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# How Do We Feel on Vacation? A Closer Look at How Emotions Change over the Course of a Trip

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## Abstract

The emotions of 39 American and Dutch vacationers were investigated. Their emotions were tracked daily during their vacation using a diary. Findings indicated that fluctuations in emotions are related to length of vacation. Vacationers on an 8- to 13-day trip experienced significant changes in the balance of their emotions over the course of their trip. In general, they felt good; but this feeling began to decline at the end of the vacation. The findings demonstrate that there is no clear peak in holiday happiness, which presents challenges to tourism suppliers. Implications and suggestions for future research are discussed.

## Keywords

diary study, emotions, happiness, longitudinal, subjective well-being

## Introduction

A brief look at travel advertising suggests that the travel industry is selling something much more profound than satisfaction or intent to repurchase; it is selling the benefits of holidays or the way they make people feel. For instance, Club Med uses the slogan, “Where Happiness Means the World” to attract the attention of consumers. Unknown is whether such slogans are representative of how people feel about their travel experiences. The purpose of our study is to uncover how tourists’ feelings unfold over the course of these experiences.

To understand individuals’ responses to their life experiences, scientists have utilized subjective well-being (SWB) measures. SWB is defined as the overall appreciation of one’s life as a whole (Veenhoven 1984). Psychologists use “happiness” as a synonym for subjective well-being (Veenhoven 2000). When estimating their happiness, people draw on two sources of information: how well they feel most of the time (i.e., affective component) and to what extent their life meets their wants (i.e., cognitive component; Veenhoven 2009). Affect, mood, and emotions make up the affective component of happiness, or as Veenhoven (1984) refers to it, the “hedonic level of affect.” Veenhoven assumes that overall life satisfaction is fueled by both the cognitive component (i.e., contentment) and the affective component. Diener (1984), on the other hand, views these as more separate indicators of SWB. Diener also views life satisfaction as being more cognitive in nature rather than an overall measure of SWB (cf., Diener 1984; Diener et al. 1999). Moods

are less conscious and less intense than emotions. They originate internally and do not directly motivate behavior (Beedie, Terry, and Lane 2005). Affect is a more general construct that subsumes moods as well as emotions. The term *affect* also sometimes refers to an average of emotions and/or moods experienced over a certain period of time. Emotions are direct, intense reactions to events that happen in an individual’s environment (Beedie, Terry, and Lane 2005) and are therefore extremely useful to study in a tourist setting (Mitas et al. 2012). Impacts of tourism on life satisfaction and overall quality of life has been studied by several authors (e.g., Gilbert and Abdullah 2004; Nawijn 2011b; Sirgy et al. 2011). Life satisfaction studies provide useful information for tourism policy makers. Emotional responses deliver detailed information on how tourists feel during their travel experience, which is of great importance for tourism service providers (cf. Pine and Gilmore 1999; Schmitt 1999).

While tourists’ moods (e.g., Nawijn 2010; Van Tilburg et al. 1996) and emotions (e.g., Coghlan and Pearce 2010; Nawijn 2011a; Nawijn et al. 2010) have been studied, Mitas et al. (2012) suggest that emotions are the most relevant component of affect to the travel industry. Anecdotal,

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commercial, and theoretical accounts of tourism abound with emotions (e.g., Graburn 2001). Furthermore, unlike moods, emotions dramatically affect individuals' thinking and behavior, leading to long-term consequences for quality of life (Fredrickson and Losada 2005). Thus, our investigation of how tourists feel on vacation focuses on emotions. In the literature review below, the nature of emotions is discussed in more detail.

## Literature Review

### *The Nature of Emotions*

Emotions are short-lived, intense, conscious responses of humans to stimuli in their environment. Emotions consist of four components: social-expressive, physical, experiential, and action tendency. The social-expressive component includes facial expressions (see Ekman 1999b). The physical component of emotions includes bodily arousal, a physiological activation that makes the body ready for action (Reeve 2008). The experiential component of emotion concerns the subjective feelings they create in the mind, such as the pleasantness of feeling relaxed. Action tendency refers to the behavioral urges that come with emotions. Such urges are relatively specific for negative emotions (e.g., the urge to flee when afraid; Fredrickson 1998) and relatively general for positive emotions (e.g., the urge to express one's self creatively when joyful; Fredrickson and Losada 2005).

