

Master Thesis
Measuring travelers' happiness



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Abstract

114 vacationers participated on a survey about measuring travelers' happiness. We examined if perceptions of happiness and good mood differ between tourists from East and tourists from West and whether people associate happiness and good mood with different feelings as they become older. Eastern tourists associate Peacefulness with good mood more than Westerns do and the exact opposite relation emerged for feelings of Calmness. Tourists that had visited museums before the survey seem to be at better mood compared to tourists that engaged on activities like sightseeing and the opposite is true for entertaining activities.

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1. Introduction

One of the oldest definitions of happiness has been given by Aristotle who proposed the concept Eudaimonia to name the life an individual can live in his full potential. In the **Nicomachen Ethics**, Aristotle elaborated this term as “fulfillment, success and flourishing” and he argued that Eudaimonia is an end itself that can be awarded to someone, at the end of his or her life. Overcoming challenges, developing skills and approaching problems as opportunities to grow constitute the happy life according to Aristotle.

The Utilitarianism Philosophy came to birth relatively more recently; in the year 1789, a new moral principle is being introduced by Jeremy Bentham (Bentham, 1789). He proposed that the impact on human happiness should be the only factor that we need to take into account when judging an action as good or bad. According to this principle, intentions should not being taken into consideration during the judging process. His motion was “*we should aim for the greatest happiness for the greatest number*”. Therefore, happiness is defined by Bentham as “*the sum of pleasures and pains*”.

During the recent decades there is an increase in the active interest in the subject of happiness. The interest is multidisciplinary: Sociology, Psychology, Economics, Philosophy and Neuroscience either from different avenues or teamed up, strive to propose a globally accepted definition of happiness in order to be quantified and measured. At around 1998, the Positive Psychology branch was initiated by E. P. Seligman who was back then the president of the American Psychology Association. This new field focus on how human emotions can affect our well-being and pay particular attention to the way we communicate our feelings. They propose that positive emotions lead to higher life expectancy to a considerable extent. For economists, however, measuring happiness is both a challenge and a necessity.

The interest of Economists to define and measure happiness is multidimensional. At the macroeconomic level, governments need an index complementing per capita GDP, Unemployment Rate and Inflation Rate, in order meaningful comparisons to be made. In addition, identification and measurement of variables that positively affect happiness are prerequisites for the design of policies that look beyond economic statistics and focus on human well-being.

At the micro-economic level, the recent development of the Human Resources discipline next to the Organizational Psychology branch point to the notion that Human Capital should be treated as an investment with a varied range of pay-off. Corporations currently realize that the performance of an employee, his adjustment level and his willingness to contribute to the corporate mission wholeheartedly, are strongly related to the culture and the internal branding

that is communicated within the organization. In contrary to machinery equipment, the limits of human productivity are not known yet; the brain of an employee is an asset that can produce diametrically opposite results if treated in different ways. To state it more simply, focus on personnel happiness is an investment that has the potential of multiple pay-offs.

The above argument brings us to our last point: given that the product-centered economy is being substituted by a consumer centered economy, the Marketing profession focus more than ever on the anatomy of consumer behavior. Internet and the subsequent generation of Large Datasets provide the opportunity to quantify consumer satisfaction, positive or negative word of mouth as well as customer retention. These three (3) attributes are directly related to the level of happiness a consumer experiences while he consumes a specific product or service.

The purpose of the present research is to shed light on the latter aspect of happiness. Our intention is to measure the part of happiness attributed to consumption of the travel industry services. How travelling affects happiness has been so far researched to a considerable extent. In particular, Nawijn (2010) in his PhD dissertation "*An empirical study into the effect of holiday trips on individuals' subjective wellbeing*", supervised by the Professor Ruut Veenhoven, examined this subject from various perspectives. Firstly, he showed that travelling is the only leisure activity that considerably boosts happiness. Secondly, following different samples and methodology, he provided statistical evidence indicating that the positive boost of happiness attributed to a holiday trip is temporary. Thirdly, in a large international sample examined in various Dutch tourist attractions, he found evidence that enjoyment of holidays, does not depend on any demographic or cultural background and it is more related to short trips instead of long ones (Nawijn, 2010).

Research Question:

In the current research, we examine the impact of traveling on individual happiness from a different perspective. In particular, we intend to understand whether happiness means different things to different people due to temporal focus. More specifically, we examine whether happiness is reflected on feelings of peacefulness and calmness for people with a temporal focus on "now" while is reflected on feelings of enthusiasm and excitement for people with a temporal focus on future. Difference in the temporal focus may be attributed to cultural backgrounds or age. Consequently, the research question of the current paper is:

" Do temporal focus, age and cultural differences affect travelers' happiness?"

The remaining of the paper is structured as follows: Chapter 2 contains academic bibliography on happiness. Specifically, in section 2.1 we explain how happiness is being defined while in section 2.2 we present metrics of happiness at the individual. Chapter 3 shows how these metrics were applied in the travel industry. In chapter 4 our hypothesis is being elaborated and in chapter 5 we explain the reasoning behind the questionnaire that was used to collect the data. Chapter 6 consists of the descriptive analysis (6.1), the statistical analysis as well as the econometric analysis. Chapter 7 concludes

2. Literature review on measuring happiness

2.1 Definitions of happiness

Perhaps the most recent and elaborated definition of happiness is being given by the Professor Veenhoven (2007) in the “Presentation at OECD conference on measurability and policy relevance of happiness” which took place on April 2-3, in Rome, Italy. Veenhoven has devoted his life on defining and measuring happiness; he is the author of various academic articles and he also gave birth to the World database of happiness (<http://worlddatabaseofhappiness.eur.nl/>), an electronic library about academic writings on this subject. Therefore, his theory and insights are worth mentioned to detail.

His personal attempts on defining and measuring happiness propose a classification about the qualities that affect human life:

	Outer Qualities	Inner qualities
Life Chances	Livability of The Environment	Life-ability of the person
Life Results	Utility of life	Satisfaction with life

Table 1: Source Rut Veenhoven, Measures of Gross National Happiness: 'Presentation at OECD conference on measurability and policy relevance of happiness' April 2-3, 2007, Rome, Italy

In the above classification, one distinction about the qualities is being made between externalities and internalities: Externally, “Livability the environment”, whether social, political or natural plays an important role on individual’s life. Internally, “Life-ability” refers to the potential of an individual regarding his health, psychological functioning and skills. This term is close to Aristotle view of Eudaimonia.

The second distinction is being made between chances and results. The two previous qualities are referred to as chances while the following two are expressed as results. “Utility” of life is interpreted by Veenhoven in a two-fold way: Individual contribution to social groups or the environment and adherence to moral norms during our life. Lastly, Veenhoven (2007) selects as the exclusive definition of happiness the “Satisfaction With Life Scale”. The term is synonymous with subjective well- being (SWB) and to extent can be measured because it is related to the utilitarian theory of moral philosophers.

Satisfaction with life scale is further segmented by Veenhoven into 4 parts:

	Passing	Enduring
Part of life	Pleasure	Domain satisfaction
Life as a whole	Top experience	Life satisfaction (Happiness)

Table 2, Source: Ruut Veenhoven, *Measures of Gross National Happiness: 'Presentation at OECD conference on measurability and policy relevance of happiness'* April 2-3, 2007, Rome, Italy

The first distinction concerns whether SWB lasts for a long time or a short time. Understandably, "Pleasure" teams-up some experiences of hedonic nature that although they may increase our SWB, their effect will-diminish, for example consuming certain types of food, or addictive substances. In contrary to sensual experiences, "Top experiences" are intellectual or inspirational events that sharply elevate our mood, for example winning or coming into a radical idea after brainstorming. These two aspects however do not improve our SWB on the long term.

On the other hand, some features like occupancy and marriage may be contributing to our SWB for longer periods. Besides, it makes sense to assume that someone may be on the long term satisfied with one and totally unhappy about some other area. For example, financially successful people may be dissatisfied with their marriage. This point leads to the second distinction, "Part of life" as opposed to "Life as a whole". Life satisfaction is interpreted by Veenhoven (2007) as combination of enduring satisfaction with all the domains of an individual's life. He provides the following definition:

"Overall happiness is the degree to which an individual judges the overall quality of his/her own life-as-a-whole favorably"

2.2 Metrics of Happiness at the individual level.

During the last decades, a great variety of indexes have been proposed and used in the academic literature. *Research projects studies that have applied* acceptable metrics are presented in the collection of Correlational Findings (WDH-CF; Veenhoven, 2011e) in the World Data Base of Happiness. This section summarizes the most utilized and debated metrics so far. Their purpose, interpretation as well as the critiques they have attracted are also briefly discussed.

Positive and Negative Affect PANAS (Watson & Clark, 1988)

One of the most used metrics for happiness is the PANAS which is composed of two dimensions; 10 features that affect humans' mood on a positive way and 10 features that affect us negatively:

Positive And Negative Affect Scale (PANAS)			
Positive Affect		Negative affect	
Interested	Inspired	Distressed	Scared
Alert	Proud	Upset	Earful
Excited	Determined	Hostile	Ashamed
Attentive	Strong	Irritable	Guilty
Enthusiastic	Active	Angry	Nervous

Table 3: The 20 items used to measure positive and negative affect

Positive Affect (PA) indicates the degree to which an individual tends to be enthusiastic, active, and alert. High energy, full concentration, and pleasurable engagement, are related to above average PA and the opposite holds for sadness and lethargy. Oppositely, Negative Affect (NA) is interpreted subjective distress and is related to mood states like anger, contempt, guilt, fear, and nervousness.

Satisfaction With Life Scale SWLS (Diener, et al., 1985)

A second measure that is prevailing in the literature is the Satisfaction With Life scale (Diener, et al., 1985). In contrast to PANAS which shed on light on distinguishable constructs like attentiveness, SWLS focus on how much satisfied an individual feels about his/her life in general. It is implemented using five (5) questions which have as a goal to elicit a response regarding achievements and subjective self-evaluations about life:

<i>Satisfaction With Life as a Whole Scale</i>
1) In most ways my life is close to my ideal
2) My conditions of my life are excellent
3) I am satisfied with my life
4) So far I have gotten the important things in my life
5) If I could live my life over, I would change almost nothing

Table 4: The five questions measuring Satisfaction With Life as a Whole (Diener, et al., 1985)

The subjects are asked to answer the above questions with a 7-point scale from “strongly agree” to strongly disagree”.

The nature of this measure is judgmental and therefore subjective. An individual coming across these questions is directed towards a comparative analysis and considers to what extent his achievements are below or above his standards. Consequently, individuals whose standards are too high (low) are expected to report that are slightly (highly) satisfied with their life.

Dimensions of Psychological Well-Being (Ryff, 1989)

Ryff (1989) criticizes the use of the she Subjective well-being scale and other similar metrics like positive and negative affect, on the grounds that such metrics focus on hedonic aspects on life. She insists on analyzing characteristics that focus on the individual’s proper function and his attention to develop himself to his greatest potential. According to the author, the Aristotle’s eydaimonic view should not be equated to hedonism and, therefore, life satisfaction. Instead, she accepts the following translation of eydaimonism "*the feelings accompanying behavior in the direction of, and consistent with, one's true potential*" (Waterman, 1984). By elaborating on this particular definition, Ryff (1989) proposes that proper functioning of an individual should be central happiness. Following this reasoning, she provides six (6) attributes for a basis of questionnaire.

Dimensions of Psychological Well-Being
Self-acceptance
Positive relations with others
Autonomy
Environmental mastery
Purpose in life
Personal growth

Table5: Six feelings used to measure Psychological Well-Being (Ryff, 1989)

The method includes questionnaire and subjects rate themselves on 6 point Likert scale from strongly disagree to strongly agree to twenty items per attribute. Ryff (1989), used this questionnaire along with -back then- well established satisfaction metrics in order to test its validity. 2 out of the 6 dimensions, self-acceptance and environmental mastery proved to be strongly related to metrics of life satisfaction; affect balance and self-esteem. On the other hand, the attributes “positive relations to others”, “autonomy” and “purpose in life”, were not strongly linked to other relevant metrics.

Before proceeding to the next metrics, it would be useful to examine the above debate. Given the opposition of Ryff (1989) to the Subjective Well-being metrics (SWLS & PANAS), which was followed by the counter-proposal of the 6-dimensional Psychological Well Being Scale, an interesting question arises: Should happiness be analyzed from the perspective of pleasures versus pains and how their net impact affects our emotions (SWB)? Or the argument that happiness should involve engagement with challenges and capabilities of overcoming them is more likely to stand (PWB)? Respectively, what is closer to happiness the subjective well-being or the psychological well-being? In addition, can these two co-exist?

An escape from this debate is offered by Linley (2009). The two previously mentioned metrics for subjective well-being -SWLS (Diener, et al., 1985) and PANAS (Watson & Clark, 1988)- and also the psychological well-being scale- 6 dimensions of proper psychological functioning- were employed in 3 samples, UK, USA and China. Confirmatory and factor analysis provided with strong statistical evidence suggesting that subjective and psychological well-being are two distinct factors. They are not mutually exclusive, subsequently, an individual can score highly in both aspects. Alternatively, an individual can score high on the on construct and low on the other. The paper also shows that happier individuals score high on both aspects.

Furthermore, the debate between Hedonic SWB and Eudaimonic PWB is nicely summarized by Ryan & Deci (2001) on their influential paper about the two different categories of happiness. The authors conclude the paper with the notion that SWB and PWB can coexist and one is not theoretically influenced by another. For instance, it makes sense to assume that the more pleasure someone looks for, the less likely is to work hard on his occupation. However, there are many people who love their job and career and this can be an example that SWB supports PWB.

The U-Index (Kahneman & Krueger, 2006)

Another source of critique towards measuring happiness comes from the cognitive psychology profession and the notion that heuristics undermine our credibility when answering questions. Kahneman (2006), in particular, argues that due to the availability heuristic each time an individual is asked to answer a question like "how much satisfied are you with your life", he uses more reasoning instead of feelings in order to answer this question. Moreover, due to the availability heuristic (Kahneman, 2003) a respondent to a questionnaire tries to bring from his memory specific type of information about an area of his life. Hence, some areas may attract more weight than others during the survey.

On the same line, one experimental study (Kahneman D, 2006) with between groups analysis provided considerable evidence about how the order of the question may affect the response: Subjects on the control group were asked to submit the satisfaction with life level and the next question required the participants to state how many dates they had during the

previous month. The correlation of the questions with the number of dates was 0.12. However, in the second group the order of the questions was reversed and the corresponding correlations was 0.60. This result is interpreted by the researchers as a tendency of subjects to bring to their memory certain indications-for example-number of dates that are supposed to justify the level of happiness instead of responding spontaneously.

What follows Kahneman (2006) opposing arguments towards measures of subjective well-being, is a counter-proposal about a metric, the U- index. This tool borrows mood dimensions from the Day Reconstruction Method (Kahneman, et al., 2004) which measures what proportion of their time people spent on unpleasant and pleasant activities. Kahneman (2006) proposes that this metric is more accurate because people do not have any hard time neither defining an activity as (un)pleasant nor estimating how much times spent on it. Lastly, he provides statistical evidence regarding the usefulness of U index by showing that the top percent of the individuals that report “very satisfied with their life as a whole” spent the lowest part of their time on unpleasant activities and vice-versa.

