The road to happiness: from mood during leisure trips and activities to satisfaction with life

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ABSTRACT
Over the past years an increasing number of studies have investigated the link between travel and subjective well-being (SWB), often focussing on the effects of trip characteristics on satisfaction with particular trips. Two elements not frequently addressed in this research domain are (i) how trip satisfaction affects the mood during − and the evaluation of − the activity at the destination of the trip and (ii) how travel can affect long-term well-being. As engagement in out-of-home activities can improve eudaimonic well-being − referring to meaning of life, self-development and social relationships − it is possible that travel (satisfaction) does not only affect the overall evaluation of people’s lives (i.e., life satisfaction), but also eudaimonic well-being, through activity participation and satisfaction. In this study we will analyse the effect of satisfaction with leisure trips on the satisfaction with the leisure activity at the destination of the trip and look at how satisfaction with these short-term activity episodes affect both eudaimonic well-being and life satisfaction. Results of this study applying a structural equation modelling approach on 1,212 respondents from the city of Ghent (Belgium) indicate that spill-over effects exist from trip satisfaction on leisure activity satisfaction and that both these short-term satisfactions affect eudaimonic well-being and life satisfaction, whether directly or indirectly.

1. INTRODUCTION
Although travel options and trip characteristics can affect individuals’ mood during a trip and cumulative satisfaction with trips could impact long-term life satisfaction, travel may also affect well-being in an indirect way. In travel behaviour analysis, it is acknowledged that travel is valued because it enables engagement in daily out-of-home activities. Not only do travel options determine whether or not people can participate in (preferred) activities, the travel experience can also affect the performance of − and satisfaction with − activities at the destination of the trip. Since engaging in these activities can improve peoples’ personal growth, social contacts and their evaluation of life, perceived travel quality may also affect long-term happiness indirectly.

In recent years, subjective well-being (SWB) has attracted increased attention across multiple disciplines, as objective elements (such as income and health status) are not able to capture all aspects of quality of life (1, 2, 3). Although studies have started analysing how travel can affect SWB, it is not clear how it influences different types of SWB. Research in SWB mostly falls into two traditions. The hedonistic tradition focusses on short-term happiness and is generally defined as the presence of positive affect and the absence of negative affect. The eudaimonic tradition, on the other hand, focusses on living a ‘full life’ and actualising one’s human potentials. In addition, satisfaction with life − a cognitive evaluation of a person’s life in general − can be regarded as an outcome of both hedonic and eudaimonic well-being.

In this study we focus on leisure trips and activities. It can be argued that leisure activities − which can be considered as freely chosen, satisfying/enjoyable and as good opportunities to strengthen social contacts and realising certain personal goals (4) − are planned and undertaken to satisfy certain needs (e.g., Abou-zeid and Ben-Akiva, 2012). Cumulative satisfaction with leisure activities (i.e., hedonic well-being) can therefore affect both eudaimonic well-being and life satisfaction. Since the perceived quality of trips towards leisure activities might affect the execution of − and contentment with − these activities; leisure trips can influence the well-being enhancing effect of leisure activities. As travel can − in most cases − be perceived as a derived demand, i.e., to participate in spatially separated activities, travel will only contribute to eudaimonic well-being indirectly (through activity participation), although cumulative positive (or negative) moods during trips might positively (or negatively) influence peoples’ life satisfaction.
2. DISENTANGLING THE WELL-BEING KNOT

2.1 Hedonic well-being versus eudaimonic well-being

Well-being is a rather vague and all-embracing concept, which can have various meanings for different people. SWB is considered subjective because the idea is for people to evaluate for themselves. Academics regularly assume that SWB consists of three components (3, 6): the presence of positive feelings, the absence of negative feelings and overall satisfaction with life. The first two components—often referred to as affective or hedonic components—tend to pertain to short time frames; they detect self-reported feelings or emotions during an interval or activity episode. The experience of happiness, enjoyment and/or pleasure (i.e., positive affect) through the satisfaction of various needs is often referred to as hedonic well-being (1, 7).

Eudaimonic well-being, on the other hand, is more than preference satisfaction and emphasises on the meaning of life and achieving personal growth (1, 8). According to Aristotle’s Nichomachean ethics, well-being cannot be based on the extent of pleasure experienced but derives from the enactment of such qualities as excellence, virtue and self-realisation (9). Contemporary eudaimonic understandings of well-being build on Aristotle and emphasise purpose in and meaning of life, personal growth and ‘flourishing’—the realisation of the best in oneself (1, 8). On this view, well-being amounts to living in ways that reflect one’s ‘daimon’ or true self, which becomes possible by “identifying one’s potential strengths and limitations and choosing those goals that provide personal meaning and purpose in life” (10). In contrast to hedonic well-being—emphasising on short-term satisfaction—eudaimonic well-being tends to pertain to the longer term.