Attempts have been made to categorize emotions. Categorizations include typologies of basic emotions (Ekman 1999a; Zelenski and Larsen 2000), a circumplex of emotions (Russell 1980), and a division between positive and negative emotions (Watson, Clark, and Tellegen 1988). Basic emotions are unique universal signals, have a distinctive physiology, and are an automatic appraisal tuned to several aspects such as brief duration and distinctive subjective experience (Ekman 1999a). The circumplex model (Russell 1980) suggests that even such basic emotions can be located along two axes based on their activation (active vs. passive) and valence (positive vs. negative). The latter categorization is most often used in the literature on SWB as it allows one to create a precise, valid and reliable indicator of the affective component of happiness. When individuals assess how they feel, they (subconsciously) compare their positive and negative emotions en bloc (Veenhoven 2000). This construct, usually referred to as "affect balance," is operationalized as the difference between an individual's mean score on positive emotions minus the mean score of negative emotions (see Veenhoven 1984).

The types of emotions that people experience are largely universal (Hupka, Lenton, and Hutchison 1999), although differences exist between individualist and collectivist cultures. Mesquita (2001) found that differences are primarily related to the social-expressive component of emotions. Mesquita found that emotions in collectivist cultures, in

comparison to individualistic cultures, are more strongly based on social worth and social comparisons.

Universality of emotional terms has also been addressed with men and women. Traditional thinking suggests that women are more emotional than men. LaFrance and Banaji (1992) have found this difference in the social-expressive component of emotion, but not in the experiential component. Similarly, another study found gender-based differences in emotion socialization patterns (Garside and Klimes-Dougan 2002).

Because of these individual differences in emotional expression, it is important to continue to look at potential differences in tourists' emotions between men and women and different cultures. Doing so will provide tourism managers with better, and potentially more specific, information about customers' response to the overall travel experience.

### *Emotions in Tourism Research*

Considering the relative importance of emotions in a consumption experience (Richins 1997), the small number of studies on emotions in a tourism setting is surprising. Studies to date generally studied emotions from the guest's perspective. A recent study on the host community suggests that tourism does not affect emotions of the local community (Nawijn and Mitas 2012). Most studies that exist do not provide a coherent picture of emotions over the course of a holiday. Zins (2002) studied potential differences in emotions during travel between complainers and noncomplainers, but failed to find a difference in emotional experience between these two groups. On the other hand, research by Bigné and colleagues (Bigné and Andreu 2004; Bigné, Andreu, and Gnoth 2005) linked emotions to customer satisfaction, customer loyalty, and willingness to pay more. Slåtten et al. (2009) studied the potential effect of a winter park's "atmosphere" on visitors. They found that design and interaction affected the emotion of joy as well as customer loyalty. While interesting, these findings fail to converge clearly on the role of emotions over the course of a vacation.

In general, studies of tourists' emotions (Mitas et al. 2012; Nawijn 2011a) treat an entire experience as a single point in time. This approach is problematic as empirical evidence suggests that emotions change over the course of a vacation. Specifically, the felt intensity of emotions potentially differs on a day-to-day basis, dependent on the events of the day and the beginning and end of a holiday travel experience. For instance, when assessing the positive and negative feelings of visitors to two tropical islands, Pearce (1981) found that negative feelings, possibly caused by health issues, were predominantly observed in the first few days of the trip. Most of his participants were on a 7- to 10-day trip. Similarly, Nawijn (2010), who conducted a study with 481 international visitors in the Netherlands, found that tourists reported feeling relatively worse during the first few days of their vacation when compared to the

remainder of their vacation. He collected data at different times of the day on several days during one week, resulting in information about tourists' emotions throughout each day of their vacation. Using these data, Nawijn was able to construct a "holiday happiness curve," which represents (potential) changes in tourists' affect balance over time. Nawijn assumed that affect balance during vacation develops according to a universal pattern. He based this universality assumption on the similar happiness curves he has found for different lengths of stay. Another study by Nawijn (2011a) revealed that certain stressors, such as travel from point A to point B, have a negative effect on tourists' affect balance. Steyn, Saayman, and Nienaber (2004) observed that lack of personal time in group tours negatively affects tourists' emotions. A positive influence on affect balance during vacation is, generally speaking, one's travel party (Nawijn 2011a).