The Affect Balance Scale (Bradburn, 1969)

Another metric for self-rated evaluation is the Affect Balance Scale. Subjects on this survey are required to simply state “yes” or “no” to 5 positive affect and 5 negative affect questions which are displayed on table 4:

Positive affect questions: During the past few weeks (did you feel)...?
Proud because someone complimented you on something you had done?
Did you feel particularly excited or interested in something?
Pleased about having accomplished something?
On top of the world?
That things were going your way?
Negative affect questions: During the past few weeks (did you feel)
Did you feel so restless that you couldn't sit long in a chair?
Very lonely or remote from other people?
Bored?
Depressed or very unhappy?
Upset because someone criticized you?

Table 6: The Affect Balance Scale (Bradburn, 1969)

Scoring: 1 point is received for every “yes” a participant responds. Lastly, the overall “balance” score is computed by subtracting the negative affect score from the positive affect score.

Measuring Satisfaction with Life with a single item scale (Adel-Khalek, 2006).

The self-rating of happiness with a single self-rating scale was used to assess happiness on the basis of the following question: “Do you feel happy in general?” The participants have to answer with a number from 0 to 10 while they are instructed not to focus on their present state.

Adel-Khalek (2006) provided statistical evidence regarding the validity of this measure. Firstly, it correlated positively and significantly with the Satisfaction With Life Scale and also the Oxford Happiness Inventory. Secondly, it correlated significantly and positively with positive affect attributes like extraversion and optimism. Thirdly, it correlated negatively with self-reported measures of pessimism and unhappiness. The author concluded that this method has some advantages on being selected on community surveys, like speed and greatest possibility to be answered by participants.

3. Literature review on the effect of tourism on happiness

The present research paper requires that happiness should be analyzed as a variable that is affected by the consumption of tourism services. Therefore, it is important to first review a part of the literature that shed light on it, to what extent and for how long happiness can be affected by holiday taking. Critical questions regarding the multidimensionality of the impact of travelling on happiness, the duration of this impact as well as the universal validity are analyzed in the following paragraphs.

Taken into account that happiness may be a multidimensional construct, Sirgy (2011) investigated to what extent *Positive and Negative Affect* influence sub domains of life that subsequently impact *Quality of Life (QOL)*. The authors approached the relation between life satisfaction and tourist activity using insights from the bottom-up spillover theory of subjective well-being. This theory posits that events can have positive or negative impact on a particular domain of life-for example- satisfaction with leisure life- and subsequently, this specific domain affects overall satisfaction with life. A two stage approach was implemented. Firstly, a qualitative study was conducted in order the particular dimensions of life that are affected by holiday-taking to be identified. The results revealed that *Satisfaction With Life as a Whole (SWLS)* is positively or negatively affected by 13 life domains that are displayed on the following table:

1)social life	5)Arts and culture	9)Spiritual life	13)Travel Life
2)Leisure and Recreation	6)Work life	10)Intellectual life	
3)Family life	7)Health and safety	11)Self	
4)Love life	8)Financial life	12) Culinary Life	

Table 7: Domains of life that affect overall satisfaction with life. Source: Joseph Sirgy et. all (2011)

The findings of the qualitative study were used as input for designing the questionnaire of the second-quantitative-study. Participants indicated how much their most recent trip affected the 13 above-mentioned domains of life. The confirmatory factor analysis showed that *Quality of life* (overall satisfaction with life) is not equally affected by all 13 domains. For example, overall satisfaction with life was significantly influenced by trip experiences that positively affected *social life, leisure life and family life* while this does not hold for safety, health and self. On the other hand negative affect from trip experiences turned out to be a reducing factor of satisfaction in social life, family life, love life, arts and culture, work life, health and safety, financial life, spiritual life, and culinary life.

The authors proposed an explanation for the differential effect on the basis that Negative Affect feelings and Positive Affect feelings are not negatively correlated. That is some factors may reduce Negative affect without improving positive affect and vice versa. For instance, *Positive Affect* has a pronounced impact on higher order needs like self-actualization and social life, while *Negative Affect* has a stronger impact on lower order (biologic) needs, for example, safety and economics.

Gilbert and Abdullah (2004) examined the impact of holiday taking on the Quality of Life which was measured as a variable composed (*Subjective Well-Being SWB*) of three different indexes:

- 1) *Positive and Negative Affect-PANAS,*
- 2) *Satisfaction With Life Scale and*
- 3) *Life Satisfaction with a particular domain*

The purpose of this study was to investigate the difference in happiness between people that take vacations compared to those who do not. Different metrics were employed to examine this difference. Happiness. *Satisfaction With Life as a Whole* was measured with Andrews and Withey's (1976) question of overall life satisfaction and the *Satisfaction With Life*

Scale (Diener, et al., 1985). Furthermore, questions about satisfaction with a specific domain of life (for example economics and family) were also included in the survey and covered 12 domains. Lastly, *the Positive and Negative Affect (PANAS)* was measured with the *Affectometer 2-* a scale comprised of 10 positive and negative constructs- developed by Kahneman and Flett (1983).

The results from the affective metrics (*PANAS*) showed that tourists experienced more positive affect feelings after the holidays compared to the period prior to it, while the difference between negative affect feelings before and after the holidays was not significant. With regards to life satisfaction, holiday takers reported higher levels of *Satisfaction With Life as a Whole* after the holidays. Regarding the *Satisfaction With Specific Domains of Life*, holiday-takers feel better about most of the domains and there is not any difference in their feelings towards family, friends, home and neighborhood that can solely be attributed to the travel party.

If we can make a comparison between these results and the findings of Sirgy (2011) which indicated that *Positive Affect* is related to higher order values like family, socialization and community, we may assume that individuals' motives that have as a goal to reduce negative affect may play a role. The joint suggestion of these two studies may be that although some higher order needs can affect positively our *Subjective Well-Being (SWB)*, many people may perceive tourism activity as a factor that mitigates the negatives feelings that arise from lack of satisfaction with economics, work satisfaction and intellectual life.

The timing of the effect of travelling on happiness has also been researched. Milman (1998) conducted a within-type study to examine the impact of tourism and the number of related activities on the Psychological Well-Being. The author employed the Memorial University of Newfoundland Scale of Happiness (Kozma A, 1980) in a sample of individuals above the age of 50. Participants responded to a questionnaire on the first and on the last day of their trip and the results did not indicate that PWB was affected by the trip itself. Nevertheless, it was slightly affected positively by the number of activities travelers engage on.

Another issue that was brought on surface by Neal (2007) is that the duration of the trip probably has a moderating effect on the *Satisfaction with Leisure Life* which in turn affects *Satisfaction With Life As a Whole (SWLS)*. For this reason, the moderating effect of duration was empirically examined. The authors measured *SWLS* with a *Quality of Life (QOL)* scale that was composed of 3 items:

(1) "I am generally happy with my life,"
(2) "Although I have my ups and downs, in general, I feel good about my life
(3) "I lead a meaningful and fulfilling life."

Table 8: Items measuring Quality of Life. Source: (Neal Janet.D., 2007)

The authors provide evidence that traveling influences *QOL* both directly and indirectly through Satisfaction with leisure life and the results suggest that this positive effect was stronger for persons that spend more days on their vacations.

Apart from the combined evidence supporting the positive relation between happiness and vacationing, there are some counterarguments regarding the metrics employed and the treatment of samples as being totally homogenous. Dolcinar et al (2013), approached the subject from the perspective of individuals that are in different phase of their life. Due to different priorities, leisure activities may not impact their Quality of Life uniformly. The authors used an a priori segmentation on a sample of Australian citizens regarding their attitudes towards vacations: 1 out of 10 characterized vacations as essential aspect of their Quality of Life, more than half stated that vacations are not important but they have the potential to enhance QOL while 30% do not feel that holidays contribute to QOL.

The results of this study are consistent with Maslow' Hierarchy of needs: The segment that does not value vacations is composed of low earners that are not satisfied with their life in general. Therefore, it makes sense to assume that they need first to satisfy other needs like work life. The segment that believes vacation enhance QOL are medium to high earners, satisfied with their social and work life. Perhaps for them, lack of time and other priorities-for example children raising- distract their attention from tourist opportunities. Lastly, the group that does not sacrifice vacations, are either high earners or retirees, they obviously have satisfied lower order needs like family, social and work and for them vacations seem to be the path for self- actualization.

A counterargument for the above conclusion is that the marginal impact of vacations is higher in disadvantaged groups. In this context, McCabe &Johnson (2013) shed light on the effects of Social Tourism on SWB. Disadvantaged groups seem to be benefited in terms of life satisfaction but this effect deteriorates when the trip is over. Specific domains of their life however, for example families and relationship, turned out to be improved on the long run: A trip gives them the opportunity to socialize, make new friends and spend valuable time with their families.

Some other issues that we need to take into consideration is the multidimensionality of Subjective Well-Being regarding temporal and non-temporal effects. Lischetzke (2006) argues that Occasion-Specific SWB (OSWB) is related to the alteration of an individual's attitude while being in a specific condition and how this individual interacts with that scenario. On the opposite side, Chronic-Specific SWB refers to the stable part of SWB that does not depend on particular situations.

Building on this observation, Chen (2013) used a between samples study to examine the differential effect of travelling on Subjective Well Being in vacationers compared to non-

vacationers. Moreover, the SWB scale was further segmented into Occasion Specific SWB (OSWB) and Chronic SWB (CSWB). The results implied that OSWB realizes a temporary boost immediately after the vacation is over while CSWB remain relatively stable across both groups. The authors interpret these results as being consistent with 3 different theories of happiness: The former confirms the **Set-Point Theory** which proposes that SWB resides in a specific level and even after short term boosts, it returns to this level on the long run. The later, confirms the other two equally famous theories of happiness, **Affective Theory**- how someone feels on an a specific point in time- and **Comparison Theory**- people use their judgment to evaluate if their life meet some self-imposed criteria.

These results of not lasting impact of travelling on SWB are in accord with Nawijn (2010) who also concludes that the positive effect of vacation on SWB sharply declines after the vacations. By examining vacationers and non-vacationers, he concluded that although the former report greater pro trip happiness, the post trip happiness between the two groups did not differ. This may imply that anticipation of the trip may be more contributing on SWB compared to experience of the trip.

Besides the effect of travelling on happiness after the trip is over, another question that naturally arises is how strong the impact of vacation is on happiness during the vacation period. De Bloom (2013) researched a small sample of 55 vacationers and found that health and well-being were not altered before or after the trip. According to the author's interpretation, neither the expectation nor the experience of a trip improves the quality of life and health. During the vacations however, Health and Wellness were significantly higher. This effect was slightly stronger for vacations longer than 3 weeks. However the authors recommend that many short trips instead of a few long ones may be more effective on recovery and making people more productive and energetic in their routine-work environment.

In the same line of reasoning Nawijn (2010) estimated the "happiness curve" of tourists with a between-subjects study with regards to the level of happiness during a holiday trip. According to the results, happiness was at the highest level at around the 2nd and 3rd day and at the lowest during the last few days providing evidence that anticipation of events may boost happiness but the experience of them do not have a strong impact.

The later study examined also the relationship between duration of happiness and cultural and age backgrounds. Although the results did not show any difference, we would like to investigate this issue from the perspective of the differences in temporal focus. Happiness may be perceived heterogeneously due to differences in ages and cultural background. According to the notion "The Shifting meaning of happiness" (Mogilner, et al., 2011), happiness is related to *dimensions of peacefulness and calmness* for older people, while younger people associate happiness with feelings of *excitement and enthusiasm*. The author proposes that this

phenomenon may be attributed to differences in temporal focus, meaning that young people focus on future while older people focus more on now (Mogilner, et al., 2012).

4. Hypothesis

Following the discussion from the previous section, in the present study we plan to examine if the daily happiness and mood metrics from Nawijn (2010) differ between people that associate happiness with feelings of peacefulness and calmness compared to people that associate happiness to feelings of excitement and enthusiasm. The idea behind this comparison is that people with a temporal focus on "Now" will tend to retain high happiness levels even during the last day(s) of their holidays. As we show in Nawijn (2010), happiness and mood tend to decline sharply during the second-last and last day of the trip (probably because of return to routine). On the other hand, people with temporal focus on future, are expected to exaggerate negative feelings due to their upcoming return in their hometown.

The framework of our research questions is formulated as follows:

Research question: "Do temporal focus, age and cultural differences affect travelers' happiness?"

Although Nawijn (2010) examined the daily difference in happiness curve and did not find any differences attributed to cultural differences, it would be of interest to investigate it from the perspective of the temporal focus that was brought on surface by Mogilner et al (2011). According to the Shifting Meaning of Happiness, young people relate happiness to enthusiasm and excitement and less with feeling of peacefulness and calmness and this pattern is gradually reversing with aging. We have reasons to expect that this relation may hold—at least for tourism mood and happiness—between Eastern and Western tourists respectively.

For example, Run et al (2008) argues that while western people travel mainly for entertaining reasons, Asians seem to travel more for historic and cultural sightseeing. Indeed, Chinese tourist consider the availability of a tour guide who is bilingual and knowledgeable about the culture and the history of the trip destination to be an important aspect of their holidays. Moreover, they prefer a balance on their trips between rest and activities and they are sensitive towards cleanliness (Xiang (Robert) Li, 2011). Consequently, it may be the case that calmness during vacation may be a stronger determining factor when it comes to alteration of Subjective –Well Being. The resulting hypothesis are formulated as follows:

H₁: Happiness and mood are associated more with calmness and peacefulness for tourists from East while they are associated more with feelings of enthusiasm and excitement for tourists from West

Moreover, it is interesting to examine whether age plays a role. Building on the notion of the *Shifting Meaning of Happiness* introduced by Mogilner et al (2011) we expect young individuals to associate happiness with excitement while older individual with feelings of calmness. Consequently, our second hypothesis is formulated accordingly:

H₂: Happiness and mood are associated more with feelings of excitement and enthusiasm for younger compared to older tourists.

5. Data Collection

We used a paper-based survey to collect data that would allow us to examine the above-mentioned questions. 114 travelers were recruited to participate on the survey. They were found in famous tourist attraction in The Netherlands, most of them were used in the paper of Nawijn (2010): The Rijksmuseum and the Dam Square in Amsterdam, The Peace Palace and the Madurodam in Den Hague, the Erasmus-bridge in Rotterdam and the Dom Tower in Utrecht. The participants were approached by the researcher and asked if they were tourists or citizens. After they confirmed they are tourists, they were handed in the survey to fill it in.

The questionnaire included 3 questions about happiness:

"In general I consider myself happy",

"Taking all things together I consider my-self happy" and

"Compared to most of my peers I consider my-self happy"

Participants rated themselves on 7-point Likert-Scale with 1 being "totally disagree" and 7 being "Totally agree".

This metric was employed by Mogilner et. al (2011) in their research to test the *Shifting Meaning of Happiness*. We were particularly interested in letting the respondents focus on their "happiness level" and we did not want the self-rating to be influenced by the temporary state of vacationing. To achieve this goal, we paid attention to both, the order and the content of the questions. With regards to the order, we inserted the questions in the beginning of the questionnaire, before the participant start answering questions about their trip.