2.2 Life satisfaction

Life satisfaction is a cognitive evaluation of a person’s life in general which tends to be rather stable over time and only gradually changes over longer periods of time (11). Although satisfaction with life is often considered as being part of hedonic well-being, life satisfaction can also be seen as an outcome of both hedonic and eudaimonic well-being. Both hedonic and eudaimonic elements like positive affect and personal growth contribute to life satisfaction (7, 12). According to (13), people with a ‘full life’ (having high levels of both hedonic and eudaimonic well-being) have a higher life satisfaction than people with an ‘empty life’ (having low levels of hedonic and eudaimonic well-being). In this paper we will regard life satisfaction separately from hedonic well-being and as an outcome of both hedonic and eudaimonic well-being.

2.3 Activity satisfaction and domain satisfaction versus life satisfaction

Life satisfaction can be affected by the performance of—and satisfaction with—daily activities. Since people engaging in interesting or rewarding activities are likely to experience more pleasant than unpleasant emotions, frequent participation in such activities can improve life satisfaction (14, 15). Furthermore, everyday activities help people to actualise their potentials and achieve personal growth and progress to their goals. It can even be argued that people plan and undertake activities to satisfy their needs and maintain or enhance well-being (16). Performing out-of-home activities and leisure/social activities seems to result in higher levels of satisfaction, compared to activities at home or more mandatory activities (16, 17).

Life satisfaction is not only influenced by satisfaction with activity episodes, it can also be affected by satisfaction in various domains (e.g., job satisfaction). According to (18), domain satisfaction can be regarded as a fourth component of SWB, besides positive affect, negative affect and life satisfaction. Studies have indicated that this medium-term domain satisfaction is correlated with life satisfaction (18, 19). Life satisfaction can be affected by the perceived quality of certain domains in life, such as employment, health and marriage. Furthermore, satisfaction with activity episodes might also affect life satisfaction indirectly through domain satisfaction, for instance when frequent pleasant social interaction with colleagues improves job satisfaction, which in turn positively affects satisfaction with life.

Reverse relationships are also possible: individuals with greater life satisfaction are probably more satisfied with life domains and/or enjoy activities to a greater extent. A bidirectional relationship
seems to occur: a bottom-up causation, where the perceived quality of performed activities and satisfaction with life domains cause a certain level of life satisfaction, and a top-down causation, where satisfaction with life produces certain levels of domain satisfaction and activity satisfaction (19, 20). In this paper we will leave the top-down causation out of account and focus on the effect of activity satisfaction and domain satisfaction on life satisfaction.

3. TRAVEL, LEISURE AND SWB

3.1 Travel and SWB
(21) and (22) provide an overview of how travel can affect SWB. Three ways in how travel can affect SWB are acknowledged in both studies, one direct way and two indirect ways. First of all, travel can affect SWB – hedonic well-being in particular – directly, through the feelings or emotions experienced during the trip and the evaluation of that trip. The mood during a trip can be affected by activities that people (can) perform during travel. Public transport users, for instance, can perform both relaxing/entertaining activities such as reading a book or listening to music (23). Second, travel enables people to participate in spatially separated out-of-home activities. Since (out-of-home) activity participation has a clear impact on life satisfaction and helps people to actualise their potentials and achieve personal growth and progress to their goals, travel can have an important indirect effect on life satisfaction and eudaimonic well-being (5, 14). In the worst case scenario of social exclusion, a lack of travel options makes it impossible to engage in rewarding activities, negatively affecting quality of life (24). Third, observed spill-over effects of travel on the activity at the destination of the trip are possible (21, 22, 25). The (perceived) quality of the trip can affect the ease with which people perform their activity at the destination of that trip. A stressful trip, for instance, might disturb the execution of – and lower the personal goals with – the upcoming activity and can therefore reduce the activity’s well-being enhancing effect. On the other hand, travel time can give travellers the opportunity to mentally prepare for the activity ahead, facilitating the performance of the activity (26).

