

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

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.

Keywords: Travel satisfaction; Leisure activity satisfaction; Life satisfaction; Subjective well-being; Eudaimonic well-being; Hedonic well-being

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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 can 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 (Ryan and Deci 2001; Helliwell and Putnam 2004; Kahneman and Krueger 2006; Diener 2009). 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 (Passmore and French 2001; Tinsley et al. 1993) – 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.

In this paper, we will analyse the effect of satisfaction with a specific leisure trip on satisfaction with the leisure activity at the destination of that trip. Furthermore, we will look at how satisfaction with these two short-term activity episodes influences long-term eudaimonic well-being and people's satisfaction with their life in general. A structural equation modelling approach is applied on 1,212 respondents residing in the city of Ghent,

Belgium. The paper is organised as follows: Sections 2 and 3 present a literature review on (i) different types of SWB, and (ii) the link between travel, leisure and SWB, respectively. Section 4 explains the conceptual model. The data and key variables are described in Section 5. Section 6 explains the used methodology. Section 7 deals with the major results, while discussion and conclusion are provided in Section 8.

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 (Atkinson 2013). SWB is considered subjective because the idea is for people to evaluate for themselves. Academics regularly assume that SWB consists of three components (Diener 2009; Kahneman et al. 1999): the presence of positive feelings (such as contentment, pleasure and affection), the absence of negative feelings (such as sadness, anxiety and frustration) and overall satisfaction with life (i.e. a cognitive evaluation pertaining to the long term). 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 (e.g. Ryan and Deci 2001; Deci and Ryan 2008), although emotional well-being is also used (Kahneman and Deaton 2010). This hedonic stance is clearly informed by the philosophical utilitarianism of Jeremy Bentham and classical philosophers like Aristippus of Cyrene and Epicurus. In contemporary research, the SWB-approach by Ed Diener and colleagues (e.g. Diener 2009) and the work of Daniel Kahneman (e.g. Kahneman et al. 1999) are the most well-known representatives of hedonic well-being.

Eudaimonic well-being, on the other hand, is more than preference satisfaction and emphasises on the meaning of life and achieving personal growth (Ryan and Deci 2001; Ryff and Singer 2008). 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 (Aristotle 1980). 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 (Ryan and Deci 2001; Ryff and Singer 2008). 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" (Waterman et al. 2008, p. 42). The well-known capabilities approach (Sen 1993; Nussbaum 2011), according to which well-being can only be realised through freedom and the ability to conduct the activities and lead the life one values, can also be ranged under eudaimonic well-being. 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 (Diener et al. 2006; Eid and Diener 2004). 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 (e.g. Deci and Ryan 2008; Huta and Ryan 2010). According to Peterson et al. (2005) and Seligman (2002), 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 (Diener 2000; Kahneman et al. 2004). 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 (Abou-Zeid and Ben-Akiva 2012). 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 (Archer et al. 2013; Schwanen and Wang 2014; Spinney et al. 2009).

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 Diener et al. (1999), 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 (Diener et al. 1999; Schimmack 2008). Life satisfaction can be affected by the perceived quality of certain domains in life, such as employment, health and marriage (e.g. Helliwell 2006; Helliwell and Putnam 2004). 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 (Diener 1984; Feist et al. 1995; Headey et al. 1991; Schimmack 2008). 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, as we want to analyse the effect of travel and leisure on long-term well-being.

2.4 Experienced utility

The concept of utility has carried two different meanings throughout its history. Decision utility is associated with the prospective choice of an alternative. The weights of various attributes in the decision are inferred from observed choices, and are used to explain these choices (Kahneman et al. 1997). Besides decision utility, utility can also refer to the experience of feelings and emotions, resulting from the outcome of a choice. This post-choice (hedonic) satisfaction is referred to as experienced utility and is closely related to Bentham's idea that utility is the sum of experienced pleasures minus pains (Carter and McBride 2013). This experienced utility has long been ignored in empirical studies, as it was often argued that subjective hedonic experience cannot be observed or measured and that made choices provide all necessary information about utility as people will choose alternatives that will maximise hedonic experience (Kahneman et al. 1997). However, studies have indicated that experienced utility empirically differs from decision utility and that experienced utility is measurable. Both the emotions felt during an activity episode – i.e. instant utility – and a retrospective evaluation of such an episode – i.e. remembered utility – can be measured using self-report scales. Remembered utility can be seen as an outcome of instant utility, the feelings experienced during an activity episode affect how people evaluate this episode. However, the overall evaluation of a previous activity is mostly not equal to the average of experienced emotions, a discrepancy which is referred to as the 'memory-experience gap' (Miron-Shatz et al. 2009). This evaluation, however, can generally be predicted by considering the peak (most intense value) in momentary affect (instant utility) during a time-span and the momentary affect near the end of the time-span (i.e. peak-end rule) (e.g. Kahneman et al. 1993; Kahneman and Krueger 2006). The duration of the activity episode has little or no effect on the remembered utility (i.e. duration neglect) (e.g. Fredrickson and Kahneman 1993).