With regards to the content, our intention was to elicit a general judgmental about the overall happiness of the individuals, hence the first question statement was *"In general I consider myself happy"*. Secondly, we intended to control for the fact that some domains are judged favorably while some others do not. For example, someone may feel satisfied with working life and dissatisfied with marriage. For this reason, we used the statement *"Taking all things together I consider my-self happy"*. Thirdly, following the research of Lyubomirsky (2001), according to it social comparison play a role, our last statement was *"Compared to most of my peers I consider my-self happy"*. Our intention regarding this last point stems from the observation of Lyubomirsky (2001) that people compare themselves to their correspondents when it comes to admit about their own happiness. According to the author, although there are criteria that may seem to objectively enhance happiness-for instance a promotion in the career-the subjective filtering puts people into comparing their circumstance with their similar others.

The next 4 questions were included to measure enthusiasm, excitement, calmness and peacefulness:

"I feel enthusiastic today"

"I feel excited today"

"I feel calm today"

"I feel peaceful today"

Participants were asked to indicate what was representative of themselves during the moment they were filling in the survey on a 7-point Likert scale. Furthermore, in the end of the questionnaire, participants were asked to indicate their mood by answering the question below:

"How do you feel today?" They were asked to indicate their mood on a 10-points scale where 1 equals terrible and 10 equals excellent. Lastly, participants also filled in demographic information like gender, age and nationality, as well as the mean of transportation and the activities they engaged on during their holidays. The full questionnaire can be found in the appendix.

6. Analysis and Results

6.1 Descriptive analysis

The final sample consists of 114 participants; half of them come from countries with a Western cultural background (South America, USA, UK, Spain, The Netherlands, Italy, Germany, France) and the other half from countries with an Eastern background (China, Hong Kong, Singapore, Malaysia, North Korea, South Korea, India and Iraq).

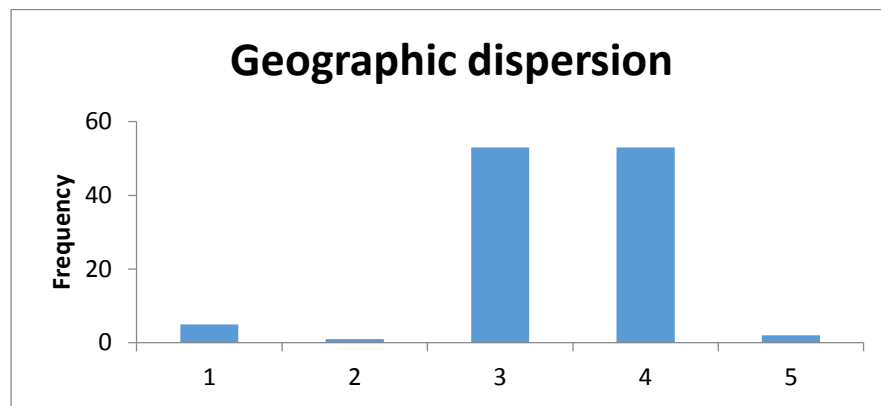


Figure 1: Segmentation based on continents of origin: 1=North America, 2=Australia, 3=Europe, 4= Asia, 5= South America

61 participants were male and the average age is 29.5. In general, the sample is composed of young people and seniors, therefore, our analysis is restricted in terms of variability. As we can see in figure below, most participants were between 25 and 35 years old:

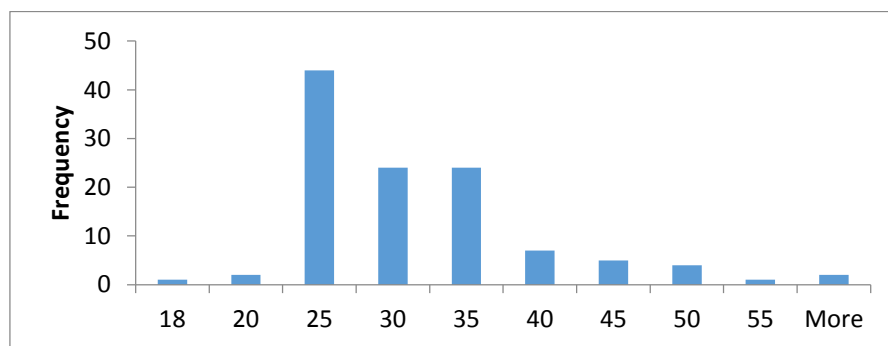


Figure 2: Frequency distribution of the age groups

With regards to activities, when participants were asked “what did you do today”, 28% said “sightseeing”, 21% said “walking around in the city” and 20% said “visit to museums” (figures & below. When however were asked to say what they were planning to do after the survey, 11% responded “sightseeing”, 11% responded “walking”, 10% said “drinking” and 17% responded

eating(figures 3 & 4). Regarding the accommodation, 57% of travelers stayed on a hotel, 14% on hostel and 12% on friends (figure 5). Furthermore, airplane was used by the majority of tourists (75%) and train follows with 17% (figure 6).

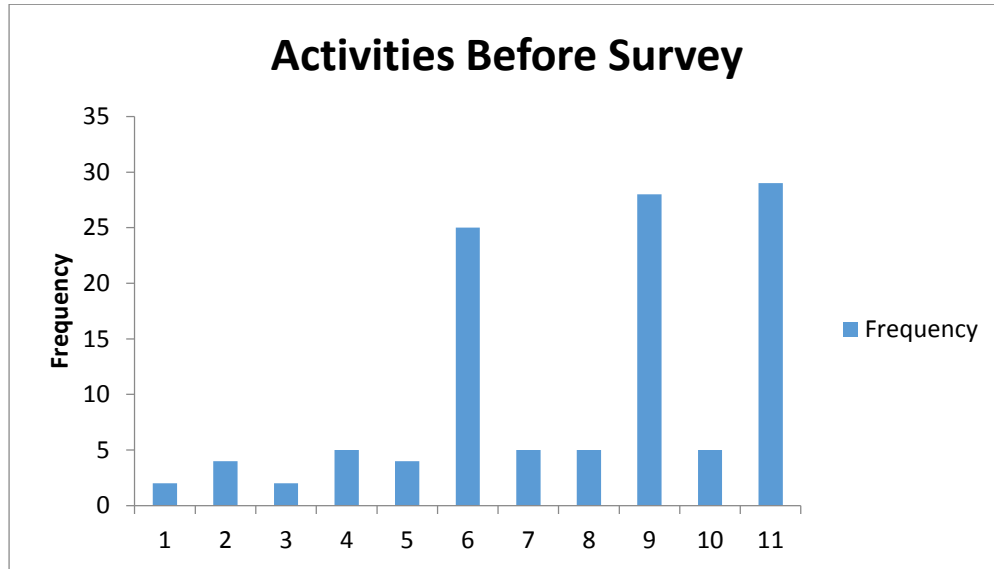


Figure 3 Responses to the question “What did you do?”: 1=boat trip, 2=cycling, 3=debating, 4=drinking, 5=eating, 6=visit museum, 7=relaxing, 8=shopping, 9=sightseeing, 10= transport, 11=walking around the city

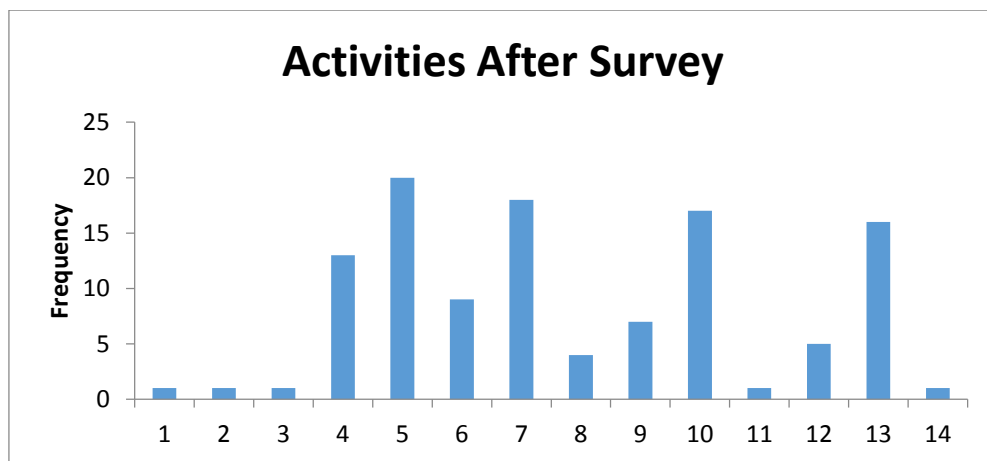


Figure 4: Responses to the question “What are you going to do?”: 1=boat trip, 2=clubbing, 3=debating, 4=drinking, 5=eating, 6=visit museum, 7=relaxing, 8=rest, 9=shopping, 10=sightseeing, 11= transport, 12=sport event attendance, 13=walking around the city, 14= visit zoo

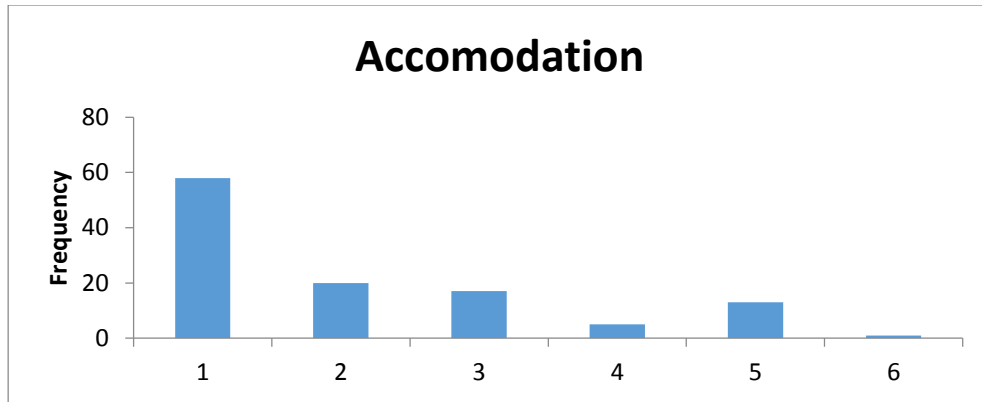


Figure 5: Accommodation frequency: 1=Hotel, 2=Hostel, 3=Stay to a friend, 4=Couch surfing, 5=rental apartment, 6=camping

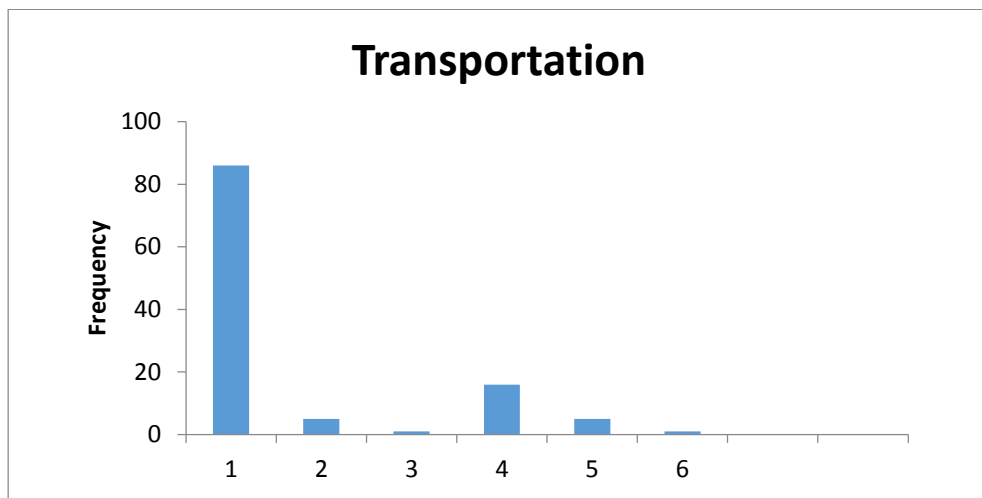


Figure 6: Transportation frequency: 1=airplane, 2=bus, 3=ferry boat/cruise ship, 4=Train, 5=car, 6=bicycle

Lastly, it is worth having a look at the response given by the individuals regarding their feelings, happiness as well as their mood. Table 7 below, summarizes the descriptive statistics of the responses. As we can see in the table, the great majority of travelers feel well during the vacation period. Interestingly, the mean is around 5, almost identical to all variables that were measured on a 7-point Likert scale. The standard deviation is also similar and close to unity, giving an indication about the homogeneity of the sample.

	<i>happy 1</i>	<i>happy 2</i>	<i>happy 3</i>	<i>peaceful</i>	<i>calms</i>	<i>excitement</i>	<i>enthusiasm</i>	<i>Duration Of trip</i>	<i>age</i>	<i>mood</i>
Mean	5.7	5.6	5.8	5.8	5.8	5.3	5.4	7.5	29.5	7.9
Median	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	28.0	8.0
Mode	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	24.0	8.0
St. Deviation	1.0	1.0	0.9	1.1	1.1	1.2	1.3	3.2	9.3	1.5
Kurtosis	2.4	0.7	0.4	3.3	3.1	-0.1	-0.2	-0.7	5.6	-0.4
Skewness	-1.2	-0.9	-0.8	-1.5	-1.3	-0.6	-0.5	0.1	1.7	-0.3
Range	5.0	5.0	4.0	6.0	6.0	5.0	5.0	12.0	70.0	6.0
Min	2.0	2.0	3.0	1.0	1.0	2.0	2.0	2.0	3.0	4.0
Max	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	73.0	10.0

Table 6: Descriptive statistics

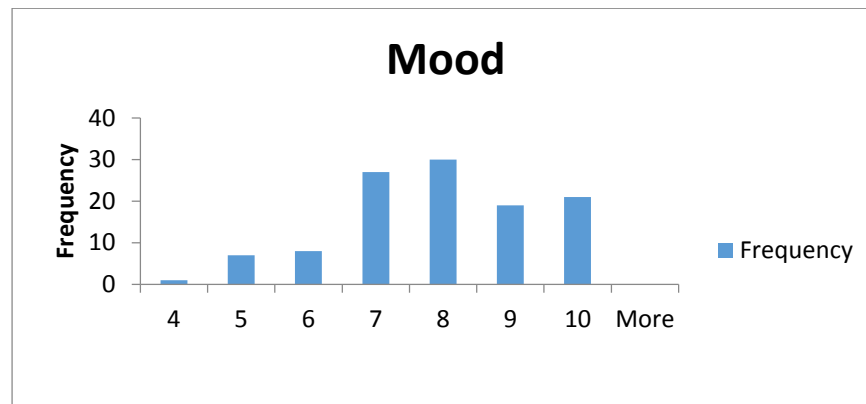


Figure 7: Mood self-reported rates Histogram

According to the histogram in the figure 7, the mood of the travelers is relatively high. 57 out of 114 participants reported 7 or 8 and the highest response was given 21 times. Table 8 shows in detail the frequency distribution of the responses. It is clearly seen that most travelers score extremely high in all attributes. The most interesting insight is that in some cases, the peacefulness is very close to calmness while excitement is very close enthusiasm. Figures 8-11 provide with a visual representation of the frequency distribution.