3.2 Leisure and SWB
Leisure time can be defined as time not occupied by paid or unpaid work, personal or household chores or other obligations. Recent studies indicate that leisure is positively correlated with different types of SWB (27). Despite this positive relation, less is known about how leisure enhances SWB. Since leisure activities can be defined as (i) freely chosen and (ii) enjoyable and/or satisfying (4), a direct link between leisure activities and SWB can be expected. According to (27), leisure is a key life domain and a core ingredient for overall well-being. They state that leisure can affect SWB through five psychological mechanisms that leisure provides, such as autonomy and mastery. According to (28), leisure activities can improve SWB as they can provide eleven psychological benefits, including relaxation, creativity and self-expression. Studies have indicated that out-of-home leisure activities (e.g., visiting family or friends) are perceived more positively than in-home leisure activities (e.g., watching television), possibly since engagement in out-of-home activities is often accompanied with social interaction (16, 17). Since leisure activities can help people in their self-development, in the realisation of personal goals and in maintaining social relationships, it is clear that participating in leisure activities does not only influence hedonic well-being and life satisfaction, but also eudaimonic well-being.

It is possible that satisfying leisure trips and activities will not only affect eudaimonic well-being (in case of leisure activities) and life satisfaction directly, but that there also exists a possible indirect effect through domain satisfaction. Satisfaction with trips might influence a global evaluation of daily travel, while satisfaction with leisure activities might affect a global evaluation of people’s leisure time. This domain satisfaction might then affect longer-term well-being (i.e., eudaimonic well-being and life satisfaction) (19).

4. CONCEPTUAL MODEL
Based on the previous literature we construct a conceptual model analysing the links between (i) trip satisfaction and leisure activity satisfaction as activity satisfaction, (ii) overall satisfaction with daily travel and leisure as domain satisfaction, (iii) eudaimonic well-being, and (iv) life satisfaction (Figure 1). In the suggested model, there exist links from trip satisfaction to leisure activity satisfaction and
from leisure activity satisfaction to eudaimonic well-being. As travel is mostly a derived demand and does not directly contribute to eudaimonic well-being, no direct link from trip satisfaction to eudaimonic well-being is included. Furthermore, links have been provided from trip satisfaction, leisure activity satisfaction and eudaimonic well-being to life satisfaction. Within trip satisfaction and leisure activity satisfaction a link exists from the emotions experienced during the activity episode to the cognitive evaluation of this episode. Since we do not have information on domain satisfaction of travel and leisure (i.e., overall satisfaction with (daily) travel and leisure activities), domain satisfaction will be kept out of analysis in the structural equation modelling approach (see Sections 6 and 7).

In this model, travel mode choice, trip duration and company during the trip are included as explanatory variables of trip satisfaction. Numerous recent studies indicate that the choice of travel mode has a significant effect on how satisfied people are with their trips. Active travel (walking in particular) seems to result in the highest levels of trip satisfaction, while people using public transport (bus in particular) seem least satisfied with their trips \((29, 30, 31, 32)\). Studies also found that trip duration tends to affect trip satisfaction negatively. With longer durations, travellers become less enthusiastic and relaxed and evaluate the quality and efficiency of the trip lower \((29, 30, 33)\). As people might travel together to leisure activities, social interaction might already start during the trip towards that activity. As a result, people travelling alone might experience their trip less positive than people travelling together with friends and family. Furthermore, as people often participate in leisure activities to meet and spend time with friends, family and others \((27)\), it is also reasonable to assume that satisfaction with leisure activities will mostly be lower for people performing such an activity alone, compared to people performing this activity together with others. We therefore added a link from activity company to leisure activity satisfaction. Finally, we added a link from the type of out-of-home leisure activity to leisure activity satisfaction as previous studies have indicated that different types of (leisure) activities result in various levels of satisfaction \((15)\).

**FIGURE 1** A conceptual model outlining the relationships between travel satisfaction and leisure satisfaction (both as activity satisfaction and domain satisfaction), eudaimonic well-being and life satisfaction. Dark blue: elements and links analysed in this study; light blue: elements and links not analysed in this study.