Although Nawijn's (2010) findings are very interesting and informative, they have several issues. First, he used a cross-sectional approach, which prevents him from distinguishing cause and effect. Second, a conceptual precision concerning emotions was lacking. This has generally plagued tourism research (see Mitas et al. 2012). This was also the case in Nawijn's (2010) study, where he used a single-item scale rather than a combined score of several emotions. To solve these issues of causality and single-item measures, Coghlan and Pearce (2010) suggest using a diary method with multi-item scales of both positive and negative emotions to assess emotional response. We adopted such an approach and used a comprehensive range of both positive and negative emotion items.

### *Purpose of the Study*

The overall purpose of this study was to analyze potential change in vacationers' emotions over time and to determine whether such change is due to differences in gender, nationality, and/or length of stay. To address this overall purpose, the following research questions were answered: (1) Do emotions change during a vacation? (2) Do nationality or gender explain changes in emotions during a vacation? (3) Do changes in emotions during a vacation vary between different lengths of stay?

## **Method**

### *Respondents*

Our initial sample was composed of 20 Dutch and 20 American adults 45 to 65 years of age who traveled for a vacation of at least 5 days during July, August, or September of 2010. These two nations were sampled because both are affluent nations with an individualistic culture (Hofstede 1980). We excluded one (Dutch) participant because of a failure to complete the diary on a daily basis. Thus, the final net sample size was 39. Dutch participants were recruited

through the Dutch Association of Travel Agents and Tour Operators (ANVR) using three criteria: (1) they were 45 years of age or older, (2) they were traveling for pleasure in August or September 2010, and (3) their trip would last at least 5 days. The latter requirement was needed to be able to assess changes in experienced emotions on a day-to-day basis. Using the same criteria, American participants were recruited through an online listserver at a large university in the Northeastern region of the United States as well as through snowball sampling. We chose to recruit older adults, given their propensity to travel for pleasure and their ability to better match their needs to their wants (Pearce and Lee 2005). The Dutch sample traveled to the southern parts of Europe and booked their trip through a travel agency. Destinations included the Greek islands, the Canary islands, Portugal, Turkey, and Cyprus. The American sample primarily traveled to destinations located along the East Coast of the United States (e.g., destinations in New York, New Jersey, North Carolina, and South Carolina). Two individuals opted to cruise through the Western Caribbean and one individual traveled with a tour group to Europe. The mean age of respondents was 53 ( $SD = 5$ ). Most participants were female ( $n = 30$ ), and the majority were employed and worked full-time ( $n = 25$ ). Most participants were married ( $n = 27$ ).

### *Study Instrument*

Emotions are difficult to measure. Because emotions are short-lived and complex, and individuals have many emotional experiences within the span of a single day, recall of emotional episodes over a period of several days or weeks, such as a holiday, is not considered valid. Thus, emotions must be measured close to the moment in which they occur. An effective method for measuring emotions is experience sampling, which involves sending text messages or automated calls at random times to participants' phones or to special PDAs (Csikszentmihalyi and Hunter 2003). When used with tourists, however, experience sampling can unpleasantly interrupt their experiences. An alternative method is the Day Reconstruction Method (Kahneman et al. 2004), in which participants are asked to write out the episodes (and associated emotions) of their entire day in the evening or the day after. Because this can take as long as two hours each day, it is burdensome in a travel context. As an alternative suited to leisure and tourism contexts, Fredrickson (2000) has proposed using a daily questionnaire in which participants rate their strongest experiences of several emotions on a particular day. Since the strongest experience of each emotion is the most memorable, this method does not introduce substantial recall error and takes much less time to complete than the experience sampling or day reconstruction methods.

As a list of emotions, we chose to use Cohn et al.'s (2009) version of Fredrickson et al.'s (2003) modified Differential Emotions Scale (mDES; Fredrickson et al. 2003). This scale

was chosen because it is a complete, brief emotion list that has been well tested and it consistently produced valid and reliable results. Each page of the diary was intended for a single day of the vacation and contained the mDES. According to Mitas et al. (2012), the mDES is more suitable for leisure and tourism contexts than other scales developed by emotion psychologists (e.g., PANAS; Watson, Clark, and Tellegen 1988). Such scales have historically ignored the richness and complexity of positive emotions (Fredrickson 1998), which are important in leisure and tourism contexts. The mDES was designed to remedy this shortcoming by including positive emotions that have only recently been described (e.g., awe) across a wide range of activation levels.