<i>Frequency Distribution of the responses</i>					
<i>Resp onse</i>	<i>Peacefulness</i>	<i>Calmness</i>	<i>Excitement</i>	<i>Enthusiasm</i>	<i>Happiness-3 questions</i>
1	1	1	0	0	0
2	1	1	4	4	3
3	2	1	4	2	5
4	9	9	25	26	36
5	20	28	23	23	67
6	53	44	43	35	175
7	29	29	16	24	58

Table 9: Frequency distribution of the responses

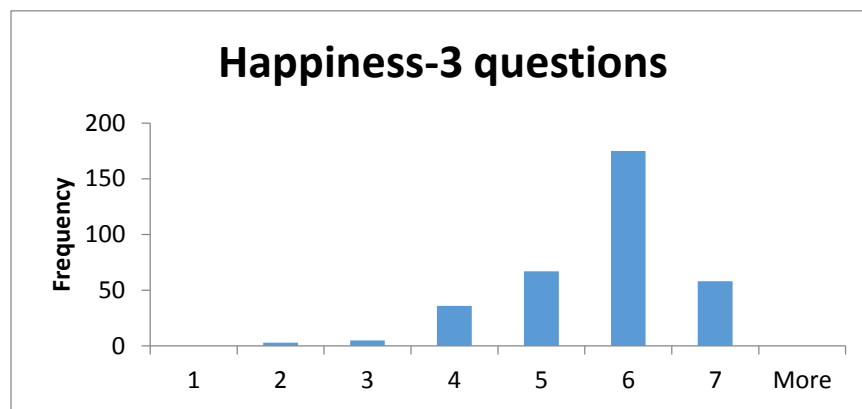


Figure 8: Happiness frequency distribution



Figure 9: Peacefulness frequency distribution

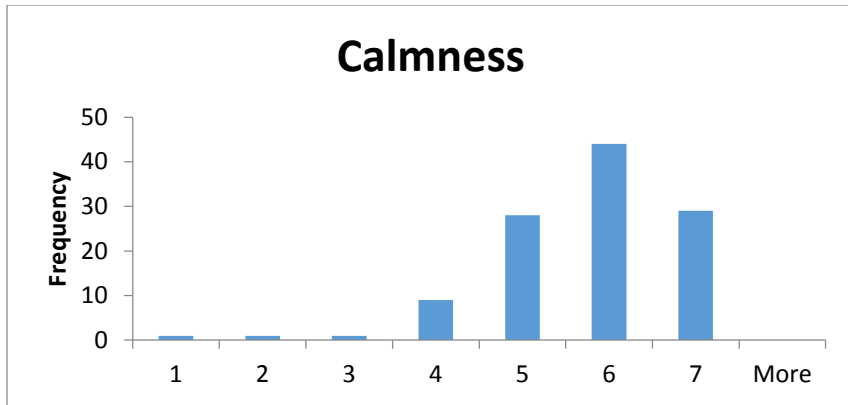


Figure 10: Calmness frequency distribution

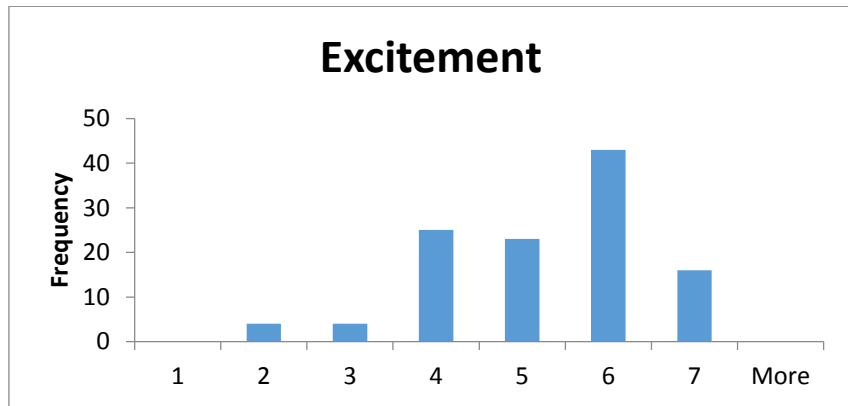


Figure 11: Excitement frequency distribution

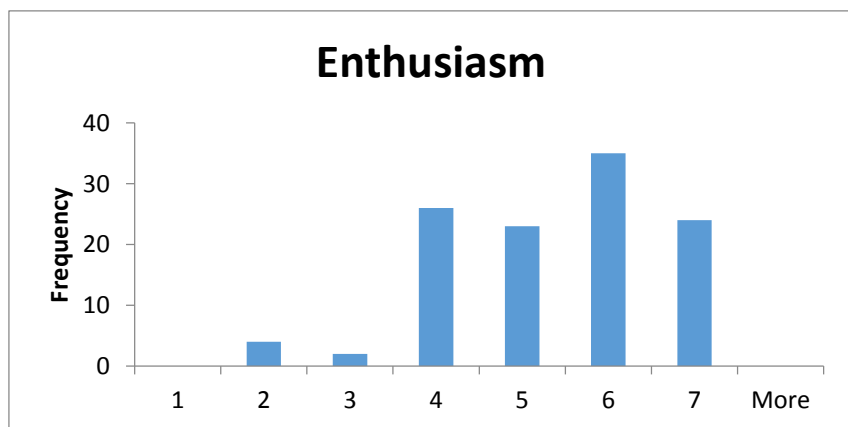


Figure 12: Enthusiasm frequency distribution

6.2 Statistical Analysis

The first statistical test we implemented is a One-way analysis of variance to examine whether any difference in mood between the West and East group exists. Our null hypothesis is that the samples come from two populations with equal means while the alternative opposes this notion. Therefore, we have:

$H_0: \mu_{\text{moodeast}} = \mu_{\text{moodwest}}$ versus

$H_1: \text{the means are different}$

Anova: Single Factor						
SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
moodeast	57	435	7.631579	1.951128		
moodwest	57	471	8.263158	2.161654		
ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F critical</i>
Between Groups	11.36842	1	11.36842	5.528336	0.020459	3.925834
Within Groups	230.3158	112	2.056391			
Total	241.6842	113				

Table 10: One way Anova-mood differences between Easterns and Westerns

According to table 8, the value F (5.5) is higher than the F critical therefore, we reject the null hypothesis of equal means and we conclude that there is a statistical difference in mood levels. We repeated the same analysis for the average happiness and found no difference between tourists from West and East (appendix table 22).

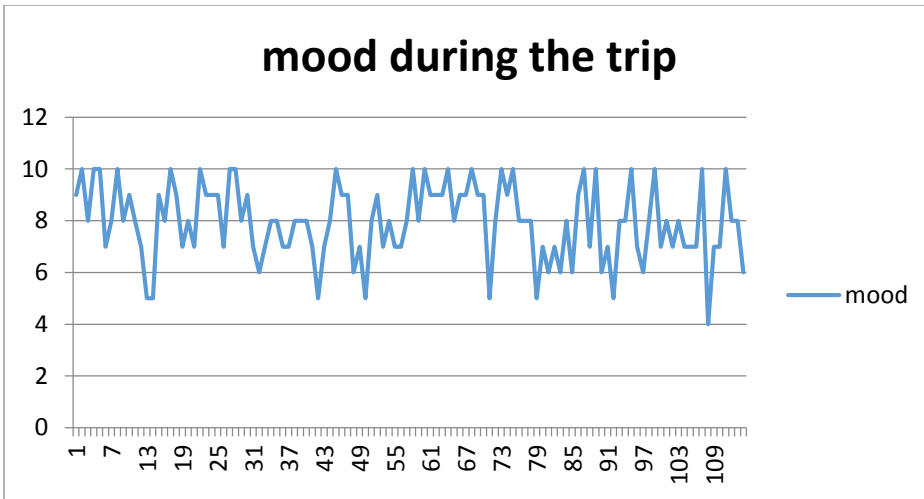


Figure 13: Time line of the mood during the trip.

In accordance with image 8, the level of mood is quite erratic. The mood scores were sorted from earliest to latest, and as we can see, the minimum and maximum scores exist in both, the travelers that are in the beginning as well the tourists that are in the end of their trip. The next image provides a visual representation of the relation between mood scores and duration of trip.

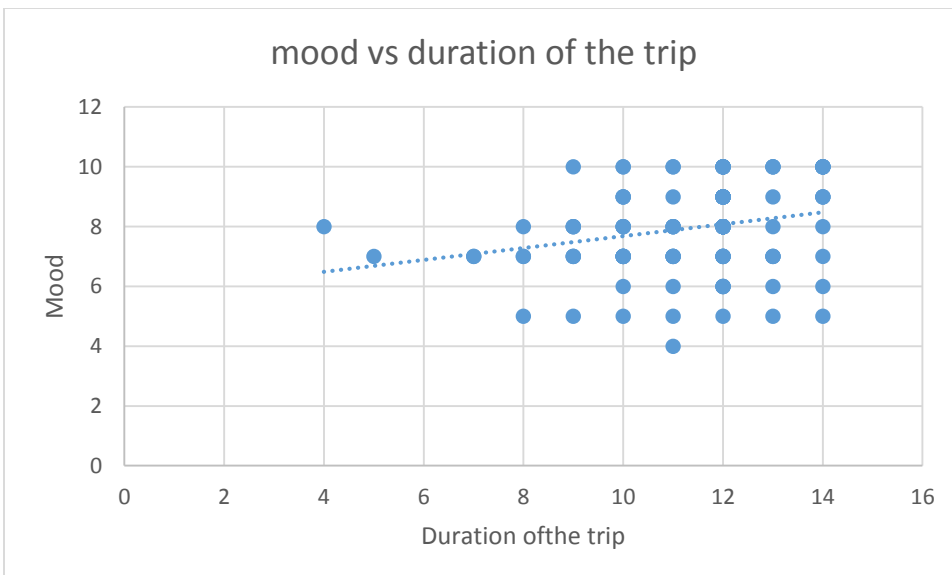


Figure 14: Scatterplot showing the variation of mood due to the duration of the trip

As figure 14 shows, mood slightly but steadily increases with the length of the trip. Vacations longer than 10 days correspond to mood of 8 or more. Nevertheless, the greatest possible score was given by tourists who attended two-day trips as well. Furthermore, we plotted “average happiness” against “duration of the trip”. As we can see easily in the image 15 below, there is an upward trend, steeper than the one between mood and duration. Nevertheless, duration of the trip correlates a bit more to mood than to happiness, as we can see in the table 11. The interesting insight is that the correlation between happiness and mood is less than 0.5. This is a clear indication that travelers separate happiness and mood. One potential reason is that in the questions about happiness, respondents focus on their life while in the question about mood they were “nudged” to take into account their vacations. Since “mood” was the last question, the participants answered first questions about their vacations, for instance means of transportation and activities. In contrast, questions about happiness were in the very beginning of the questionnaire. Subsequently, the order and the placement of the questions at the two extremes may play a role on the answers given.

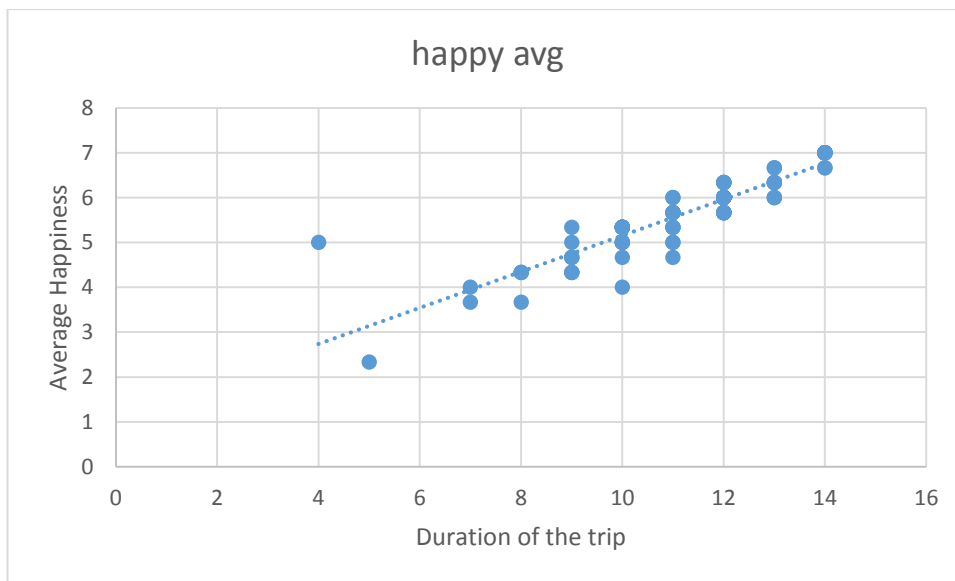


Figure 15: Scatterplot of the relationship between duration of the trip and average happiness

	<i>Mood</i>	<i>Duration the trip</i>	<i>Average Happiness</i>
mood	1		
duration_trip	0.056066	1	
happy avg	0.395042	0.04739914	1

Table 11: Correlations between mood, duration of the trip and average happiness

6.3 Econometric analysis

6.3.1 Description of the variables and the specifications employed

Besides the descriptive analysis elaborated on the previous sections, we implemented econometric analysis to test the main research questions of the paper. 8 variables were in the econometric models:

1) Happinessavg: This was calculated using the average value of the responses given to three questions related to happiness: *"In general I consider myself happy"*, *"taking all things together I consider my-self happy"* and *"compared to most of my peers I consider my-self happy"*. The participants rate themselves on this metric by responding on a scale from 1 (totally disagree) to 7 (totally agree).

2) Enthusiasm: The participants rate themselves on this metric by responding in the question *"I feel enthusiastic today"* on a scale from 1 (totally disagree) to 7 (totally agree).

3) Excitement: The participants rate themselves on this metric by responding in the question *"I feel excited today"* on a scale from 1 (totally disagree) to 7 (totally agree).

4) Peacefulness: The participants rate themselves on this metric by responding in the question *"I feel peaceful today"* on a scale from 1 (totally disagree) to 7 (totally agree).

5) Calmness: The participants rate themselves on this metric by responding in the question *"I feel calm today"* on a scale from 1 (totally disagree) to 7 (totally agree).

6) West: This is a dummy variable and corresponds to the nationality of the participant. It takes the value 1 if the individual comes from one of the following countries: The UK, The USA, South America, The Netherlands, Spain, Italy, Germany, Bulgaria, Croatia, France, Belgium

Alternatively, the dummy variables takes the value "0" if the individual comes from one of the below countries: China, Hong Kong , South Korea, North Korea, Iraq, Egypt, India, Indonesia, Singapore, Australia.

7) Age: This is a continuous variable and shows the age of the respondent.

8) Male: This is a dummy variable and takes the value "1" if the respondent is male, 0 otherwise.

9) Duration: This is a continuous variable and measure the number of dates the vacation lasted.

10) Part of trip: This variable is a ratio (%) and shows in which part of trip the respondent is during the day he fills in the survey. For instance, for an individual being in the second day of a 10-day trip, this value is 20%.

11) Activities: The activities the tourists engage on were divided into four categories:

a) Entertainment: These include activities like “boat trip” or “drinking” whose purpose is in general to give a short lived pleasure.

b) Educative: These include “visit to museums” since they fulfil higher order needs

c) Necessities: This category encompass activities like “Transport to airport” or “eating” since they describe a need that has to be satisfied without considering alternatives

d) Neutral: These are the activities “sightseeing” and “walking around the city”. These are neither educative nor entertaining, however, they may provide mental feedback and also give lasting pleasure through the process of memories creation.

Since they are nominal we use 3 dummy variables to examine their potential impact. For the activities the tourists had done before the survey (BS), we have the following specification:

BS_ Entertainment: It takes the value 1 if the activity is related to entertainment, for example drinking or shopping, 0 otherwise.