**5. DATA**

For this study we use data from a 2012 Internet survey on travel behaviour, SWB and satisfaction with the most recent leisure activity and the foregoing trip. Invitations with a link to the Internet survey were distributed in twelve neighbourhoods (five urban and seven suburban neighbourhoods) within the
city of Ghent, Belgium (approximately 250,000 inhabitants). In total, 27,780 invitations to the Internet survey were distributed to every household in the selected neighbourhoods, covering about one fourth of all households in Ghent. Eventually, 1,807 adult persons completed the survey, of which 1,720 respondents were retained after a first data cleaning. For this study we removed an additional share of respondents (see Section 5.1), resulting in 1,212 respondents. As the used sample recruitment method resulted in a rather low response rate (i.e., 6.5%) it is not possible to perform a descriptive analysis of the total population of the selected neighbourhoods. However, since the main goal of this study is an analytical representation of relationships among multiple variables it is more important to have a large and sufficiently diverse sample (34). Since our sample size is large enough (even after removing a substantial share of respondents) coefficients to characterise specific relationships can be estimated with great confidence. For more information on the neighbourhood selection, sample recruitment and representativeness, see (29).

In this study we use cross-sectional data, measuring respondents’ experiences at one point in time. Since our model tries to measure how short-term satisfaction (with specific trips and leisure activities) affects long-term life satisfaction and eudaimonic well-being, longitudinal data (i.e., repeated observations of the same variables over a certain period of time) would have been most appropriate. Doing so would have made it possible to analyse whether multiple satisfying (or dissatisfying) trips and/or activity episodes over time could positively (or negatively) affect peoples’ eudaimonic well-being and evaluation of life. However, within travel behaviour research (but also in other domains) there is a limited availability of longitudinal data, as they are expensive, time consuming and impose a high respondent burden. Although the lack of longitudinal data in this study is a clear limitation, we do think that the cross-sectional data used in our model gives an indication of how (i) trip satisfaction and leisure activity satisfaction, (ii) eudaimonic well-being and (iii) life satisfaction are related with each other at a certain point in time.

5.1. Key variables
In this section we analyse the key variables of the model outlined in Figure 2. It has to be noted that satisfaction with the most recent out-of-home leisure activity and satisfaction with the trip to this activity are measured retrospectively. In retrospective measurements, (i) remembered frequency, duration and intensity of positive and negative affect (i.e., remembered mood) or (ii) a global perception of the quality and efficiency (i.e., cognitive evaluation) of a past activity episode are reported. This type of measurement could create memory distortions that affect the delayed recall and evaluation of experiences (15) or may cause skewing of memories of ‘average’ trips by extreme or unusual circumstances. In order to minimise these effects, we removed respondents indicating that they performed their most recent leisure trip and activity more than two days before filling in the survey. This resulted in retaining 1,212 respondents who performed their most recent leisure activity and foregoing trip the day of filling in the survey, the day before or two days before.

5.1.1 Trip satisfaction
In the used survey we asked respondents how they experienced the trip to their most recent out-of-home leisure activity. In order to measure people’s trip satisfaction we used the Satisfaction with Travel Scale (STS) (30, 31, 35). This scale measures the mood (i.e., feelings and emotions) travellers experience during a trip and how they evaluate the trip being made. The affective feelings measured by this scale are based on two dimensions (i.e., valence: ranging from unpleasant to pleasant; and activation: ranging from deactivation to activation), which are assessed by the Swedish Core Affect Scale (SCAS) (36), and consists of six items. The endpoints of each item are combinations of the valence and activation dimensions. Three items range from negative deactivation to positive activation (i.e., bored - enthusiastic; tired - alert; fed up - engaged) and the other three from negative activation to positive deactivation (i.e., stressed - calm; worried - confident; hurried - relaxed). A cognitive evaluation of the trip being made is measured by three additional items that refer to the general quality and efficiency of the trip (i.e., the trip was the worst - best I can think of; the trip was low - high standard; the trip did not work out - worked out well). For all the nine scales, scores vary from -3 to 3 with a higher score implying higher satisfaction.
In this study we subdivide the affective component of travel satisfaction (i.e., emotions during the trip) from the cognitive component of travel satisfaction (i.e., evaluation of the trip made). Since the internal consistency (i.e., the average correlation of a scale’s items) of the six scales measuring emotions during the trip and the three scales measuring the cognitive evaluation of the trip are assessed as good (Cronbach’s alpha is respectively 0.89 and 0.87), we created a positive emotion variable by averaging the six scales measuring the affective emotions and a positive evaluation variable by averaging the three scales measuring cognitive evaluation. The average scores on the positive emotion variable and positive evaluation variable are 1.18 and 1.40 respectively, indicating that respondents are fairly satisfied with the trip to their most recent leisure activity.