The mDES contains 19 emotion items. Individuals were asked to rate their strongest experiences with each emotion item using a 5-point scale (i.e., very slight or not at all, little, moderate, quite a bit, extreme). Using guidelines proposed by Veenhoven (1984), we first grouped the 19 emotions into positive (*joyful, grateful, amused, content, proud, awed, loving, hopeful, interested*); negative (*angry, sad, afraid, ashamed, contemptuous, embarrassed, guilty, disgusted*); and neutral (*surprised, compassionate*) categories. Then, we created an index of how emotionally positive each participants' experience was on a given day (affect balance; Veenhoven 1984). We did this by generating an average positive emotions score, an average negative emotions score, and then subtracting the average negative emotions score from the average positive emotions score. The emotions of surprise and compassion can be either positive or negative, depending on the situation; thus, they were excluded from further analysis (cf. Laros and Steenkamp 2005).

In addition, a questionnaire was administered to participants at their intake into the study to measure individual characteristics (including demographic background).

### Study Design and Data Collection

We adopted a longitudinal study design (i.e., measuring the same individuals over repeated occasions), which permitted us to measure development in emotional response over time. Data were collected in 2010. To begin, participants met with a staff member of the universities conducting this research in person approximately one week before their departure on vacation. At this meeting, they were informed about the purpose of the study, asked to complete the intake questionnaire with personal and demographic information and to participate in follow-up interviews for a separate component of the study. The follow-up interviews are not part of the present study, but are the focal point of another manuscript. The fact that the follow-up interviews are mentioned is merely to make that reader aware that the present data collection was one component in a larger study. At the end of the meeting, participants were given the diary containing the mDES. The diary was discussed in detail and participants were asked to

complete it every day of their vacation. Specifically, they were asked to fill in the diary alone and between dinner and going to sleep. This is a common time frame for diary studies as it allows for a reflection on the entire day (Bolger, Davis, and Rafaeli 2003). Participants were asked to return the completed emotion diaries in individual meetings with researchers approximately one week after their return.

### Study Analysis

This study used repeated measures analysis of variance (ANOVA) to analyze the data. The minimum sample size required for repeated measures ANOVA, as mentioned in the literature, varies between 4 (Cleophas et al. 2009) and 11 (Wilcox and Keselman 2003). The sample size of this study ( $n = 39$ ) can be considered a moderate sample size for ANOVA (Wilson VanVoorhis and Morgan 2007). Repeated measures ANOVA have been used in a tourism context with sample sizes as small as 9 (e.g., Kim, Kim, and Bolls 2011). A conservative Greenhouse–Geisser correction was used to compensate for the violation of sphericity. The violation of sphericity in repeated measures is common (Namasivayam 2004). The Greenhouse–Geisser correction is a conservative correction to the degrees of freedom and produces a more accurate significance ( $p$ ) value and prevents potential type I errors (Greenhouse and Geisser 1959).

## Results

### Emotions

The participants in our study scored higher on positive emotions, as can be seen in Table 1. Overall, the mean positive affect score was 3.37 ( $SD = 0.61$ ) and the mean negative affect score was 1.26 ( $SD = 0.28$ ). Thus, the ratio between positive and negative affect is 2.67 to 1. Differences between Dutch and American participants were not significant. The American sample's mean positive affect score was 3.38 ( $SD = 0.53$ ) compared to the Dutch sample's mean score of 3.35 ( $SD = 0.70$ ). American participants' average negative affect score was somewhat higher than that of the Dutch participants ( $M = 1.32$  vs.  $M = 1.20$ ). Consequently, the resulting affect balance for the American participants ( $M = 2.07$ ,  $SD = 0.65$ ) was a little lower than it was for the Dutch participants ( $M = 2.15$ ,  $SD = 0.72$ ).

To assess potential changes in emotions during vacation, we created 20% splits for length of stay. This approach has been successfully adopted by Nawijn (2010). For a 10-day trip, this means that day 1 and day 2 fall into the first 20%, day 3 and day 4 in the second 20%, and so forth. Average length of stay for study participants was 10 days ( $SD = 3.27$ ). Length of stay ranged from 5 to 16 days. The mode was 7.

The findings presented in Table 2 suggest that our participants felt the worst at the end of their trip. The scores on the affect balance range from 1.92 to 2.30.