BS_ Educative: It takes the value 1 if the activity refers to “visiting museum(s)”, 0 otherwise.

BS_ Necessities: It takes the values 1 if the activity is refers to something that has to be done, 0 otherwise.

The reference category, is the neutral. Consequently, the coefficient of the above 3 dummy variables is going to show their impact relative to the impact of the neutral category.

Similarly, we estimated the exact same models using the “AS-After Survey activities” instead of the BS dummies. With a few exceptions the other coefficients did not change significantly. The results that are being displayed on the next section (6.3.2) refer to the results of the first four models and only the coefficients of the three dummies AS_ Entertainment, AS_ Educative, and AS_ Necessity correspond to the models 4 to 8.

The hypothesis as well as the exact specification are elaborated below.

H_{1a}: Happiness metrics are associated more with calmness and peacefulness for tourists from East while they are associated more with feelings of enthusiasm and excitement for tourists from West.

To test this hypothesis, we run a regression using the following equation:

$$\text{Happy_avg} = b_0 + b_1 \text{enthusiasm} + b_2 \text{excitement} + b_3 \text{peacefulness} + b_4 \text{calmness} + b_5 \text{age} + b_6 \text{gender} + b_7 \text{west} * \text{enthusiasm} + b_8 \text{west} * \text{excitement} + b_9 \text{west} * \text{peacefulness} + b_{10} \text{west} * \text{calmness} + b_{11} \text{duration} + b_{12} \text{duration} * \text{west} + b_{13} \text{BS_ Entertainment} + b_{14} \text{BS_ Educative,} + b_{15} \text{BS_ Necessity} + e$$

Since “Happy_avg” is the response given in the three questions about happiness, we run an Ordinary Least Square model. This variable is being treated as continuous.

H_{1b}: The mood metric is associated more with calmness and peacefulness for tourists from East while they are associated more with feelings of enthusiasm and excitement for tourists from West.

“Mood” is an ordinal variable with a minimum of 4 and a maximum of 10. For this reason, we calibrated an Ordinal Logit model using the following equation:

$$\text{Mood} = b_0 + b_1 \text{enthusiasm} + b_2 \text{excitement} + b_3 \text{peacefulness} + b_4 \text{calmness} + b_5 \text{age} + b_6 \text{gender} + b_7 \text{west} * \text{enthusiasm} + b_8 \text{west} * \text{excitement} + b_9 \text{west} * \text{peacefulness} + b_{10} \text{west} * \text{calmness} + b_{11} \text{duration} + b_{12} \text{duration} * \text{west} + b_{13} \text{BS_ Entertainment} + b_{14} \text{BS_ Educative,} + b_{15} \text{BS_ Necessity} + e$$

The coefficients b_7, b_8, b_9 and b_{10} indicate the impact of the interaction terms. For instance, b_7 implies the difference of “enthusiasm” in impact for Western compared to Eastern tourists.

The second hypothesis is formulated as follows:

H_{2a}: Happiness and mood metrics are associated more with feelings of excitement and enthusiasm for younger compared to older tourists.

Following the same line of reasoning, we use a similar specification for the next two (2) equations:

$$\text{Happy_avg} = b_0 + b_1 \text{enthusiasm} + b_2 \text{excitement} + b_3 \text{peacefulness} + b_4 \text{calmness} + b_5 \text{age} + b_6 \text{gender} + b_7 \text{age} * \text{enthusiasm} + b_8 \text{age} * \text{excitement} + b_9 \text{age} * \text{peacefulness} + b_{10} \text{age} * \text{calmness} + b_{11} \text{duration} + b_{12} \text{duration} * \text{age} + b_{13} \text{BS_ Entertainment} + b_{14} \text{BS_ Educative,} + b_{15} \text{BS_ Necessity} + e$$

Lastly,

H_{2b}: Mood metrics are associated more with feelings of excitement and enthusiasm for younger compared to older tourists.

$$\text{Mood} = b_0 + b_1 \text{enthusiasm} + b_2 \text{excitement} + b_3 \text{peacefulness} + b_4 \text{calmness} + b_5 \text{age} + b_6 \text{gender} + b_7 \text{age} * \text{enthusiasm} + b_8 \text{age} * \text{excitement} + b_9 \text{age} * \text{peacefulness} + b_{10} \text{age} * \text{calmness} + \text{duration} + \text{duration} * \text{age} + b_{13} \text{BS_ Entertainment} + b_{14} \text{BS_ Educative} + b_{15} \text{BS_ Necessity} + e$$

Here, the coefficient b_7 shows how the impact of “enthusiasm” on the dependent variable is modified if age increases by one (1).

6.3.2 Results

In this point of the paper, we put our assumptions under test using four (4) regressions. We used ordinary least squares for the 1st and 3rd model and ordinal Logit regression for the 2nd and 4th model. We estimated these model twice: In the first four, we included the dummies that correspond to activities before the survey (BS). Full results can be found in appendix in tables 1,5,7 and 11. In the next four estimations, we did not include BS but we included only AS (after survey activities). The full results can also be found on appendix in tables 13,17,19,24. Table 12 below show the results from the first four regressions and from the second regressions we included only the results for the 3 dummy coefficients. With the exception of the variable calmness which is significant in the first version of the second model, and insignificant in the second version, all the other values are approximately the same. The table below shows the independent and dependent variables we used in our analysis as well as the resulted coefficients:

		Model 1 OLS		Model 2 Ordinal Logit		Model 3 OLS		Model 4 Ordinal Logit	
Independent Variables		Dependent Variable: Happiness_avg		Dependent Variable: Mood		Dependent Variable: happiness_avg		Dependent Variable: Mood	
		Coef.	Sign.	Coef.	Sign.	Coef.	Sign.	Coef.	Sign.
Constant		3.7	***	-	-	4.66	***	-	-
Enthusiasm		0.05	No	1.1	***	0.04	No	0.28	No
Excitement		0.12	No	-0.51	*	0.33	No	0.65	No
Calmness		0.11	No	-0.7	**	-0.29	No	-0.9	No
Duration		0.009	No	0.13	No	0.06	No	0.21	No
Duration*West		0.04	No	-0.06	No	-	-	-	-
Duration*age		-	-	-	-	0	No	0	No
Peacefulness		0.02	No	1.5	***	0.33	No	0.48	No
Age		0.005	No	0.01	No	-0.02	No	-0.17	No
Male		0.08	No	0.57	No	0.05	No	0.49	No
West		-1	No	-1.2	No	0.13	No	0.9	**
Part of the trip		-0.56	No	-1.3	No	-0.44	No	-0.8	No
BS Necessity		-0.24	No	-1.3	**	-0.23	No	-1.6	***
Bs Entertainment		-0.15	No	-1.1	**	-0.18	No	-1.29	**
Bs Education		0.3	*	1	**	0.29	No	0.82	*
AS Necessity		-0.08	No	0.64	No	-0.13	No	0.56	No
AS Entertainment		-0.05	No	-0.08	No	-0.06	No	-0.04	No
AS Education		0.13	No	0.5	No	0.04	No	0.25	No
Enthusiasm*age		-	-	-	-	0	No	0.02	No
Excitement*age		-	-	-	-	0	No	-0.03	No
Calmness*age		-	-	-	-	0.01	No	0.01	No
Peacefulness*age		-	-	-	-	0.01	No	0.02	No
Enthusiasm*West		0.09	No	0.18	No	-	-	-	-
Excitement*West		-0.06	No	0.32	No	-	-	-	-
Calmness*West		-0.02	No	1	**	-	-	-	-
Peacefulness*West		0.14	No	-0.99	*	-	-	-	-
Model Summary Statistics	R ²	0.34		0.25		0.34		0.24	
	Adjusted R ²	0.22		-		0.22		-	

Table 12: Results of the econometric analysis, ***=significant at the 0.01 confidence interval, **=significant at the 0.05 confidence interval, * significant at the 0.1 confidence interval.

The results in table 12 allow us to derive some useful suggestions. We will interpret the

results model by model and we will use some combined insights to conclude.

Model 1: According to table 11, none of the explanatory variables are significant. Therefore, we do not have any evidence supporting the notion that Happiness is affected by any of the feelings- enthusiasm, excitement, calmness, peacefulness. On top of that, the interaction terms do not seem to have any explanatory power. Consequently, H_{1a} is not supported.

The same holds for the activities the tourists engaged on. The only exception is the “BS_Educative” activity which it is marginally significant at 0.10 level and has small positive coefficient. This implies that travelers who visited a museum before the survey were slightly happier than the ones who engaged on a less attentive activity like sightseeing.

Model 2: Here, “mood” is the dependent variable. In contrast to the previous model, many explanatory variables are statistically significant. “Enthusiasm” and “Peacefulness” are highly significant at 0.01 level and their beta coefficient are very large in magnitude, (1.1 and 1.5 respectively). This clearly show that these two feelings enhance the mood of the tourists. The confusing part here is that “calmness” and “excitement” are, to a lesser extent, also significant but their impact is negative. A possible interpretation is that the participants perceive peacefulness and calmness as to distinct feelings. The same would hold for excitement and enthusiasm.

By investigating the interaction terms, we see that “westcalmness” is positive, the coefficient is 1, and it marginally significant at 0.05 level This is evidence against H_{1b} ; the interpretation is that calmness is more effective on helping Western travelers to be in a better mood more than Eastern ones. On the other hand, “westpeacefulness” is also, significant, its coefficient is also unity but the sign is negative: Although this evidence supports H_{1b} , we need to stay cautious about the interpretation. Calmness may help vacation-takers from East to be on better mood than Western one but the opposite is true for peacefulness. As we saw in the paragraph above, the respondents interpret these two feeling to be distinguishable from each other. The other interaction terms are not significant at all, consequently, we do not have evidence supporting H_{1b} and on top of that we have a piece of evidence that rejects this hypothesis.

Before proceeding to the 3rd and 4th model, it is worth analyzing briefly the results for the activities. All of the 4 dummy variables are significant at 0.05 level. Activities classified as necessities or entertaining, have a strong negative impact on mood. It is not difficult to assume that tourists who ate or traveled just before the survey, may be in a worse mood. The indication that entertainment worsens the mood perhaps seems counterintuitive. A potential reason, is that compared to sightseeing or exploring the area, a tourist feels he has wasted some time in things that can be done in the routine.

Contrary to the “before survey activities”, the dummy variables of the “after-survey activities” are all insignificant indicating that the mood of the respondents was influenced mainly by what they did and not at all by what they were planning to do.

The above framework also explains why educative activities represent an important variable with respect to both, significance and magnitude ($p=0.03$ and $b=1$). Vacationers that visited museum are benefited probably because they gain knowledge and have inputs for conversations. This result is consistent with “The Makes Me Smarter Experience” (Youngman, 2010) according to it, consumers express a desire to be informed about certain issues when the browse corporate webpages. In spite of the fact that this is a concept employed by professional content creators who want to enhance engagement of consumers with the ecosystem of a company, we have a piece of evidence supporting its adoption in the travel industry.

Model 3: Similarly to the first equation, none of the variables is statistically significant. As we can see in table 11, their coefficients are also extremely low showing that H_{3b} is not supported as well.

Model 4: In this model none of the variables is statistically significant except for “west”. *Ceteris paribus*, tourists from West seem to be at a better mood compared to their Eastern counterparts. This effect is moderate (0.2) and cannot help us evaluate H_{2b} which is also not supported.

Remarkably, the dummies representing the activities are almost identical to the ones in model 2: Entertaining and necessary activities lead to not very good mood while educative ones is a mood enhancer.

Summary of the 4 models: The first two models correspond to H_1 and the next two correspond to H_2 . Therefore, it is important to examine their results from the perspective of the 2 hypothesis:

H_{1a} : Happiness metrics are associated more with calmness and peacefulness for tourists from East while they are associated more with feelings of enthusiasm and excitement for tourists from West (model 1).

H_{1b} : Mood metrics are associated more with calmness and peacefulness for tourists from East while they are associated more with feelings of enthusiasm and excitement for tourists from West (model 2).

It is difficult to reach a conclusion based on the previous analysis. The reason is the conflicting results. We have two related independent variables, happiness and mood, that may be interpreted on a different manner or the specification we chose for the first model in inappropriate. Secondly, we have conflicting results among the feelings. Within the second model "Enthusiasm" and "Peacefulness" are feelings that seem to enhance mood and the opposite is true for "calmness" and "excitement". This may imply that indeed travelers perceive excitement to be different than enthusiasm and the same hold for peacefulness and calmness.

Third and most importantly, we have a piece of evidence in favor H_{2b} and one against it. Specifically, "peacefulness" is more effective on enhancing mood for Eastern travelers than Western one. The exact opposite is true for calmness. Besides, we have not any significant result for enthusiasm/excitement. Consequently, one quarter of the hypothesis is supported, one quarter is rejected, and the remaining half does support neither reject H_{2b} .

H_{2a} : Happiness variables correlate more with feelings of excitement and enthusiasm for younger compared to older tourists (3rd model).

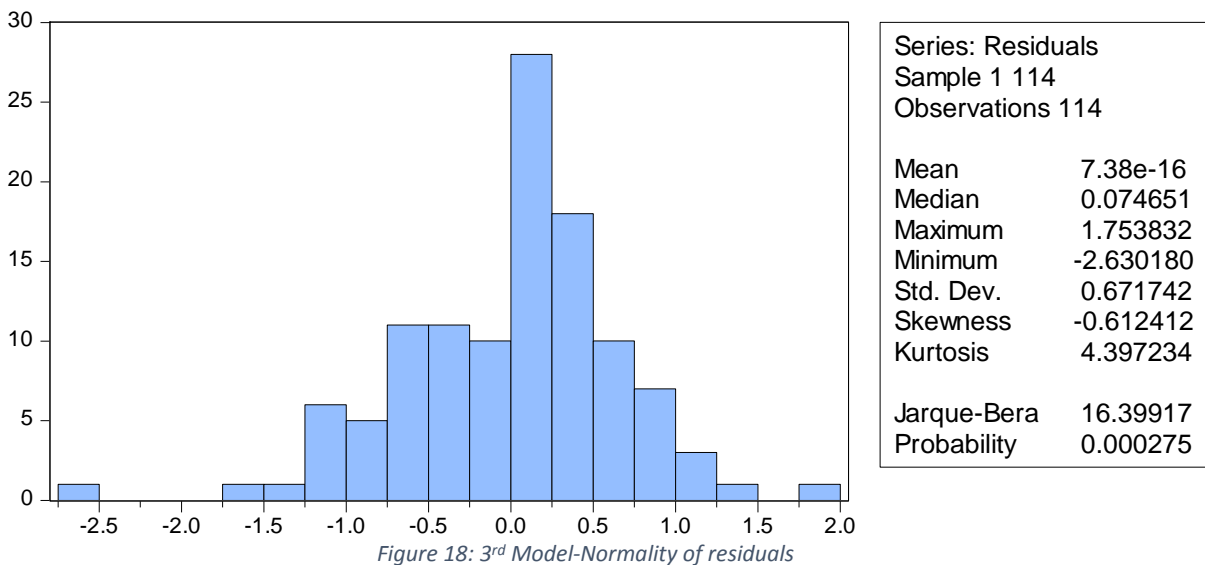
We failed to find any insight differentiating young from older people. Happiness is not affected by the stage of life an individual is in. The interaction terms of age and feelings do not add any explanatory power to the model. We may conclude that we have not find any evidence supporting H_{2a}

H_{2b}: Happiness variables correlate more with feelings of excitement and enthusiasm for younger compared to older tourists (3rd model).