5.1.2 Leisure activity satisfaction

In order to measure how satisfied respondents were with their most recent out-of-home leisure activity we applied a comparable scale as the STS, but applied on the leisure activity instead of on the trip. This scale (i.e., Satisfaction with Activity Scale (SAS)) therefore also contains six items analysing the experienced mood during the (leisure) activity, ranging from negative to positive emotions with varying levels of activation (i.e., bored - enthusiastic; tired - alert; fed up - engaged; stressed - calm; worried - confident; hurried - relaxed). A cognitive evaluation of the leisure activity made is measured by five items that refer to the general quality of the activity, including two items referring to the eudaimonic aspects of the leisure activity (i.e., the activity was the worst - best I can think of; the activity was low - high standard; the activity did not work out - worked out well; the activity did not make it possible – made it possible to develop myself; the activity did not strengthen – strengthened my social relationships). In analogy with the STS, the scores of the SAS vary from -3 to 3 with a higher score implying higher satisfaction.

Parallel to the STS, we subdivide the affective component of leisure activity satisfaction from the cognitive component of leisure activity satisfaction. Since the internal consistency of the six scales measuring emotions during the leisure activity and the five scales measuring the cognitive evaluation of that activity are good (Cronbach’s alpha is respectively 0.82 and 0.82), we created a positive emotion variable by averaging the six scales measuring the affective emotions and a positive evaluation variable by averaging the five scales measuring cognitive evaluation. The average scores on the positive emotion variable and positive evaluation variable − 1.82 and 1.76 respectively − indicate that respondents are satisfied with their most recent leisure activity, somewhat more satisfied than with the trip to the activity. These differences can be partly explained by the fact that people often participate in leisure activities to satisfy certain needs, while travel is mostly a derived demand, in this case to enable engagement in leisure activities.

5.1.3 Eudaimonic well-being

In order to gain information on the respondents’ eudaimonic well-being we asked them − on a five-point scale going from 1 (strongly disagree) to 5 (strongly agree) − to which extent they agree with the following seven statements: I am leading a purposeful and meaningful life; My social relationships give me support and appreciation; I am engaged and interested in my daily activities; I actively contribute to the happiness and well-being of others; I am suitable for and competent in the activities that are important to me; I am a good person and live a good life; People respect me. Since the internal consistency (reliability) of this scale is high (Cronbach’s Alpha = 0.86), we created one eudaimonic well-being variable by averaging the seven items. The average score of respondents on this variable is 4.06; indicating that respondents generally lead a meaningful and full life.

5.1.4 Life satisfaction

Life satisfaction is measured using the Satisfaction With Life Scale (SWLS) (37). This scale asks respondents – on a five-point scale going from 1 (strongly disagree) to 5 (strongly agree) − to which extent they agree with five statements: In most ways my life is close to my ideal; The conditions of my life are excellent; I am satisfied with my life; So far I have gotten the important things I want in life; If I could live my life over, I would change almost nothing. Since the internal consistency (reliability) of this scale is high (Cronbach’s Alpha = 0.87), we created one life satisfaction variable by averaging the five items. The average score of respondents on this variable is 3.66, indicating that respondents are
moderately satisfied with their life. These scores, together with the scores of trip satisfaction, leisure activity satisfaction and eudaimonic well-being are in line with studies of Diener and colleagues, indicating that most people are happy and experience above neutral (i.e., positive) emotions most of the time (38).

5.1.5 Travel mode choice, trip duration and trip company

Respondents indicated which travel mode they chose to reach their most recent leisure activity. Almost half of the respondents travelled by car (48.8%), 9.5% used public transport, 22.5% cycled, while 19.2% walked to their leisure activity. Since walking results in significantly higher levels of trip satisfaction compared to using other modes (at p < 0.05), we made a binary variable by subdividing respondents into two groups: respondents cycling or using a car or public transport (0) and respondents walking (1). We also asked respondents to indicate how long they travelled to reach their most recent leisure activity. Respondents travelling less than 10 minutes evaluate their trip more positively (at p < 0.05) compared to respondents travelling for more than 20 minutes. We therefore created a binary variable by giving trips shorter than 10 minutes a value of 0 (34.7% of the trips) and trips longer than 10 minutes a value of 1 (65.3% of the trips). Finally, we also looked at whether respondents travelled alone, or together with their partner, family, friends or colleagues/acquaintances (multiple answers were possible). Since travelling alone results in significantly lower levels of travel satisfaction (at p < 0.05), compared to travelling together with others, we added the following binary variable – i.e., travelling alone (0; 42.1% of the trips) versus travelling together with company (1; 57.9% of the trips) – as an explanatory variable of travel satisfaction.