**Table 1.** Mean Scores and Standard Deviations of Emotions

Variables	Total		Dutch		U.S.	
	M	SD	M	SD	M	SD
Interested	3.66	0.75	3.53	0.69	3.77	0.80
Joyful	3.63	0.71	3.71	0.78	3.56	0.65
Grateful	3.61	1.04	3.27	1.18	3.93	0.79
Amused	3.46	0.72	3.55	0.71	3.38	0.74
Content	3.67	0.70	3.83	0.79	3.51	0.58
Proud	3.03	1.05	3.11	1.08	2.96	1.04
Awed	2.87	0.97	3.11	0.95	2.65	0.96
Loving	3.64	0.79	3.58	0.84	3.70	0.76
Hopeful	2.88	0.90	2.54	0.91	3.21	0.78
<b>Total PA</b>	<b>3.37</b>	<b>0.61</b>	<b>3.35</b>	<b>0.70</b>	<b>3.38</b>	<b>0.53</b>
Angry	1.37	0.51	1.35	0.49	1.38	0.54
Sad	1.48	0.49	1.31	0.39	1.64	0.53
Afraid	1.23	0.32	1.17	0.22	1.28	0.40
Ashamed	1.14	0.31	1.19	0.36	1.10	0.26
Contemptuous	1.18	0.40	1.19	0.45	1.17	0.37
Embarrassed	1.15	0.28	1.04	0.12	1.25	0.35
Guilty	1.19	0.28	1.10	0.18	1.27	0.37
Disgusted	1.33	0.45	1.22	0.46	1.43	0.43
<b>Total NA</b>	<b>1.26</b>	<b>0.28</b>	<b>1.20</b>	<b>0.27</b>	<b>1.32</b>	<b>0.29</b>

Note: PA = positive affect; NA = negative affect.

**Table 2.** Affect Balance during the Trip

	0%-19%	20%-39%	40%-59%	60%-79%	≥80%
M	2.15	2.30	2.14	2.14	1.92
SD	0.92	0.77	0.89	0.86	0.82

To test whether the change in affect balance over the course of the vacation was statistically significant, a one-way repeated measures ANOVA was performed. The ANOVA resulted in a nonsignificant effect of time,  $F(2.93, 111.15) = 1.96, p = ns$ .

### Gender, Nationality, and Length of Stay

To assess if changes in emotions over time differ based on gender, nationality, and length of stay, a three mixed between-within subjects repeated measures ANOVA was performed.

First the potential effect of time and gender were studied. Using an ANOVA with repeated measures with a Greenhouse–Geisser correction, no significant main effect was found for time,  $F(2.98, 110.33) = 1.40, p = ns$ . The interaction effect for time  $\times$  gender was also not significant,  $F(2.98, 110.32) = 1.83, p = ns$ .

Next, the potential effect of time and nationality were assessed. Using an ANOVA with repeated measures with a Greenhouse–Geisser correction, no significant main effect for time was observed,  $F(2.95, 109.05) = 1.92, p = ns$ . There

was also no interaction effect for time  $\times$  nationality,  $F(2.95, 109.05) = 1.02, p = ns$ .

Finally, to study the potential effect of length of stay, the participants were divided into three groups, based on their length of stay. Group 1 included 11 participants whose trip lasted 7 days or less. Group 2 included those on a trip between 8 and 13 days ( $n = 19$ ). Group 3 contained the final 9 respondents who took a trip that lasted more than 13 days. These groupings were based on earlier studies by Pearce (1981) and Nawijn (2010).

A mixed between-within subjects ANOVA with a Greenhouse–Geisser correction was conducted to assess the impact of time in combination with length of stay. No significant main effect for time was found,  $F(2.86, 103.06) = 1.04, p = ns$ . However, there was an interaction effect for time  $\times$  length of stay,  $F(5.73, 103.06) = 2.31, p < .05$ , partial eta-squared = .11, which indicates a large effect size (Cohen 1988).

To further test how length of stay affected emotions, three one-way repeated measures ANOVA were performed for each length-of-stay group. There was no statistically significant effect for time for group 1, Wilks's Lambda = .75,  $F(4, 7) = .59, p = .68$ , and group 3, Wilks's Lambda = .46,  $F(4, 5) = 1.47, p = .34$ . There was a statistically significant change in emotions for group 2, Wilks's Lambda = .46,  $F(4, 15) = 4.47, p < .05$ , partial eta-squared = .54, indicating a large effect size. Participants in group 2's mean affect balance was 2.17 ( $SD = 1.02$ ) at the start of their trip. Overall, these participants feel best at the 20% to 59% parts of their trip. Their mean Affect balance reaches 2.57 ( $SD = 0.47$ ) and 2.48 ( $SD = 0.66$ ) at these second and third 20% splits respectively. Participants feel a little worse at the fourth 20% split ( $M = 2.25, SD = 0.90$ ), but worst at the end ( $M = 1.85, SD = 0.71$ ). Figure 1 shows the changes in affect balance for all three groups. The pattern for the second group (8-13 days) is statistically significant.