Similarly to the previous model, the coefficients representing feelings and interaction terms are not significant. Consequently, H_{2b} is not supported.

6.3.3 Diagnostics

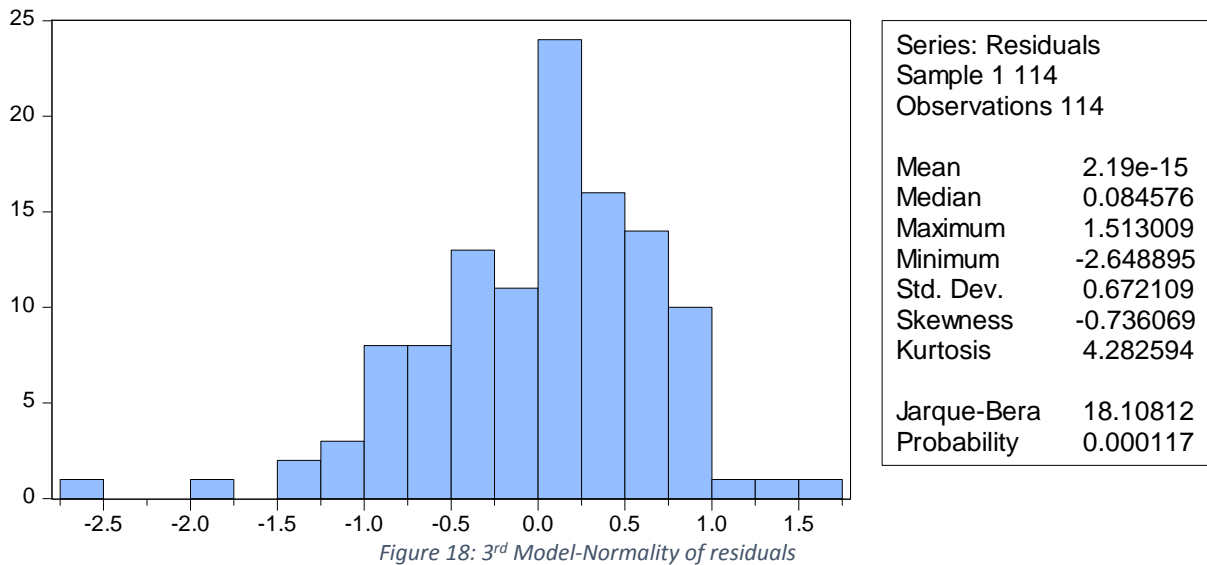
Since we implemented an econometric analysis using OLS in the first and third model, it is necessary to examine the residuals for normality. With regards to the first model, as we can see in image below, Kurtosis is 4.3 and Skewness is -0.6. The Jarque-Bera statistic is quite high and the p-value equals 0 leading us to reject the null hypothesis that the residuals are normally distributed.



We also run the Breusch-Pagan test for heteroskedasticity (Appendix table 4). This tests the null hypothesis that the error variances are all equal while the alternative is that the error variances are a multiplicative function of one or more variables. The p-value (0.04) is slightly

lower than 0.05 indicating that the null hypothesis of homoscedasticity is being marginally rejected (appendix table 2).

Similarly we examined the residuals and the presence of heteroskedasticity in the 3rd model. The results are almost identical. Skewness and Kurtosis are -0.7 and 4.2 respectively and the Jarque-Bera test rejects the assumption of normally distributed residuals. With regards to Breusch-Pagan test, the p-value is 0.04 and since it is smaller than 0.05 we reject the hypothesis of homoscedasticity (appendix table 8).



Lastly, we run a Wald test to examine whether the four (4) interaction terms add explanatory power to the models. In the first two models, these refer to “west*enthusiasm”, “west*excitement”, “west*peacefulness” and “west*calmness”. In the third and fourth model, we examine “age*excitement”, “age*enthusiasm”, “age*peacefulness” and “age*calmness”. The full results of the Wald tests can be found in appendix in tables 3, 6, 9 and 12.

In this specific test, the null hypothesis is that the coefficients have zero explanatory power. The Wald test resulted in very high p-values (far greater than 0.05) for all specifications showing that the null hypothesis of no significance cannot be rejected. In conclusion, the interaction terms do not improve the performance of models.

6. Conclusion

The purpose of this research paper was to shed light on the perceptions about happiness when vacationing and how these differ among individuals from different age and cultural background. A sample of 114 tourists in The Netherlands- half with a Western and half with an Eastern background- was analyzed for this purpose. We hypothesized that Western tourists feel happier while experience high levels of enthusiasm and excitement. In contrary, our hypothesis about Eastern tourists was that they feel happier when they are in a state of peacefulness and calmness. Regarding age, we hypothesized that young people associate happiness with feelings of excitement and enthusiasm, while older people feel happier when they are in a state of peacefulness and calmness.

With regards to the first hypotheses, we did not manage to find any strong supportive evidence. The only exception is that indeed peacefulness is more effective on helping vacationers from East to be at a better mood. However, this effect may be offset by calmness which turned out to have the exact opposite effect.

Regarding the second hypothesis, we did not find any evidence in favor of the shifting meaning of happiness (Mogilner, et al., 2011). Independently of age, happiness and mood of tourists do not seem to vary between states of peacefulness and excitement, or between states of enthusiasm and excitement. Age did not influence also happiness and mood as an independent variable.

Besides the two hypothesis which were the key motivation factor for this paper, it is worth mentioning other findings that may be of interest to the reader. These results refer to three areas: Cultural background, type of activities and duration of the trip.

The cultural background seems that may indeed play a role but not a crucial one. Tourists from Europe and the USA report slightly higher levels of positive mood. The critical assignment here is to find which attribute plays an important role for that. In the second model, we truly found some evidence suggesting that enthusiasm and peacefulness are two attributes that let tourists be on a better mood. In contrary, calmness and excitement were responsible for the worsening of mood. This is probably an indication that travelers do not equate peacefulness with calmness and excitement with enthusiasm.

Secondly, the activities the tourist engage on seem to be very important predictors but only the ones completed before the survey. Compared to "Sightseeing" and "walking around the city", visiting museums largely enhances mood and happiness. In contrast entertaining activities like drinking and necessary activities like eating worsen them. This is an indication that tourists

do not simply want to have fun and relax, they also want to gain something of value, for example historical knowledge of a destination.

Lastly, duration of the trip does not seem to be an important aspect, at least in our sample. Regarding the “happiness curve” from Nawijn (2010), we found similar results on a sense that mood is high during the medium phase of the vacations. However, every individual of our sample was in the range 40%-60% of his/her vacations, therefore, we cannot compare this result with a group of tourists who were, for instance, in the beginning of their trip.

Limitations and future research

In the previous section, we mentioned that only the Ordinal Logit models gave us some meaningful results. Therefore, the first limitation of the current thesis is that we should probably have used a different specification for the 1st and 3rd model.

Secondly, due to budget restrictions, we were not able to collect a large and representative sample of the populations in questions. We recommend to future researchers to take advantage of the cultural variety that characterizes the tourist industry in The Netherlands.

Third, within the sample, there is not variety of age-groups. Indeed most participants were between the age of 25 and 35, consequently, our sample may extremely biased, taken into account that the travel industry is largely benefitted by retirees, seniors and elders in general.

Lastly, we cannot exclude the possibility that travelers like Germans who are very close to The Netherlands, may not feel as much as tourists as Americans or Asians. We may assume that tourists that came from far away may be influenced by factors like jet-luck or tiredness. A more proper sampling would be with Asians travelling to Europe and Europeans travelling to Asia.

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Appendix

Econometric Tables

Dependent Variable: HAPPY_AVG

Method: Least Squares

Date: 06/15/15 Time: 23:08

Sample: 1 114

Included observations: 114

Variable	Coefficien t	Std. Error	t-Statistic	Prob.
MALE	0.085957	0.150586	0.570819	0.5695
PART_TRIP	-0.566797	0.432846	-1.309467	0.1935
PEACEFUL	0.028935	0.160997	0.179724	0.8577
EXCITEMENT	0.125919	0.129656	0.971171	0.3339
ENTHUSIAST	0.059881	0.126436	0.473608	0.6369
DURATION_WEST	0.059556	0.045311	1.314388	0.1918
DURATION_TRIP	0.005905	0.034181	0.172760	0.8632
CALM	0.112251	0.136901	0.819946	0.4143
BS_NECESSITY	-0.247167	0.244837	-1.009520	0.3153
BS_ENTERTAINMENT	-0.150775	0.217259	-0.693988	0.4894
BS_EDUCATIVE	0.325498	0.184413	1.765051	0.0807
AGE	0.005635	0.008378	0.672659	0.5028
WEST	-0.996627	0.949099	-1.050077	0.2963
WEST_CALNMESS	-0.023170	0.203589	-0.113807	0.9096
WEST_ENTHUSIASM	0.090336	0.178412	0.506334	0.6138
WEST_EXCITEMENT	-0.065080	0.185212	-0.351380	0.7261
WEST_PEACEFULNE SS	0.123851	0.214621	0.577069	0.5652
C	3.778103	0.835451	4.522234	0.0000
R-squared	0.343890	Mean dependent var		5.69005
Adjusted R-squared	0.227704	S.D. dependent var		8
S.E. of regression	0.728796	Akaike info criterion		0.82930
Sum squared resid	50.98985	Schwarz criterion		5
Log likelihood	-115.8984	Hannan-Quinn criter.		2.34909
F-statistic	2.959820	Durbin-Watson stat		5
Prob(F-statistic)	0.000411			2.78112
				6
				2.52443
				2
				1.54121
				8

Table 1: Model 1

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.467801	Prob. F(17,96)	0.1235
Obs*R-squared	23.51829	Prob. Chi-Square(17)	0.1331
Scaled explained SS	28.32918	Prob. Chi-Square(17)	0.0412

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 06/15/15 Time: 23:09

Sample: 1 114

Included observations: 114

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.342405	0.917489	0.373197	0.7098
MALE	-0.385011	0.165373	-2.328140	0.0220
PART_TRIP	0.391544	0.475350	0.823698	0.4122
PEACEFUL	-0.100710	0.176806	-0.569607	0.5703
EXCITEMENT	-0.041254	0.142388	-0.289726	0.7727
ENTHUSIAST	0.000528	0.138852	0.003805	0.9970
DURATION_WEST	-0.080366	0.049761	-1.615057	0.1096
DURATION_TRIP	0.006691	0.037537	0.178259	0.8589
CALM	0.166040	0.150344	1.104403	0.2722
BS_NECESSITY	0.669872	0.268879	2.491355	0.0144
BS_ENTERTAINMENT	0.228298	0.238593	0.956851	0.3410
BS_EDUCATIVE	-0.043153	0.202521	-0.213077	0.8317
AGE	-0.005557	0.009200	-0.604025	0.5473
WEST	1.741091	1.042297	1.670436	0.0981
WEST_CALNMESS	-0.302489	0.223580	-1.352932	0.1793
WEST_ENTHUSIASM	-0.283850	0.195932	-1.448720	0.1507
WEST_EXCITEMENT	0.249102	0.203399	1.224695	0.2237
WEST_PEACEFULNESS	0.141602	0.235696	0.600782	0.5494
R-squared	0.206301	Mean dependent var	0.447279	
Adjusted R-squared	0.065750	S.D. dependent var	0.828047	
S.E. of regression	0.800362	Akaike info criterion	2.536434	
Sum squared resid	61.49559	Schwarz criterion	2.968465	
Log likelihood	-126.5767	Hannan-Quinn criter.	2.711771	
F-statistic	1.467801	Durbin-Watson stat	1.917851	
Prob(F-statistic)	0.123460			

Table 2: Model 1 Heteroskedasticity test

Variance Inflation Factors

Date: 06/15/15 Time: 23:10

Sample: 1 114

Included observations: 114

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
MALE	0.022676	2.646959	1.207385
PART_TRIP	0.187355	9.545767	1.139640
PEACEFUL	0.025920	193.7864	6.752006
EXCITEMENT	0.016811	105.1734	5.558484
ENTHUSIAST	0.015986	103.5655	5.648034
DURATION_WEST	0.002053	15.61248	9.077829
DURATION_TRIP	0.001168	16.66904	2.596682
CALM	0.018742	136.8732	4.889546
BS_NECESSITY	0.059945	1.580040	1.386000
BS_ENTERTAINMENT	0.047201	1.421880	1.222318
BS_EDUCATIVE	0.034008	1.664725	1.285051
AGE	7.02E-05	14.40167	1.284466
WEST	0.900789	96.66856	48.33428
WEST_CALNMESS	0.041448	155.2914	80.74659
WEST_ENTHUSIASM	0.031831	106.4940	56.94788
WEST_EXCITEMENT	0.034304	109.4056	58.41806
WEST_PEACEFULNESS	0.046062	177.9541	93.09102
C	0.697978	149.8076	NA

Table 3 Model 1 VIF Test

Wald Test:

Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	0.255223	(4, 96)	0.9058
Chi-square	1.020891	4	0.9066

Null Hypothesis: $C(1)=0, C(2)=0, C(3)=0, C(4)=0$

Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	-0.023170	0.203589
C(2)	0.090336	0.178412
C(3)	-0.065080	0.185212
C(4)	0.123851	0.214621

Restrictions are linear in coefficients.

Table 4: Model 1 Wald test

Dependent Variable: MOOD
 Method: ML - Ordered Logit (Quadratic hill climbing)
 Date: 06/15/15 Time: 23:19
 Sample: 1 114
 Included observations: 114
 Number of ordered indicator values: 7
 Convergence achieved after 8 iterations
 Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
WEST_PEACEFULNESS	-0.997872	0.563444	-1.771023	0.0766
WEST_CALNMESS	1.027812	0.530877	1.936062	0.0529
WEST_ENTHUSIASM	0.189983	0.457163	0.415570	0.6777
WEST_EXCITEMENT	0.328528	0.456491	0.719680	0.4717
WEST	-1.190416	2.468434	-0.482255	0.6296
PEACEFUL	1.579958	0.431788	3.659103	0.0003
PART_TRIP	-1.308700	1.153644	-1.134405	0.2566
MALE	0.575406	0.391623	1.469288	0.1418
EXCITEMENT	-0.517444	0.320497	-1.614504	0.1064
ENTHUSIAST	1.183059	0.348600	3.393741	0.0007
DURATION_WEST	-0.065935	0.115894	-0.568929	0.5694
DURATION_TRIP	0.130277	0.088485	1.472304	0.1409
CALM	-0.799130	0.354179	-2.256290	0.0241
BS_NECESSITY	-1.368385	0.616824	-2.218435	0.0265
BS_ENTERTAINMENT	-1.112289	0.560000	-1.986232	0.0470
BS_EDUCATIVE	1.077664	0.502434	2.144885	0.0320
AGE	0.029942	0.022620	1.323711	0.1856
Limit Points				
LIMIT_5:C(18)	3.129257	2.446569	1.279039	0.2009
LIMIT_6:C(19)	6.072651	2.227225	2.726555	0.0064
LIMIT_7:C(20)	7.174506	2.224830	3.224744	0.0013
LIMIT_8:C(21)	9.329677	2.292906	4.068932	0.0000
LIMIT_9:C(22)	11.33689	2.378507	4.766390	0.0000
LIMIT_10:C(23)	12.88234	2.429426	5.302629	0.0000
Pseudo R-squared	0.255164	Akaike info criterion	2.948975	
Schwarz criterion	3.501015	Log likelihood	-145.0916	
Hannan-Quinn criter.	3.173017	Restr. log likelihood	-194.7966	
LR statistic	99.41006	Avg. log likelihood	-1.272733	
Prob(LR statistic)	0.000000			

Table 5: Model 2

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	1.536372	(4, 91)	0.1983
Chi-square	6.145487	4	0.1885

Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	-0.997872	0.56344 4
C(2)	1.027812	0.53087 7
C(3)	0.189983	0.45716 3
C(4)	0.328528	0.45649 1

Restrictions are linear in coefficients.