5.1.6 Type of leisure activity and activity company

Respondents indicated which type of out-of-home leisure activity they performed most recently. Seven possible leisure activities were provided: Visiting family/friends; Going out to a bar or club; Eating out; Going to forest, park, nature; Going to a cultural/sport activity as spectator; Going to a cultural/sport activity as active participant; and Recreational shopping. Two sample t-tests indicate that satisfaction levels of respondents participating in cultural/sport activity as active participant are significantly lower (at p < 0.05) than respondents participating in other types of leisure activities we made the following binary variable: respondents engaging in other activities than actively participating in cultural/sport activity (0; 91.0%) and respondents actively participating in cultural/sport activity (1; 9.0%). In analogy with the trip to the leisure activity we also asked respondents to indicate with whom they performed their most recent out-of-home leisure activity: Alone, with partner, with friends, with children, with family, or with colleagues/acquaintances. We made a binary variable – i.e., performing leisure activity alone (0; 19.7% of the activities) versus performing leisure activity together with others (1; 80.3% of the activities) – as an explanatory variable of leisure activity satisfaction.

6. METHOD

In this study we perform a Structural Equation Modelling (SEM) approach. This approach makes it possible to examine multiple relationships within a set of variables in which a given variable can be outcome (dependent variable) in one set of relationships and simultaneously predictor of outcomes (explanatory variable) in other relationships. In travel behaviour studies, SEM has been used since the 1980s and on a regular base since 2000 (39). SEM offers an appropriate method for the current study as the proposed conceptual model involves multiple simultaneous relationships among trip satisfaction, leisure activity satisfaction, eudaimonic well-being and life satisfaction.

Since outliers may affect the results of a SEM, it is important to detect and remove them. We therefore examined the Mahalanobis distance (a measure of how distant a vector of observed variable values is from the vector of sample means) for each case in the data set. The greater the Mahalanobis distance the greater the contribution to the departure from multivariate normality (40). Cases were removed five at a time until multivariate normality did not improve anymore. In the end we excluded 40 outliers, resulting in 1,172 respondents. We chose the maximum likelihood estimation approach, the most common estimation technique used in practice, to develop the SEM in AMOS 22.0. Although the sample has no multivariate normal distribution (even after removing outliers), the sample size (i.e., 1,172) is large enough to reduce biases to an acceptable level (39).
7. RESULTS

In this section we analyse the results of the applied SEM of the model presented in Figure 2. The goodness-of-fit measures of the model are satisfactory; and show that the model specifications fit the data well (i.e., $\chi^2$/df = 3.75; RMSEA = 0.05; GFI = 0.99; CFI = 0.98).

7.1 Trip satisfaction, leisure activity satisfaction, eudaimonic well-being and life satisfaction

Table 8 shows how (i) trip satisfaction and leisure activity satisfaction, (ii) eudaimonic well-being and (iii) life satisfaction are related with each other. First of all, a strong effect from the emotions experienced during the trip on the emotions experienced during the leisure activity exists. In other words, the mood during the leisure activity is affected by the mood during the trip towards that activity. The link from trip evaluation to the evaluation of the leisure activity is – although significant (at $p < 0.05$) – less strong, suggesting that the evaluation of the leisure activity is more affected by the content and characteristics of that activity than by the evaluation of the foregoing trip. However, strong indirect effects from feelings during the trip to the evaluation of the leisure activity exist, mainly through the feelings experienced during the activity. In sum, the mood during the leisure trip clearly affects satisfaction with the leisure activity at the destination of the trip; it affects the mood during the leisure activity directly and the evaluation of that activity indirectly. The evaluation of the leisure trip, on the other hand, seems less connected with satisfaction with the leisure activity. Second, strong effects exist from (i) the emotions experienced during the trip towards the evaluation of that trip and (ii) the emotions experienced during the leisure activity towards the evaluation of that activity. This is in line with studies of Kahneman and colleagues, stating that the evaluation of an activity episode is a function of the emotions experienced during that episode (41).

Besides effects within and between trip satisfaction and leisure activity satisfaction, the proposed model also examined effects from activity satisfaction to eudaimonic well-being and life satisfaction. A positive effect of the satisfaction with the leisure activity on eudaimonic well-being is present. Both the emotions during the leisure activity (direct and indirect) and the evaluation of this activity (direct) positively affect self-development and social relationships of respondents. The mood during the trip towards the leisure activity also has a significant indirect effect on eudaimonic well-being, through the mood during the leisure activity.