Based on the above literature we created an overview of different types of SWB, whereby satisfaction with a specific activity episode – including emotions experienced during the activity and a global evaluation of the activity – affects people's satisfaction with their life in general, both directly and indirectly through eudaimonic well-being (Figure 1). The effect of short-term satisfaction on long-term well-being, however, might be partly indirect through satisfaction with certain domains in life. In the continuation of this paper we will use this model to analyse the effects of leisure trips and activities on eudaimonic well-being and life satisfaction.

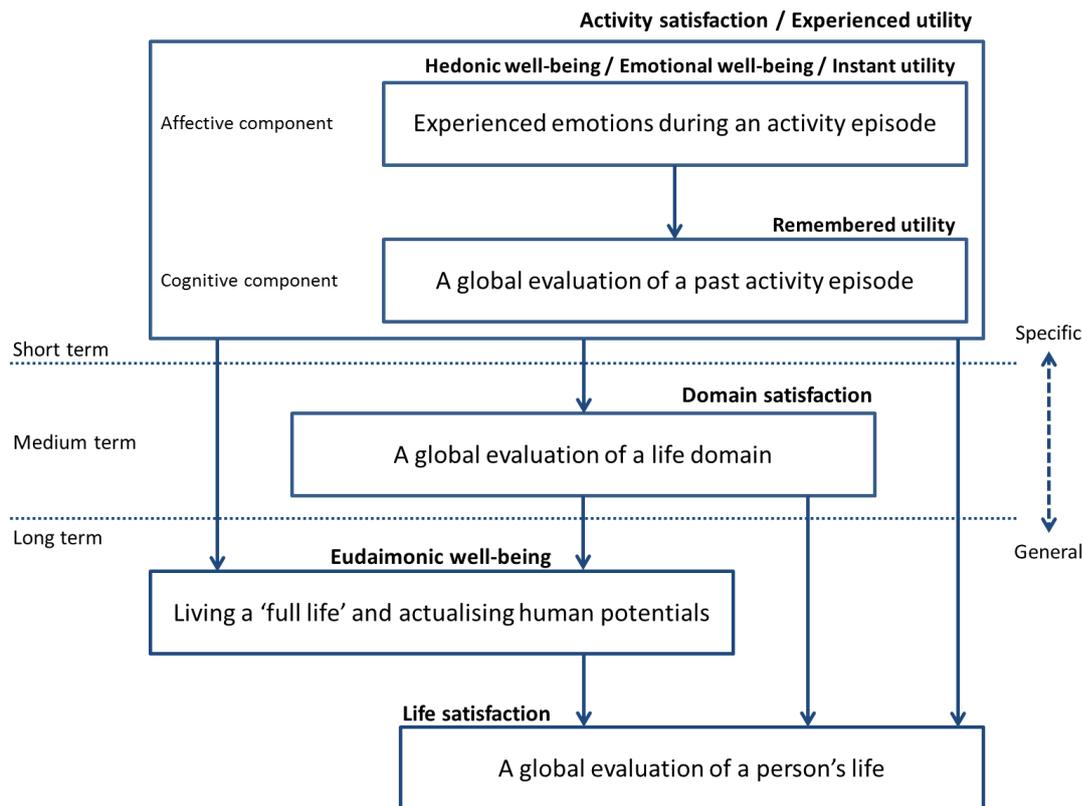


Figure 1. Overview of the relationships between different types of SWB.