### Conclusion and Discussion

The overall purpose of this study was to analyze potential change in vacationers' emotions over time and to determine whether such change is due to differences in gender, nationality, and/or length of stay. Study participants scored higher on positive emotions than they did on negative emotions, which is consistent with findings from earlier studies (cf. Nawijn 2011a; Zins 2002). In comparison to Nawijn's (2010) happiness curve study, we chose to (1) focus on the emotional dimension of "happiness" (i.e., hedonic level of affect); (2) use a better and more valid measure (multi-item vs. single-item scales; breadth and balance of items) of emotion; and (3) adopt a longitudinal design. Our findings indicate that Nawijn's initial observations regarding changes in affect balance are reasonable, but without accounting for length of stay, they are not specific enough. In our study, the affect balance changed significantly over time for vacationers on an 8- to 13-day trip. These tourists felt the worst at the

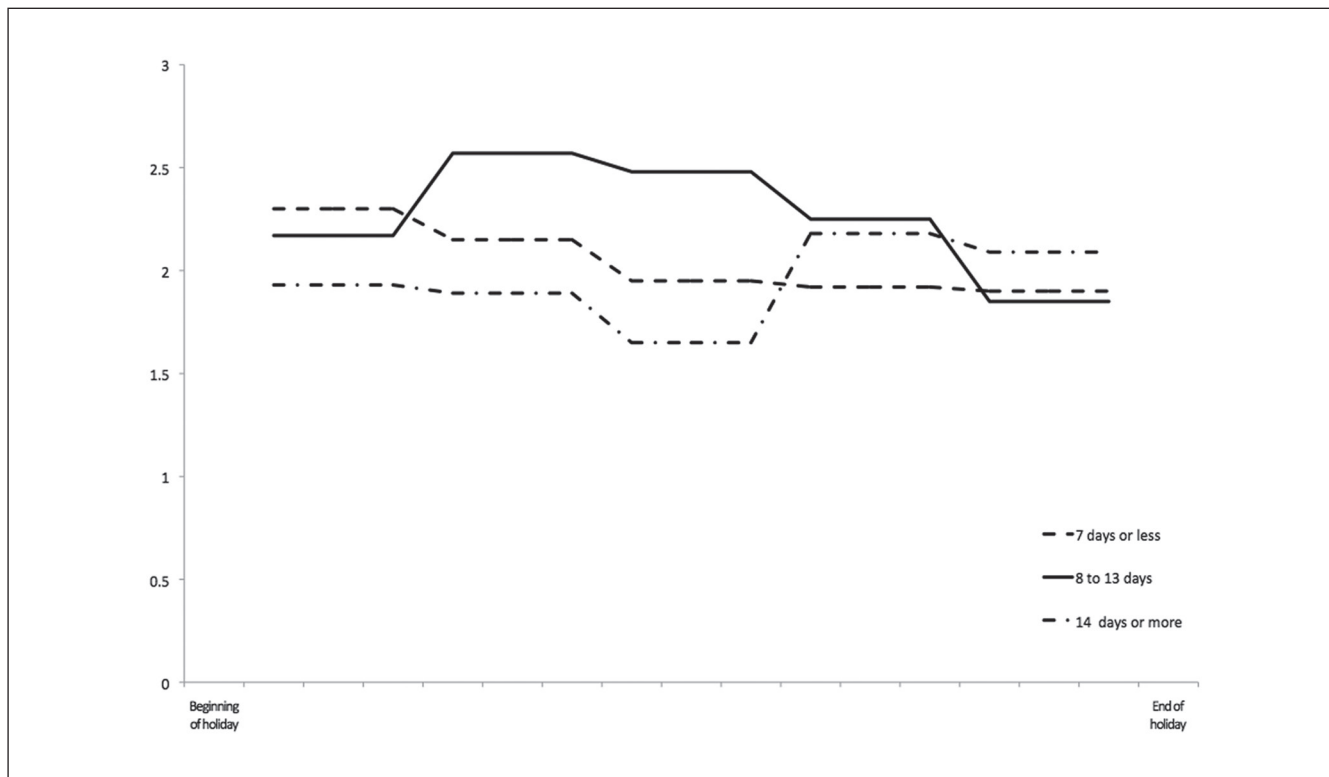


Figure 1. Affect balance over time for each length-of-stay group

beginning and end of their trip. Hence, Nawijn's proposed model should be revised by explicating that a significant change in affect balance during travel is only observed for individuals on extended (i.e., 8 to 13 days) rather than short vacations. Furthermore, Nawijn found a slight rise in happiness at the end of the trip, which was not replicated in our study. More importantly, the affect balance in this study has no clear "peak." We found that scores on the affect balance are rather similar during the middle (i.e., 20%-79% splits) of the trip. This is consistent with an earlier study by Kemp, Burt, and Furneaux (2008), who studied vacation memories and whether the peak-end rule (Fredrickson 2000) was a good predictor for memories of holiday happiness. They found it was not a very good predictor. Kemp et al. reasoned that this could be explained by a clear absence of a peak in holiday happiness in their study. Similarly, a clear peak in holiday happiness was not observed by Nawijn (2010). However, it is important to recognize that in both Kemp et al.'s and Nawijn's studies, a single-item scale was used to assess SWB. In this study, we used a 17-item emotion scale to assess overall affect. Still, we found no clear peak in affect balance among the five periods assessed of the holiday. Fredrickson's research (2000) suggests that tourists may be more likely to remember ends instead of peaks. Unfortunately, the ends of holidays sometimes feature stress about return travel, regrets that the holiday is ending, and generally lower levels of positive emotion (cf. Graburn 2001; Mitas et al.

2012). In our data, the lowest levels of affect balance were likewise at the end of the holiday.