Table 6: Model 2-Wald test

Dependent Variable: HAPPY_AVG

Method: Least Squares
Date: 06/15/15 Time: 23:21
Sample: 1 114
Included observations: 114

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE_CALMNESS	0.013069	0.014365	0.909809	0.3652
AGE_ENTHUSIASM	0.001616	0.010857	0.148842	0.8820
AGE_EXCITEMENT	-0.006683	0.010830	-0.617106	0.5386
AGE_PEACEFULNESS	-0.007686	0.013946	-0.551106	0.5828
AGE	-0.026215	0.056551	-0.463557	0.6440
WEST	0.130829	0.154343	0.847653	0.3987
BS_EDUCATIVE	0.290108	0.188460	1.539364	0.1270
BS_ENTERTAINMENT	-0.186855	0.215343	-0.867710	0.3877
BS_NECESSITY	-0.233832	0.236896	-0.987068	0.3261
CALM	-0.297787	0.423975	-0.702369	0.4841
DURATION_TRIP	-0.064346	0.096001	-0.670260	0.5043
DURATION_AGE	0.003576	0.003270	1.093582	0.2769
ENTHUSIAST	0.040184	0.355636	0.112991	0.9103
EXCITEMENT	0.333187	0.350029	0.951884	0.3435
MALE	0.058909	0.152092	0.387325	0.6994
PART_TRIP	-0.440084	0.434397	-1.013092	0.3136
PEACEFUL	0.332701	0.396985	0.838068	0.4041
C	3.946329	1.675504	2.355308	0.0205
R-squared	0.343174	Mean dependent var		5.690058
Adjusted R-squared	0.226861	S.D. dependent var		0.829305
S.E. of regression	0.729194	Akaike info criterion		2.350185
Sum squared resid	51.04547	Schwarz criterion		2.782216
Log likelihood	-115.9605	Hannan-Quinn criter.		2.525522
F-statistic	2.950441	Durbin-Watson stat		1.626155
Prob(F-statistic)	0.000427			

Table 7: Model 3

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.485691	Prob. F(17,96)	0.1164
Obs*R-squared	23.74523	Prob. Chi-Square(17)	0.1265
Scaled explained SS	27.63735	Prob. Chi-Square(17)	0.0494

Test Equation:
 Dependent Variable: RESID^2
 Method: Least Squares
 Date: 06/15/15 Time: 23:23
 Sample: 1 114
 Included observations: 114

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.225816	1.807436	1.784747	0.0775
AGE_CALMNESS	0.014946	0.015496	0.964524	0.3372
AGE_ENTHUSIASM	-0.011817	0.011712	-1.009000	0.3155
AGE_EXCITEMENT	0.016684	0.011683	1.428121	0.1565
AGE_PEAFCFULNES S	0.000744	0.015044	0.049467	0.9606
AGE	-0.074880	0.061004	-1.227461	0.2227
WEST	-0.051951	0.166496	-0.312025	0.7557
BS_EDUCATIVE	-0.114758	0.203299	-0.564478	0.5737
BS_ENTERTAINMEN T	0.178576	0.232300	0.768732	0.4439
BS_NECESSITY	0.752414	0.255549	2.944300	0.0041
CALM	-0.337612	0.457359	-0.738178	0.4622
DURATION_TRIP	0.120971	0.103561	1.168114	0.2457
DURATION_AGE	-0.006160	0.003528	-1.746256	0.0840
ENTHUSIAST	0.246107	0.383639	0.641508	0.5227
EXCITEMENT	-0.415099	0.377590	-1.099336	0.2744
MALE	-0.307494	0.164068	-1.874192	0.0639
PART_TRIP	-0.037893	0.468603	-0.080864	0.9357
PEACEFUL	-0.100251	0.428245	-0.234097	0.8154
R-squared	0.208291	Mean dependent var		0.44776
Adjusted R-squared	0.068093	S.D. dependent var		0.81484
S.E. of regression	0.786612	Akaike info criterion		2.50177
Sum squared resid	59.40077	Schwarz criterion		2.93380
Log likelihood	-124.6012	Hannan-Quinn criter.		2.67711
F-statistic	1.485691	Durbin-Watson stat		1.94688
Prob(F-statistic)	0.116404			3

Table 8: Model 3-Heteroskedasticity test

Variance Inflation Factors

Date: 06/15/15 Time: 23:23

Sample: 1 114

Included observations: 114

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
AGE_CALMNESS	0.000206	1454.155	184.3075
AGE_ENTHUSIASM	0.000118	702.8633	88.52743
AGE_EXCITEMENT	0.000117	662.0949	75.32666
AGE_PEACEFULNESS	0.000194	1405.428	175.3782
AGE	0.003198	655.5007	58.46321
WEST	0.023822	2.553659	1.276830
BS_EDUCATIVE	0.035517	1.736695	1.340607
BS_ENTERTAINMENT	0.046373	1.395392	1.199548
BS_NECESSITY	0.056120	1.477598	1.296138
CALM	0.179755	1311.336	46.84506
DURATION_TRIP	0.009216	131.3482	20.46126
DURATION_AGE	1.07E-05	135.2817	26.78356
ENTHUSIAST	0.126477	818.4819	44.63661
EXCITEMENT	0.122520	765.6875	40.46710
MALE	0.023132	2.697221	1.230311
PART_TRIP	0.188701	9.603852	1.146575
PEACEFUL	0.157597	1176.963	41.00834
C	2.807314	601.8800	NA

Table 9: Model 3- VIF

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	0.402148	(4, 96)	0.8067
Chi-square	1.608590	4	0.8072

Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	0.013069	0.014365
C(2)	0.001616	0.010857
C(3)	-0.006683	0.010830
C(4)	-0.007686	0.013946

Restrictions are linear in coefficients.

Table 10: 3rd model Wald test

Dependent Variable: MOOD
 Method: ML - Ordered Logit (Quadratic hill climbing)
 Date: 06/15/15 Time: 23:25
 Sample: 1 114
 Included observations: 114
 Number of ordered indicator values: 7
 Convergence achieved after 8 iterations
 Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE_CALMNESS	0.017644	0.038077	0.463386	0.6431
AGE_ENTHUSIASM	0.028092	0.028086	1.000221	0.3172
AGE_EXCITEMENT	-0.028577	0.025156	-1.135962	0.2560
AGE_PEACEFULNESS	0.024740	0.036340	0.680797	0.4960
AGE	-0.176498	0.193441	-0.912414	0.3616
WEST	0.925977	0.414476	2.234089	0.0255
BS_EDUCATIVE	0.826286	0.499316	1.654836	0.0980
BS_ENTERTAINMENT	-1.298781	0.566439	-2.292886	0.0219
BS_NECESSITY	-1.616147	0.607935	-2.658420	0.0079
CALM	-0.943123	1.120883	-0.841411	0.4001
DURATION_AGE	-0.004934	0.008679	-0.568516	0.5697
DURATION_TRIP	0.219825	0.254217	0.864716	0.3872
ENTHUSIAST	0.401384	0.895815	0.448066	0.6541
EXCITEMENT	0.658753	0.825151	0.798343	0.4247
MALE	0.491010	0.390530	1.257290	0.2086
PART_TRIP	-0.878879	1.112609	-0.789926	0.4296
PEACEFUL	0.479267	1.032028	0.464393	0.6424
Limit Points				
LIMIT_5:C(18)	-1.409810	5.472381	-0.257623	0.7967
LIMIT_6:C(19)	1.596579	5.364047	0.297644	0.7660
LIMIT_7:C(20)	2.663721	5.374034	0.495665	0.6201
LIMIT_8:C(21)	4.762523	5.401546	0.881696	0.3779
LIMIT_9:C(22)	6.791373	5.408296	1.255733	0.2092
LIMIT_10:C(23)	8.326374	5.418121	1.536764	0.1244
Pseudo R-squared	0.247119	Akaike info criterion	2.97646	8
Schwarz criterion	3.528508	Log likelihood	146.6587	-
Hannan-Quinn criter.	3.200510	Restr. log likelihood	194.7966	-
LR statistic	96.27583	Avg. log likelihood	1.286480	-
Prob(LR statistic)	0.000000			

Table 11: 4th Model

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	0.899766	(4, 91)	0.4676
Chi-square	3.599063	4	0.4630

Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	0.017644	0.038077
C(2)	0.028092	0.028086
C(3)	-0.028577	0.025156
C(4)	0.024740	0.036340

Restrictions are linear in coefficients.
Table 12 Model 4 Wald test

Dependent Variable: HAPPY_AVG

Method: Least Squares

Date: 06/15/15 Time: 23:31

Sample: 1 114

Included observations: 114

Variable	Coefficient	Std. Error	t-Statistic	Prob.
WEST_PEACEFULNESS	0.121005	0.221688	0.545835	0.5864
WEST_EXCITEMENT	-0.098963	0.197239	-0.501741	0.6170
WEST_ENTHUSIASM	0.122297	0.180258	0.678456	0.4991
WEST_CALNMESS	0.018780	0.209428	0.089673	0.9287
WEST	-1.229730	0.968654	-1.269524	0.2073
AGE	0.002410	0.008400	0.286862	0.7748
AS_EDUCATIVE	0.132676	0.306332	0.433110	0.6659
AS_ENTERTAINMENT	-0.053687	0.217026	-0.247375	0.8051
AS_NECESSITY	-0.080687	0.184227	-0.437978	0.6624
CALM	0.121010	0.144285	0.838683	0.4037
DURATION_TRIP	-0.002868	0.037479	-0.076525	0.9392
DURATION_WEST	0.058897	0.047627	1.236636	0.2192
ENTHUSIAST	0.023045	0.129015	0.178626	0.8586
EXCITEMENT	0.139725	0.135704	1.029626	0.3058
MALE	0.037055	0.154997	0.239068	0.8116
PART_TRIP	-0.466762	0.455410	-1.024927	0.3080
PEACEFUL	0.017802	0.172343	0.103294	0.9179
C	4.122072	0.853418	4.830074	0.0000
R-squared	0.304582	Mean dependent var		5.690058
Adjusted R-squared	0.181435	S.D. dependent var		0.829305
S.E. of regression	0.750310	Akaike info criterion		2.407280
Sum squared resid	54.04470	Schwarz criterion		2.839311
Log likelihood	-119.2149	Hannan-Quinn criter.		2.582617
F-statistic	2.473319	Durbin-Watson stat		1.624995
Prob(F-statistic)	0.002903			

Table 13: 1st Model (after survey activities)

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.189488	Prob. F(17,96)	0.2878
Obs*R-squared	19.83481	Prob. Chi-Square(17)	0.2828
Scaled explained SS	31.02423	Prob. Chi-Square(17)	0.0198

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 06/15/15 Time: 23:32

Sample: 1 114

Included observations: 114

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.206892	1.121667	0.184450	0.8540
WEST_PEACEFULNESS	0.320073	0.291370	1.098510	0.2747
WEST_EXCITEMENT	0.320065	0.259236	1.234647	0.2200
WEST_ENTHUSIASM	-0.446671	0.236917	-1.885346	0.0624
WEST_CALNMESS	-0.480135	0.275256	-1.744322	0.0843
WEST	2.569004	1.273124	2.017874	0.0464
AGE	-0.003240	0.011040	-0.293518	0.7698
AS_EDUCATIVE	-0.010342	0.402620	-0.025686	0.9796
AS_ENTERTAINMENT	-0.106999	0.285242	-0.375118	0.7084
AS_NECESSITY	0.134664	0.242134	0.556158	0.5794
CALM	0.168449	0.189637	0.888270	0.3766
DURATION_TRIP	0.006916	0.049260	0.140399	0.8886
DURATION_WEST	-0.106600	0.062597	-1.702958	0.0918
ENTHUSIAST	0.021993	0.169567	0.129700	0.8971
EXCITEMENT	0.001847	0.178359	0.010356	0.9918
MALE	-0.459064	0.203716	-2.253454	0.0265
PART_TRIP	0.381497	0.598556	0.637362	0.5254
PEACEFUL	-0.137823	0.226514	-0.608453	0.5443

R-squared	0.173990	Mean dependent var	0.474076
Adjusted R-squared	0.027717	S.D. dependent var	1.000107
S.E. of regression	0.986150	Akaike info criterion	2.953923
Sum squared resid	93.35922	Schwarz criterion	3.385954
Log likelihood	-150.3736	Hannan-Quinn criter.	3.129260
F-statistic	1.189488	Durbin-Watson stat	1.886044
Prob(F-statistic)	0.287795		

Table 14: 1st Model (AS) Heteroskedasticity test

Variance Inflation Factors
 Date: 06/15/15 Time: 23:32
 Sample: 1 114
 Included observations: 114

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
WEST_PEAFCFULNESS	0.049146	179.1351	93.70881
WEST_EXCITEMENT	0.038903	117.0624	62.50651
WEST_ENTHUSIASM	0.032493	102.5638	54.84622
WEST_CALNMESS	0.043860	155.0385	80.61511
WEST	0.938291	95.00151	47.50075
AGE	7.06E-05	13.65972	1.218291
AS_EDUCATIVE	0.093840	1.833567	1.656644
AS_ENTERTAINMENT	0.047100	2.007941	1.585216
AS_NECESSITY	0.033940	2.833494	1.665299
CALM	0.020818	143.4435	5.124258
DURATION_TRIP	0.001405	18.90836	2.945521
DURATION_WEST	0.002268	16.27390	9.462413
ENTHUSIAST	0.016645	101.7375	5.548339
EXCITEMENT	0.018416	108.7017	5.744959
MALE	0.024024	2.645790	1.206851
PART_TRIP	0.207399	9.969677	1.190249
PEACEFUL	0.029702	209.5093	7.299832
C	0.728322	147.4845	NA

Table 14 1st model (as) VIF

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	0.379517	(4, 96)	0.8228
Chi-square	1.518069	4	0.8234

Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	0.121005	0.221688
C(2)	-0.098963	0.197239
C(3)	0.122297	0.180258
C(4)	0.018780	0.209428

Restrictions are linear in coefficients.