3. Travel, leisure and SWB

3.1 Travel and SWB

De Vos et al. (2013) and Ettema et al. (2010) 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, socialising with co-travellers, or listening to music (e.g. Ettema et al. 2012; Lyons et al. 2007). 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 (Abou-Zeid and Ben-Akiva 2012; Diener 2000; Lyubomirsky et al. 2005). 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 (e.g. Currie et al. 2009; Lucas 2012). Third, observed spillover effects of travel on the activity at the destination of the trip are possible (Bergstad et al. 2011; De Vos et al. 2013; Ettema et al. 2010). 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 satisfaction 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 (Jain and Lyons 2008; Mokhtarian and Salomon 2001).

Trip satisfaction, however, can also vary across different types of activities. Abou-Zeid (2009) indicates that trip satisfaction is highest for activities where individuals experience a high level of happiness when conducting that activity, suggesting that respondents confound their liking for the activity with their liking of travel. As indicated in Section 2.3, activity satisfaction can also be affected by life satisfaction, making it possible that people evaluating their life positively will have a higher probability of being satisfied with their trips, compared to people with a lower life satisfaction. Also here a bidirectional relationship seems to occur where satisfaction with a short-term activity episode (in this case a trip) results in a certain level of life satisfaction, while this level of long-term well-being affects the perception of these activity episodes. In this paper we will focus on the bottom-up causation of trip satisfaction on long-term well-being.

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. The importance of leisure has long been acknowledged. Aristotle has emphasised on the importance of leisure by arguing that leisure is more important than work since leisure provides pleasure and happiness in life (Aristotle 1998). Recently, studies have indicated that leisure is positively correlated with different types of SWB (e.g. Newman et al. 2014). 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 (e.g. Passmore and French 2001; Tinsley et al. 1993), a direct link between leisure activities and SWB can be expected. According to Newman et al. (2014), 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: (i) detachment and recovery from work and other potential life pressures; (ii) autonomy (i.e. providing people perceptions of control and freedom); (iii) mastery (i.e. overcoming of challenges and improving of skills); (iv) meaning (i.e. adding value and purpose to one’s life); and (v) affiliation (i.e. engagement with others). According to Tinsley and Eldredge (1995), 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 (Archer et al. 2013; Schwanen and Wang 2014; Spinney et al. 2009; Ravulaparthi et al. 2013). 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.¹ This domain satisfaction might then affect longer-term well-being (i.e. eudaimonic well-being and life satisfaction) (e.g. Schimmack 2008).

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/experienced utility, (ii) overall satisfaction with daily travel and leisure as domain satisfaction, (iii) eudaimonic well-being, and (iv) life satisfaction (Figure 2). 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, as remembered utility can be seen as an outcome of instant utility (e.g. Kahneman et al. 1997). This effect has recently been recognised in a travel-related context by Suzuki et al. (2014), indicating that the cognitive evaluation of commute trips can be seen as an aggregation of the experienced emotions during these trips. 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 of a particular leisure trip. 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 (Abou-Zeid 2009; De Vos et al. 2016a; Ettema et al. 2011; Friman et al. 2013;

¹ In this paper, satisfaction with one specific trip will be referred to as trip satisfaction, while satisfaction with one specific leisure activity will be referred to as leisure activity satisfaction. Doing so, we avoid confusing between (short-term) activity satisfaction and (medium-term) domain satisfaction. The latter will be referred to as satisfaction with (daily) travel and satisfaction with leisure. In previous studies, travel satisfaction is often used to refer to both satisfaction with one trip and satisfaction with travel in general.

Morris and Guerra 2015b; Olsson et al. 2013). 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 (De Vos et al. 2016a; Ettema et al. 2011, 2012; Morris and Guerra 2015a; Stutzer and Frey 2008). 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 (De Vos et al. 2016b; Ettema and Zwartbol 2013). Furthermore, as people often participate in leisure activities to meet and spend time with friends, family and others (e.g. Ettema and Schwanen 2012; Newman et al. 2014), 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 (e.g. Kahneman et al. 2004). Finally, positive effects of activity duration on leisure activity satisfaction could be expected (e.g. Schwanen and Wang 2014; Spinney et al. 2009), but were, however, not included in the model as we do not have information on activity duration.