Results also show positive effects from trip satisfaction and leisure activity satisfaction on life satisfaction; the experience of positive emotions during these episodes has a positive influence on the longer-term evaluation of people’s life. The evaluations of leisure trips and activities only have a significant indirect effect on life satisfaction, through eudaimonic well-being. Finally, eudaimonic well-being has a strong influence on life satisfaction. Respondents who are contented with their self-development and social contacts will also be more satisfied with their lives in general.

7.2 Additional links

Table 1 shows the direct effects of trip characteristics and leisure activity characteristics on trip satisfaction and leisure activity satisfaction respectively, and their indirect effects on eudaimonic well-being and life satisfaction. In line with previous studies, walking to a leisure activity has a significant positive effect on the mood during the trip and a significant positive indirect effect (through this mood) on the evaluation of the trip. A trip longer than 10 minutes, on the other hand, has a significant negative effect on the evaluation of the trip. Travelling together with others positively affects the mood during the trip and indirectly the evaluation of that trip. Furthermore, travelling in company also has a significant indirect effect on the mood during the leisure activity at the destination of the trip. Travelling with others will result in more positive feelings experienced during the leisure activity as they had a better mood during the trip.

Respondents actively participating in a cultural or sport activity have a significantly worse mood and evaluate this activity more negatively compared to respondents engaging in other leisure activities. Performing a leisure activity together with others, on the other hand, has a positive effect on the mood during — and the evaluation of — the leisure activity. Trip characteristics (travel mode choice, trip
duration and trip company) and leisure activity characteristics (type of activity and activity company) have no significant, indirect effects on eudaimonic well-being and life satisfaction.
## TABLE 1. Standardised direct (D), indirect (I) and total (T) effects of the links in the model displayed in Figure 2 (N = 1,172)

<table>
<thead>
<tr>
<th>Endogenous variables</th>
<th>Positive feelings trip</th>
<th>Positive evaluation trip</th>
<th>Positive feeling activity</th>
<th>Positive evaluation activity</th>
<th>Eudaimonic well-being</th>
<th>Life satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D  I  T</td>
<td>D  I  T</td>
<td>D  I  T</td>
<td>D  I  T</td>
<td>D  I  T</td>
<td>D  I  T</td>
</tr>
<tr>
<td><strong>Exogenous variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel mode choice (walking)</td>
<td>0.08 - 0.08</td>
<td>- 0.08</td>
<td>- 0.05  0.05  0.09</td>
<td>- 0.04  0.04</td>
<td>- 0.03  0.03</td>
<td>- 0.01  0.01</td>
</tr>
<tr>
<td>Trip duration (+ 10 minutes)</td>
<td>-0.02 - -0.02</td>
<td>-0.07 -0.03 -0.09</td>
<td>- 0.02  0.02</td>
<td>- 0.02 -0.02</td>
<td>- 0.01 -0.01</td>
<td>- 0.01 -0.01</td>
</tr>
<tr>
<td>Trip company (with others)</td>
<td>0.15 - 0.15</td>
<td>0.02  0.08  0.10</td>
<td>- 0.07  0.07</td>
<td>- 0.05  0.05</td>
<td>- 0.02  0.02</td>
<td>- 0.03  0.03</td>
</tr>
<tr>
<td>Type of activity (active participation in a cultural or sport activity)</td>
<td>- - -</td>
<td>- - -</td>
<td>-0.10 - -0.10</td>
<td>-0.11 -0.05 -0.17</td>
<td>- -0.04 -0.04</td>
<td>- -0.03 -0.03</td>
</tr>
<tr>
<td>Activity company (with others)</td>
<td>- - -</td>
<td>- - -</td>
<td>0.07 - 0.07</td>
<td>0.09  0.04  0.13</td>
<td>- 0.03  0.03</td>
<td>- 0.02  0.02</td>
</tr>
<tr>
<td><strong>Endogenous variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive feelings trip</td>
<td>- - -</td>
<td>- - -</td>
<td>0.55 - 0.55</td>
<td>0.47 - 0.47</td>
<td>0.32  0.32</td>
<td>0.13  0.13</td>
</tr>
<tr>
<td>Positive evaluation trip</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>0.16 - 0.16</td>
<td>- 0.02  0.02</td>
</tr>
<tr>
<td>Positive feeling activity</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>0.54 - 0.54</td>
<td>0.18  0.08  0.26</td>
</tr>
<tr>
<td>Positive evaluation activity</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>0.15 - 0.15</td>
<td>0.01  0.08  0.09</td>
</tr>
<tr>
<td>Eudaimonic well-being</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
<td>0.53 - 0.53</td>
</tr>
<tr>
<td>Squared multiple correlations</td>
<td>0.03</td>
<td>0.33</td>
<td>0.24</td>
<td>0.40</td>
<td>0.09</td>
<td>0.35</td>
</tr>
</tbody>
</table>
8. DISCUSSION AND CONCLUSION