Table 15: 1st model (AS) wald test

Dependent Variable: MOOD
 Method: ML - Ordered Logit (Quadratic hill climbing)
 Date: 06/15/15 Time: 23:44
 Sample: 1 114
 Included observations: 114
 Number of ordered indicator values: 7
 Convergence achieved after 6 iterations
 Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
WEST_PEACEFULNESS	-0.821383	0.544414	-1.508748	0.1314
WEST_EXCITEMENT	-0.006744	0.461146	-0.014624	0.9883
WEST_ENTHUSIASM	0.400855	0.436716	0.917885	0.3587
WEST_CALMNESS	1.152985	0.523984	2.200419	0.0278
WEST	-1.994807	2.483425	-0.803248	0.4218
AGE	0.010685	0.020937	0.510349	0.6098
AS_EDUCATIVE	0.503997	0.726398	0.693830	0.4878
AS_ENTERTAINMENT	-0.080488	0.522466	-0.154054	0.8776
AS_NECESSITY	0.641750	0.460333	1.394100	0.1633
CALM	-0.586235	0.362780	-1.615954	0.1061
DURATION_TRIP	0.119716	0.092229	1.298021	0.1943
DURATION_WEST	-0.105910	0.115122	-0.919982	0.3576
ENTHUSIAST	0.907954	0.328222	2.766280	0.0057
EXCITEMENT	-0.348177	0.319974	-1.088142	0.2765
MALE	0.248307	0.384658	0.645526	0.5186
PART_TRIP	-1.274284	1.168700	-1.090343	0.2756
PEACEFUL	1.303475	0.436598	2.985526	0.0028
Limit Points				
LIMIT_5:C(18)	1.956062	2.407567	0.812464	0.4165
LIMIT_6:C(19)	4.909825	2.155555	2.277754	0.0227
LIMIT_7:C(20)	6.023044	2.151286	2.799741	0.0051
LIMIT_8:C(21)	8.082654	2.222114	3.637371	0.0003
LIMIT_9:C(22)	9.879832	2.289564	4.315159	0.0000
LIMIT_10:C(23)	11.25592	2.325480	4.840255	0.0000
Pseudo R-squared	0.218001	Akaike info criterion	3.07597	7
Schwarz criterion	3.628017	Log likelihood	152.3307	-
Hannan-Quinn criter.	3.300019	Restr. log likelihood	194.7966	-
LR statistic	84.93184	Avg. log likelihood	1.336234	-
Prob(LR statistic)	0.000000			

Table 16: 2nd Model (AS)

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	1.541741	(4, 91)	0.1968
Chi-square	6.166965	4	0.1870

Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	-0.821383	0.54441 4
C(2)	-0.006744	0.46114 6
C(3)	0.400855	0.43671 6
C(4)	1.152985	0.52398 4

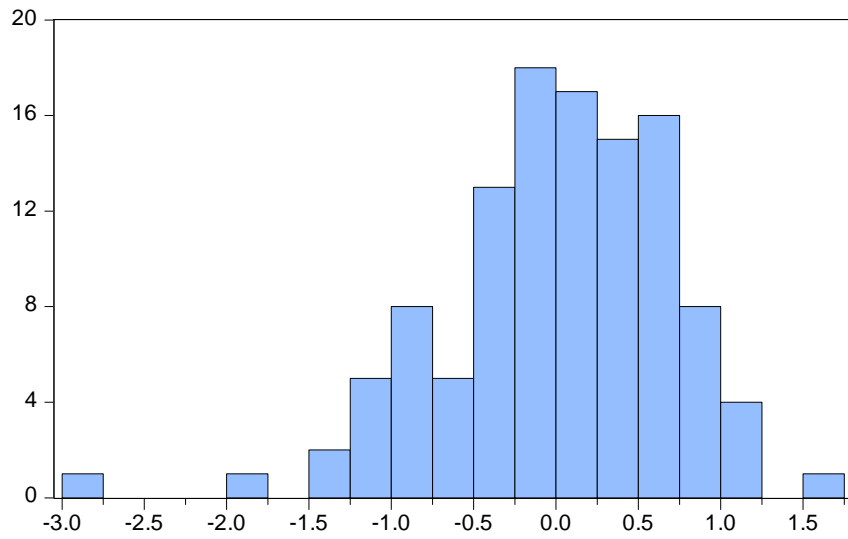
Restrictions are linear in coefficients.

Table 17: 2nd model (AS) Wald test

Dependent Variable: HAPPY_AVG
Method: Least Squares
Date: 06/15/15 Time: 23:37
Sample: 1 114
Included observations: 114

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE_CALMNESS	0.016674	0.014682	1.135734	0.2589
AGE_ENTHUSIASM	0.002734	0.011175	0.244688	0.8072
AGE_EXCITEMENT	-0.009903	0.011496	-0.861389	0.3912
AGE_PEAFCFULNESS	-0.010895	0.014403	-0.756437	0.4512
AGE	-0.020070	0.059674	-0.336330	0.7374
AS_EDUCATIVE	0.047709	0.297729	0.160242	0.8730
AS_ENTERTAINMENT	-0.061930	0.214410	-0.288838	0.7733
AS_NECESSITY	-0.139160	0.186682	-0.745439	0.4578
WEST	0.071638	0.172461	0.415387	0.6788
CALM	-0.390838	0.431883	-0.904962	0.3678
DURATION_AGE	0.003619	0.003362	1.076507	0.2844
DURATION_TRIP	-0.070995	0.099305	-0.714917	0.4764
ENTHUSIAST	-0.023074	0.368048	-0.062693	0.9501
EXCITEMENT	0.440672	0.370381	1.189780	0.2371
MALE	0.016195	0.155164	0.104375	0.9171
PART_TRIP	-0.312074	0.463707	-0.672997	0.5026
PEACEFUL	0.416151	0.406928	1.022665	0.3090
C	3.956971	1.738855	2.275618	0.0251
R-squared	0.309189	Mean dependent var		5.690058
Adjusted R-squared	0.186858	S.D. dependent var		0.829305
S.E. of regression	0.747821	Akaike info criterion		2.400632
Sum squared resid	53.68665	Schwarz criterion		2.832664
Log likelihood	-118.8360	Hannan-Quinn criter.		2.575970
F-statistic	2.527477	Durbin-Watson stat		1.701719
Prob(F-statistic)	0.002340			

Table 18: 3rd model (AS)



Series: Residuals	
Sample 1 114	
Observations 114	
Mean	7.21e-16
Median	0.032701
Maximum	1.644769
Minimum	-2.990875
Std. Dev.	0.689277
Skewness	-0.916578
Kurtosis	5.313345
Jarque-Bera	41.38213
Probability	0.000000

Figure 2: 3rd model (AS) normality test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.041366	Prob. F(17,96)	0.4224
Obs*R-squared	17.74943	Prob. Chi-Square(17)	0.4048
Scaled explained SS	27.14571	Prob. Chi-Square(17)	0.0560

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 06/15/15 Time: 23:37

Sample: 1 114

Included observations: 114

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.730231	2.277196	1.638081	0.1047
AGE_CALMNESS	0.015312	0.019227	0.796364	0.4278
AGE_ENTHUSIASM	-0.017396	0.014634	-1.188749	0.2375
AGE_EXCITEMENT	0.023234	0.015056	1.543232	0.1261
AGE_PEAFCFULNESS	0.005341	0.018862	0.283145	0.7777
AGE	-0.089484	0.078149	-1.145036	0.2550
AS_EDUCATIVE	0.027373	0.389904	0.070206	0.9442
AS_ENTERTAINMENT	-0.033732	0.280791	-0.120133	0.9046
AS_NECESSITY	0.253174	0.244478	1.035567	0.3030
WEST	0.148933	0.225855	0.659418	0.5112
CALM	-0.412665	0.565592	-0.729615	0.4674
DURATION_AGE	-0.008653	0.004403	-1.965109	0.0523
DURATION_TRIP	0.176906	0.130049	1.360298	0.1769
ENTHUSIAST	0.397238	0.481994	0.824156	0.4119
EXCITEMENT	-0.588554	0.485049	-1.213391	0.2280
MALE	-0.326243	0.203203	-1.605505	0.1117
PART_TRIP	-0.271281	0.607268	-0.446723	0.6561
PEACEFUL	-0.163625	0.532911	-0.307040	0.7595
R-squared	0.155697	Mean dependent var	0.470936	
Adjusted R-squared	0.006185	S.D. dependent var	0.982385	
S.E. of regression	0.979342	Akaike info criterion	2.940068	
Sum squared resid	92.07471	Schwarz criterion	3.372100	
Log likelihood	-149.5839	Hannan-Quinn criter.	3.115406	
F-statistic	1.041366	Durbin-Watson stat	1.924491	
Prob(F-statistic)	0.422374			

Table 19: 3rd Model (AS) Heteroskedasticity test

Variance Inflation Factors
Date: 06/15/15 Time: 23:39
Sample: 1 114
Included observations: 114

Variable	Coefficient t Variance	Uncentered d VIF	Centered VIF
AGE_CALMNESS	0.000216	1444.262	183.0537
AGE_ENTHUSIASM	0.000125	707.9483	89.16790
AGE_EXCITEMENT	0.000132	709.3621	80.70426
AGE_PEACEFULNESS	0.000207	1425.373	177.8670
AGE	0.003561	693.9974	61.89669
AS_EDUCATIVE	0.088642	1.743570	1.575331
AS_ENTERTAINMENT	0.045972	1.972912	1.557562
AS_NECESSITY	0.034850	2.928935	1.721391
WEST	0.029743	3.031544	1.515772
CALM	0.186523	1293.772	46.21763
DURATION_AGE	1.13E-05	135.9602	26.91789
DURATION_TRIP	0.009862	133.6296	20.81665
ENTHUSIAST	0.135459	833.4855	45.45485
EXCITEMENT	0.137182	815.1403	43.08072
MALE	0.024076	2.669198	1.217529
PART_TRIP	0.215024	10.40517	1.242242
PEACEFUL	0.165591	1175.819	40.96849
C	3.023618	616.3631	NA

Table 20: 3rd Model (AS) VIF

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	0.709290	(4, 96)	0.5875
Chi-square	2.837159	4	0.5854

Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	0.016674	0.01468 2
C(2)	0.002734	0.01117 5
C(3)	-0.009903	0.01149 6
C(4)	-0.010895	0.01440 3

Restrictions are linear in coefficients.

Table 21: Model 3 (AS) Wald test

Dependent Variable: MOOD
Method: ML - Ordered Logit (Quadratic hill climbing)
Date: 06/15/15 Time: 23:41
Sample: 1 114
Included observations: 114
Number of ordered indicator values: 7
Convergence achieved after 7 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE_CALMNESS	0.025895	0.036970	0.700426	0.4837
AGE_ENTHUSIASM	0.018580	0.026917	0.690291	0.4900
AGE_EXCITEMENT	-0.025501	0.025743	-0.990607	0.3219
AGE_PEACEFULNESS	0.005499	0.034242	0.160584	0.8724
AGE	-0.130761	0.181030	-0.722317	0.4701
WEST	0.904426	0.446229	2.026821	0.0427
AS_EDUCATIVE	0.259502	0.698763	0.371374	0.7104
AS_ENTERTAINMENT	-0.049438	0.513811	-0.096219	0.9233
AS_NECESSITY	0.565221	0.462637	1.221739	0.2218
CALM	-0.873094	1.078673	-0.809415	0.4183
DURATION_AGE	-0.000214	0.008336	-0.025640	0.9795
DURATION_TRIP	0.066198	0.247358	0.267620	0.7890
ENTHUSIAST	0.490782	0.873162	0.562075	0.5741
EXCITEMENT	0.556960	0.840969	0.662284	0.5078
MALE	0.125066	0.381525	0.327805	0.7431
PART_TRIP	-0.967887	1.151091	-0.840843	0.4004
PEACEFUL	0.780338	0.979282	0.796848	0.4255
Limit Points				
LIMIT_5:C(18)	-0.204952	5.061998	-0.040488	0.9677
LIMIT_6:C(19)	2.417828	5.062393	0.477606	0.6329
LIMIT_7:C(20)	3.474026	5.077209	0.684239	0.4938
LIMIT_8:C(21)	5.493646	5.100564	1.077066	0.2815
LIMIT_9:C(22)	7.272848	5.112026	1.422694	0.1548
LIMIT_10:C(23)	8.629467	5.121061	1.685094	0.0920
Pseudo R-squared	0.205741	Akaike info criterion		3.117876
Schwarz criterion	3.669916	Log likelihood		154.7189
Hannan-Quinn criter.	3.341918	Restr. log likelihood		194.7966
LR statistic	80.15529	Avg. log likelihood		1.357184
Prob(LR statistic)	0.000000			

Table 22 Model 4 AS

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
F-statistic	0.699855	(4, 91)	0.5940
Chi-square	2.799419	4	0.5919

Null Hypothesis: $C(1)=0, C(2)=0, C(3)=0, C(4)=0$

Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	0.025895	0.036970
C(2)	0.018580	0.026917
C(3)	-0.025501	0.025743
C(4)	0.005499	0.034242

Restrictions are linear in coefficients.

Table 21: Model 4 AS-Wald test

Anova: Single Factor						
SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
happy_avg_west	57	332.3333	5.830409	0.829852		
happy_avg_east	57	316.3333	5.549708	0.517822		
ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	2.24561404	1	2.245614	3.332576	0.070585	3.925834
Within Groups	75.4697856	112	0.673837			
Total	77.7153996	113				

Table 22: One way analysis of variance for examining the difference in average happiness between travelers from East and travelers from West.

Questionnaire

Erasmus University Rotterdam, Master of Science in Economics and Business, Student name: Polyvios Dimiou, Student number:359386.

Dear reader,

Thank you for your interest in the study "Measuring Tourist's Happiness".

Firstly, we would like to acknowledge you that anonymity is respected and that the answers will be used for the sole purpose of writing my Thesis as a requirement to complete my master studies in the above mentioned program. The results of this study are not going to be used for commercial or advertising purposes. Lastly, please keep in mind that if you are not vacations now, it would be better not to fill in the survey because, for the purpose of our research, we are looking specifically for people who are now on a vacation.

Thank you for your participation!

<u>Please check the applicable</u>	Totally disagree	Disagree	Somewhat Disagree	Neutral	Somewhat agree	Agree	Totally agree
Taking all things together, I consider my-self happy							
Compared to most of my peers, I consider myself happy							
In general I consider my-self happy							
I feel peaceful today							
I feel calm today							
I feel excited today							
I feel enthusiastic today							

In which day of your vacation period are you currently in? (Please tick the respective box)

1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	7 th +

In how many days are you going back?

1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	7 th +

--	--	--	--	--	--	--	--

Is it a trip in a different country? Y/N

Yes	No

Is it an intercontinental trip?

Yes	No

When did you plan your trip?

--

Which type of accommodation did you use? (Select all that apply)

Hotel	Hostel	Stay to a friend	Couch surfing	Rental apartment	Camping

Which method of transportation you selected to reach your destination?
(Select all that apply)

Airplane	Bus	Ferryboat/cruise ship	Train	Motorbike	Car	Bicycle	Walking

Which method of transportation you selected to reach your destination?
(Select all that apply)

Airplane	Bus	Ferryboat/cruise ship	Train	Motorbike	Car	Bicycle	Walking

Which method of transportation you are using during your vacations?
 (Select all that apply)

Airplane	Bus	Ferryboat/cruise ship	Train	Motor bike	Car	Bicycle	Walking

What did you do today?

What are you going to do today?

How often do you go on vacations?

0-1 per year	2-3 per year	4-5 per year	6+ per year

What is your age?

--

What is your gender?

Female	<input type="checkbox"/>
Male	<input type="checkbox"/>

What is your nationality?

--

How are you feeling today?

1 Terrible	2	3	4	5	6	7	8	9	10=excellent

Thank you for your participation!!

In case you want to be contacted about the results or if you would like more information about this study, please fill in your email address below