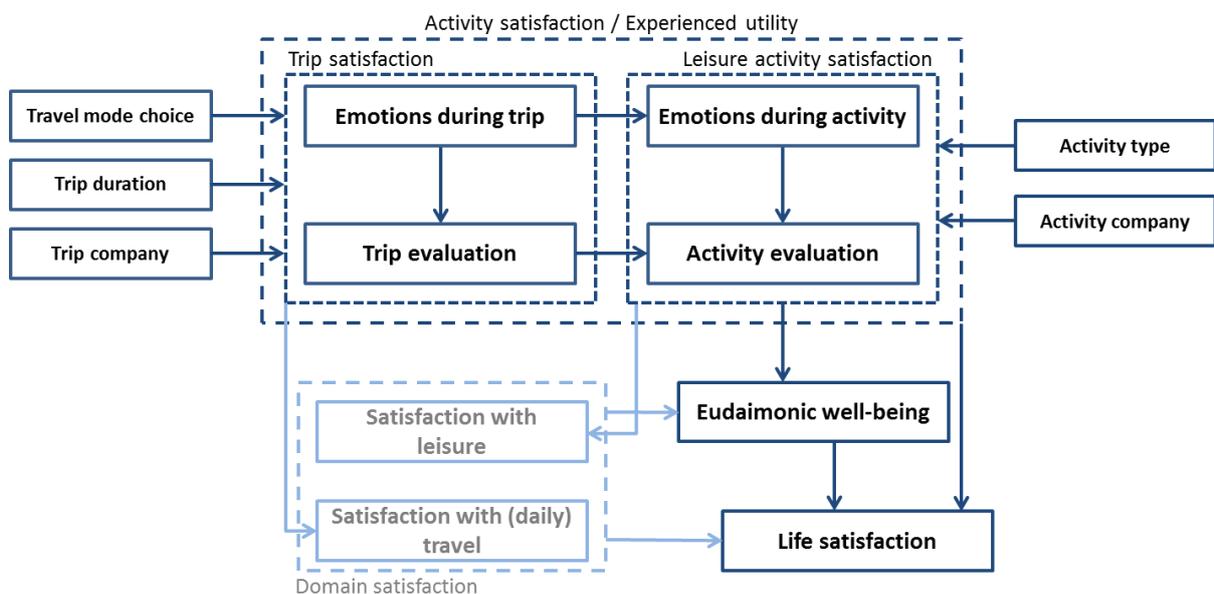


Figure 2. A conceptual model outlining the relationships between travel satisfaction and leisure satisfaction (both as activity satisfaction and domain satisfaction), eudaimonic well-being and life satisfaction. Dark blue: elements and links analysed in this study; light blue: elements and links not 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 an Internet survey were distributed in twelve neighbourhoods (five urban and seven suburban neighbourhoods) within the city of Ghent, Belgium (Ghent has 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 (Table 1). 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 (Groves 1989). 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 De Vos et al. (2016).

Table 1. Socio-economic and demographic characteristics of the respondents (N = 1,212)

| | % |
|-----------------------------------|------|
| Age | |
| 18-30 | 27.5 |
| 31-45 | 27.7 |
| 46-60 | 25.6 |
| > 60 | 19.2 |
| Gender | |
| Female | 48.3 |
| Male | 51.7 |
| Education | |
| Low (lower than bachelor degree) | 21.5 |
| High (bachelor degree or higher) | 78.5 |
| Household type | |
| Single | 26.1 |
| Single parent | 4.5 |
| Couple without children | 37.4 |
| Couple with children | 25.4 |
| Other | 6.6 |
| Household net income/month | |
| Low (< 1750 euro) | 19.5 |
| Average (1750 – 3499 euro) | 48.9 |
| High (3500+ euro) | 31.6 |

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 such longitudinal data, as data are expensive, time consuming and impose a high respondent burden (e.g. Schlich and Axhausen 2003; Twisk 2013). Although the lack of longitudinal data 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 (Kahneman et al. 2004) 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.² However, retrospective measures have – besides being cheaper, imposing less respondent burden and not disrupting normal activities – the advantage that the self-report of life satisfaction (see Section 5.1.4) is not affected by the feelings experienced during the leisure trip and activity. This could have resulted in an overestimation of the relation between (i) trip and leisure activity satisfaction and (ii) life satisfaction as situational conditions (e.g. experienced feelings and mood) can strongly affect self-reports of life satisfaction (Schwarz and Strack 1999). The same influence could be expected with self-reports of eudaimonic well-being (see Section 5.1.3).