Preliminary results of this study show that trip characteristics have an influence on trip satisfaction, just as characteristics of leisure activities have an effect on the satisfaction with the performed leisure activity. Walking, short travel duration and travelling in company have a positive effect on satisfaction with the trip made. Performing a leisure activity alone has a negative impact on satisfaction with the leisure activity while also the type of leisure activity (in particular whether respondents participate in a cultural/sport activity as active participant) affects how people perceive their out-of-home leisure activity.

Results of the performed structural equation model indicate spill-over effects of travel on the activity at the destination of the trip. A positive mood and – to a lesser extent – a positive evaluation of a trip will positively affect satisfaction with the (leisure) activity at the destination of that trip. Other outcomes indicate that satisfaction with short-term activity episodes – in this case trip satisfaction and leisure activity satisfaction – can affect long-term satisfaction and well-being. Eudaimonic well-being is directly affected by satisfaction with leisure activities and indirectly (through leisure activity satisfaction) by the mood during the trip towards this leisure activity. Life satisfaction, on the other hand is mainly affected by the emotions experienced during that trip and leisure activity. The evaluation of these activity episodes only affects life satisfaction indirectly, through eudaimonic well-being; which in turn has a strong influence on people’s satisfaction with life. In sum, results of this study provide valuable information on how trip satisfaction affects the mood during – and the evaluation of – the activity at the destination of the trip and how travel can affect long-term well-being.

According to us, this study has two main shortcomings: (i) we used cross-sectional data instead of longitudinal data and (ii) no information on domain satisfaction of travel and leisure was at our disposal. Future research analysing the relationship between short-term trip satisfaction and leisure activity satisfaction and long-term eudaimonic well-being and life satisfaction might benefit, as indicated before, from using longitudinal data. Doing so enables researchers to statistically identify causality, which is not possible with cross-sectional data. Using these data makes it possible to analyse whether repeated positively (or negatively) experienced leisure trips and activities can make changes in people’s eudaimonic well-being and evaluation of their life. However, this might not be so obvious as life satisfaction and eudaimonic well-being tend to rather stable over time (12, 38). According to the hedonic treadmill theory, positively or negatively experienced activity episodes will affect happiness temporarily, but in short time it will return to hedonic neutrality (42). However, studies do indicate that long-term well-being is not stable over the course of an entire life span and can vary over longer time periods (i.e., periods of numerous years) (38). Anyhow, longitudinal data over a long period of time would be necessary in order to analyse potential changes in life satisfaction and/or eudaimonic well-being.

Another limitation of this study is that we do not have information on domain satisfaction of travel and leisure. Information on this medium-term satisfaction could provide valuable insight on the relationship between specific leisure trips and activities and long-term well-being, as satisfaction with (daily) travel and satisfaction with leisure (in general) might play an intermediate role in this link. Specific trips and leisure activities might affect life satisfaction and eudaimonic well-being (in case of leisure) indirect, through this domain satisfaction of travel and leisure (as indicated by Figure 1). In this respect, it is worth noticing that (25) analysed the link between satisfaction with daily travel (i.e., domain satisfaction) and life satisfaction. According to this study satisfaction with daily travel affects life satisfaction both direct and indirect, through satisfaction with out-of-home activities. However, they used positive and negative affect experienced during specific activities as a proxy for activity satisfaction (thus short-term activity satisfaction) while satisfaction with daily travel was measured by asking respondents to rate general statements such as I am completely satisfied with my daily travel (thus medium-term domain satisfaction). It has to be noted, however, that the link between short-term satisfaction with (i) leisure trips and activities and (ii) medium-term domain satisfaction of travel and leisure might not be so straightforward due to a rather large variety in leisure trips and activities. A
focus on commute trips and work activities might circumvent this problem as these trips and activities are – in most cases – less subject to variability.

REFERENCES