Our study confirms that vacations are enjoyable experiences (cf. Mitas et al. 2012; Nawijn 2011a). The ratio of positive to negative emotions was, on average, 2.67:1. This is greater than the 2:1 ratio typically experienced in daily life (Fredrickson 2009). However, the tourism industry is not pushing their customers into a state of *flourishing*. Fredrickson and Losada (2005) suggest that *flourishing*, "to live within an optimal range of human functioning, one that connotes goodness, generativity, growth and resilience" (p. 678), begins at a 3:1 ratio of positive to negative emotions. Scores of below 3:1 are deemed insufficient to spark flourishing dynamics (Garland et al. 2010). Our participants scored a ratio of 2.67:1 on average. This suggests that vacationers are not benefiting from vacationing to such an extent that they can cope better with everyday life. This finding may provide an additional explanation as to why posttrip benefits of vacationing, in terms of SWB, are absent or short-lived (De Bloom et al. 2009; Milman 1998; Nawijn 2011b; Nawijn et al. 2010; Steyn, Saayman, and Nienaber 2004).

### Implications

This study has several implications. First, vacationers on an 8- to 13-day trip feel best during the second, third, and fourth 20% segments of their trip, but it seems there is room left for

improvement. In particular, the absence of a peak in holiday happiness is a potential point of concern. The absence of a peak in holiday happiness makes tourists remember the end instead (Fredrickson 2000), which is the phase where tourists feel worst. Consequently, this phase is a basis for future holiday purchases (Wirtz et al. 2003). As vacation memories are an important predictor of future purchase behavior, the tourism industry should try to create a peak in holiday happiness—a time of high positive emotion that is potentially more memorable than the end of the holiday.

Our study supports compounding evidence that tourists experience a higher intensity of positive emotions compared to negative emotions on holiday (e.g., Mitas et al. 2012; Nawijn 2011a; Wirtz et al. 2003; Zins 2002), validating the industry's use of emotions in travel marketing. When tour operators such as Kuoni® or Apple Vacations® go further to promise life transformations and profound personal development—in other words, flourishing—from holidays, there may be cause for concern, as our participants did not reach a flourishing level of affect balance on holiday. The tourism industry could spark flourishing dynamics through improving their products and services by putting a stronger emphasis on experiences aimed toward eliciting more positive emotions in their customers, something that the rather conventional sun/sea/sand holidays seem to lack. For instance, more attention should be paid to the design of tourist attractions. Carefully designed tourist attractions can enhance positive emotions, such as awe and joy (Slåtten, Krogh, and Connolly 2011; Slåtten et al. 2009). In addition, destination marketing organizations (DMOs) could work with locals to create pro-poor tourism projects that elicit tourists' involvement. This may boost emotions such as interest, hope, and pride and positively impact local communities. Finally, holidays that specifically address individuals' hobbies and passions appear to boost the emotion of interest in particular (Graburn 2001; Mitas et al. 2012), but the travel industry is still overwhelmingly focused on rather generic sun/sea/sand holidays. Many of our participants experienced such generic holidays.