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. This enables us to analyse the effect of trip satisfaction on the

² Respondents were asked to indicate when they performed their most recent out-of-home leisure activity and accompanying trip. 276 respondents (16.1%) indicated today, 611 (35.5%) yesterday, 325 (18.9%) the day before yesterday, 208 respondents (12.1%) three days ago and finally 299 respondents (17.4%) indicated that they performed this leisure trip and activity more than three days ago.

satisfaction with the (leisure) activity at the destination of that trip. In order to measure people's trip satisfaction we used the Satisfaction with Travel Scale (STS) (De Vos et al. 2015; Ettema et al. 2011; Friman et al. 2013).³ 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) (Västfjäll et al. 2002; Västfjäll and Gärling 2007), 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.

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. The fact that the average evaluation score of leisure trips is significantly higher (at $p < 0.05$) than the score of experienced emotions during these trips can be seen as rather surprising since negative emotions mostly have a stronger impact on retrospective evaluations than positive emotions (e.g. Miron-Shatz et al. 2009). However, this can be (partly) explained by the different scales used for the affective and cognitive part of trip satisfaction (i.e. experienced emotions during the trip versus perceived quality and efficiency of the trip).

In order to analyse whether trip satisfaction varies according to travel mode choice, trip duration and company during the trip, we performed two-sample t-tests. Table 2 shows that people using public transport have the lowest trip satisfaction; while people walking are most satisfied with their trip. People walking are significantly (at $p < 0.05$) more satisfied with their trip compared to people using other travel modes (except compared to feelings

³ This scale is mostly used to measure satisfaction with one specific trip, although Bergstad et al. (2011) used a variant of the STS to measure satisfaction with daily travel.

experienced during car trips). Table 3 indicates that trip duration does not have a significant effect on the mood during the trip. The average scores on the emotions experienced barely differ between the four groups of trip duration. However, respondents seem to evaluate shorter trips more positively than longer trips. Leisure trips between 0 and 10 minutes, for instance, are evaluated significantly (at $p < 0.05$) better than trips longer than 20 minutes. Finally, Table 4 shows that travelling alone results in significantly lower levels (at $p < 0.05$) of trip satisfaction compared to when travelling together with partner, friends, family or colleagues/ acquaintances.

Table 2. P-values of two-sample t-tests analysing trip satisfaction differences according to the used travel mode (average scores between brackets).

| Positive feelings | 1. | 2. | 3. | Positive evaluation | 1. | 2. | 3. |
|-------------------------|-------------|-------------|-------------|-------------------------|-------------|-------------|-------------|
| 1. Car (1.18) | | | | 1. Car (1.35) | | | |
| 2. Publ. Transp. (0.91) | 0.01 | | | 2. Publ. Transp. (1.21) | 0.27 | | |
| 3. Cycling (1.13) | 0.46 | 0.08 | | 3. Cycling (1.39) | 0.60 | 0.17 | |
| 4. Walking (1.34) | 0.06 | 0.00 | 0.03 | 4. Walking (1.62) | 0.00 | 0.00 | 0.03 |

Table 3. P-values of two-sample t-tests analysing trip satisfaction differences according to trip duration (average scores between brackets).

| Positive feelings | 1. | 2. | 3. | Positive evaluation | 1. | 2. | 3. |
|------------------------|------|------|------|------------------------|-------------|------|------|
| 1. 0 - 10 min. (1.20) | | | | 1. 0 - 10 min. (1.53) | | | |
| 2. 10 - 20 min. (1.16) | 0.52 | | | 2. 10 - 20 min. (1.39) | 0.07 | | |
| 3. 20 - 30 min. (1.17) | 0.72 | 0.93 | | 3. 20 - 30 min. (1.26) | 0.01 | 0.24 | |
| 4. 30+ min. (1.15) | 0.54 | 0.92 | 0.88 | 4. 30+ min. (1.23) | 0.00 | 0.09 | 0.83 |

Table 4. P-values of two-sample t-tests analysing trip satisfaction differences according to trip company (average scores between brackets).

| Positive feelings | 1. | 2. | 3. | 4. | Positive evaluation | 1. | 2. | 3. | 4. |
|----------------------|-------------|------|------|------|----------------------|-------------|------|------|------|
| 1. Alone (1.01) | | | | | 1. Alone (1.27) | | | | |
| 2. Partner (1.34) | 0.00 | | | | 2. Partner (1.54) | 0.00 | | | |
| 3. Friends (1.44) | 0.00 | 0.29 | | | 3. Friends (1.55) | 0.01 | 0.97 | | |
| 4. Family (1.27) | 0.00 | 0.41 | 0.12 | | 4. Family (1.40) | 0.16 | 0.11 | 0.17 | |
| 5. coll./acq. (1.39) | 0.01 | 0.74 | 0.78 | 0.47 | 5. coll./acq. (1.34) | 0.67 | 0.21 | 0.22 | 0.72 |

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 (i.e. emotions experienced during the leisure activity) from the cognitive component of leisure activity satisfaction (i.e. evaluation of the leisure activity). Since the internal consistency (i.e. the average correlation of a scale's items) 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 respectively⁴ – 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.

