61,34
Max	Max	94,21	89,36	98,34	47,97	49,96	50,69

## Appendix F: Correlation Matrix

	Pearson	Perceived N. of tourists	Econ. Adv.	Econ. Dis.	Soc. Ben.	Soc. Dis.	Environ. Adv.	Environ. Dis.	EconBINT	EconDINT	SocBINT	SocDINT	EnvironAINT	EnvironDINT
Perceived Number of tourists	Pearson	1	.204*	.525*	.241*	.213*	.222**	.322**	.045	.372**	.085	.158**	.140**	.211**
Econ. Adv.	Corr.		1	.000	.000	.000	.000	.000	.927**	-.131*	-.004	-.053	-.025	-.055
Econ. Dis.	Pearson	.525**		1	.000	.000	.000	.000	-.122*	.924**	-.104*	.009	-.054	-.039
Soc. Ben.	Corr.				1	.000	.000	.000	-.004	-.108*	.924**	-.057	-.069	-.099
Soc. Dis.	Pearson	.241**	.000	.000		1	.000	.000	-.051	.009	-.057	.923**	.011	.012
Environ. Adv.	Corr.						1	.000	-.025	-.057	-.070	.011	.920**	-.009
Environ. Dis.	Pearson	.322**	.000	.000	.000	.000		1	-.052	-.040	-.098	.012	-.008	.923**
EconBINT	Corr.								1	-.209**	.001	-.096	-.036	-.096
EconDINT	Pearson	.045	.927*	-.122*	-.004	-.051	-.025	-.052		1	-.189**	.024	-.110*	-.065
SocBINT	Corr.										1	-.103*	-.130*	-.172**
SocDINT	Pearson	.372**	-.131*	.924*	-.108*	.009	-.057	-.040	-.209**			1	.015	-.001
EnvironAINT	Corr.												1	-.016
EnvironDINT	Pearson	.085	-.004	-.104*	.924*	-.057	-.070	-.098	.001	-.189**				1
	Corr.													
	Pearson	.158**	-.053	.009	-.057	.923*	.011	.012	-.096	.024	-.103*			
	Corr.													
	Pearson	.140**	-.025	-.054	-.069	.011	.920**	-.008	-.036	-.110*	-.130*			
	Corr.													
	Pearson	.211**	-.055	-.039	-.099	.012	-.009	.923**	-.096	-.065	-.172**	-.001	-.016	
	Corr.													

Sig. \* = <0.05 \*\* = <0.025  
N = 378