Emotions are considered an antecedent of customer satisfaction (Zins 2002), willingness to return (Bigné and Andreu 2004), and word of mouth (Hanzaee and Khanzadeh 2011). Yet, measuring emotions in a tourism context is not common practice. Assuming that customer satisfaction and resultant positive word-of-mouth promotion is important to the tourism industry, researchers and DMOs should include measurements of emotions in their studies. If they find, as we did, that the beginning and end of the trip are low points in the travel experience, they could consider, for example, promoting excitement prior to and/or positive memories at the end of the experience. And service providers could focus on building in uplifting components of the experience during these same time periods.

Particular attention should be given to the last part of the trip, as this appears to be the phase in which vacationers feel

worst. Possibly, tourists' positive feelings are distracted by hassles of packing and making arrangements for the travel back home. Unfortunately, the industry currently does little to alleviate these stresses.

### *Limitations and Suggestions for Future Research*

This study is based on a small, nonprobability sample and cannot be generalized to a larger population. Unfortunately, the nature of tourism makes finding probability samples difficult and costly. The size of our sample must be considered with respect to the longitudinal design of our study—while we used only 39 participants, they recorded their emotions across 14 or more days, resulting in more than 400 data points (participants × occasions). The number of data points does not enhance the power to detect between-participant effects, but it does affirm power to detect within-participant development.

Second, our investigation into national differences between travelers included two nationalities, only. Emotions are more important in the overall evaluation of one's life as a whole in individualistic societies compared to collectivist societies (Suh et al. 1998). Both Americans and the Dutch are from affluent, individualistic societies (Hofstede 1980, 1991). Perhaps with greater diversity of individuals, a significant effect of nationality would show. Differences in tourist nationality were not the main focus of the present study but are an intriguing topic for future research. Similarly, the implications are limited by the types of holidays studied, largely comprising family outings and sun/sea/sand holidays. Distinct holiday types such as those focused on volunteering or hobbies have different, possibly more diverse positive emotional outcomes (Mitas et al. 2012).

Another limitation is that we assessed the recalled experiential aspect of emotions. Observed differences in emotions between cultures and gender generally focus on the social-expressive component of emotions (Garside and Klimes-Dougan 2002; Mesquita 2001). To our knowledge, no studies that assess the tourist experience through tourists' facial expressions exist. Hence, future studies could assess the social-expressive component.

Moreover, the fact that we studied recalled felt emotions implies that memory distortion could have taken place (Braun-LaTour, Grinley, and Loftus 2006). Memory is reconstructed and recollection may provide inaccurate accounts of actual emotions experienced in the moment (Kemp, Burt, and Furneaux 2008). However, because of the limited time between emotional experience and assessment of such experience, the discrepancies are likely limited. According to Fredrickson (2000), a daily diary strategy like the one used in the present study greatly limits memory distortion.

Adding to the latter point raised, the grouping of emotions (i.e., positive vs. negative) may be an oversimplification of reality (Smith and Schneider 2009). Emotions differ in

frequency, intensity, and sometimes valence (Griffiths 1997). Some scientists argue that certain emotions are more basic, more important than others (Ekman 1999a). Others have claimed that certain emotions overlap, while other emotions are more indicative of moods (Izard 1992). Future research is required on these issues.

Furthermore, although the present study included a large set of emotions, there is currently no evidence suggesting that these emotions truly capture the essence of a tourist travel experience. A combination of quantitative and qualitative research is likely best suited to establish which emotions are most important in a tourism context.

Finally, we find that vacationers feel best during the middle of their trip, but our data do not tell us why that is. Earlier research (Nawijn 2010; Pearce 1981) suggests that health issues, culture shock, and jet lag may cause vacationers to feel worse at the beginning of their trip. There is no explanation for the experienced emotions during the remainder of the trip. Why do people feel the best during the middle of their trip and the worst at the end of their trip? These questions remain open for empirical investigation.

## Conclusion

We assessed the potential changes in emotions during vacation. We found that changes in vacationers' emotions differ based on length of stay and that the ratio of positive to negative emotions is insufficient to spark flourishing dynamics. Vacationers on an 8- to 13-day trip feel best during the middle of their trip and worst at the end. This finding challenges Nawijn's (2010) holiday happiness curve model and provides evidence that the industry should consider what it can do to elicit more positive emotions among tourists, especially toward the end of their vacation.

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