Two sample t-tests were performed in order to analyse variances in leisure activity satisfaction according to the type of leisure activity and the company during the leisure activity. Table 5 indicates that the type of out-of-home leisure activity can have an important effect on how people perceive this activity. Going to a cultural or sport activity as a spectator has the highest average level of satisfaction. Going to a cultural or sport activity as an active participant, on the other hand, results in significantly lower levels (at $p < 0.05$) of leisure activity satisfaction compared to engagement in other types of leisure activities. This might be partly explained by the rather mandatory character of this activity (e.g. weekly music lessons). Table 6 shows that participating in a leisure activity together with friends results in the highest levels of satisfaction, while performing a leisure activity alone results in significantly lower levels (at $p < 0.05$) of leisure activity satisfaction compared to when performing these activities together with others.

⁴ In contrast to trip satisfaction, the average evaluation score of leisure activities is not significantly different (at $p < 0.05$) than the score of experienced emotions during these activities.

Table 5. P-values of two-sample tests analysing leisure activity satisfaction differences according to the type of activity (average scores between brackets).

| Positive feelings | 1. | 2. | 3. | 4. | 5. | 6. |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| 1. Visiting family/friends (1.77) | | | | | | |
| 2. Going out to a bar/club (1.92) | 0.09 | | | | | |
| 3. Eating out (1.79) | 0.81 | 0.25 | | | | |
| 4. Going to a forest/park/nature (1.81) | 0.66 | 0.31 | 0.89 | | | |
| 5. Going to a cultural/sport activity as spectator (1.93) | 0.02 | 0.85 | 0.17 | 0.21 | | |
| 6. Going to a cultural/sport activity as active participant (1.55) | 0.03 | 0.00 | 0.06 | 0.04 | 0.00 | |
| 7. Recreational shopping (1.82) | 0.53 | 0.30 | 0.83 | 0.95 | 0.15 | 0.02 |
| Positive evaluation | 1. | 2. | 3. | 4. | 5. | 6. |
| 1. Visiting family/friends (1.82) | | | | | | |
| 2. Going out to a bar/club (1.68) | 0.17 | | | | | |
| 3. Eating out (1.62) | 0.11 | 0.70 | | | | |
| 4. Going to a forest/park/nature (1.80) | 0.90 | 0.36 | 0.27 | | | |
| 5. Going to a cultural/sport activity as spectator (1.87) | 0.50 | 0.05 | 0.03 | 0.55 | | |
| 6. Going to a cultural/sport activity as active participant (1.32) | 0.00 | 0.01 | 0.05 | 0.00 | 0.00 | |
| 7. Recreational shopping (1.81) | 0.97 | 0.20 | 0.13 | 0.92 | 0.51 | 0.00 |

Table 6. P-values of two-sample tests analysing leisure activity satisfaction differences according to activity company (average scores between brackets).

| Positive feelings | 1. | 2. | 3. | 4. | Positive evaluation | 1. | 2. | 3. | 4. |
|--------------------------|-------------|------|------|------|----------------------------|-------------|-------------|-------------|------|
| 1. Alone (1.65) | | | | | 1. Alone (1.51) | | | | |
| 2. Partner (1.88) | 0.00 | | | | 2. Partner (1.79) | 0.00 | | | |
| 3. Friends (1.93) | 0.00 | 0.47 | | | 3. Friends (1.95) | 0.00 | 0.01 | | |
| 4. Family (1.81) | 0.04 | 0.24 | 0.06 | | 4. Family (1.77) | 0.00 | 0.78 | 0.01 | |
| 5. coll./acq. (1.88) | 0.00 | 0.96 | 0.53 | 0.36 | 5. coll./acq. (1.89) | 0.00 | 0.22 | 0.43 | 0.17 |

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) (Diener et al. 1985; Pavot and Diener 1993). 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 (Diener and Diener 1996; Diener et al. 2006, 2015).

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 (592 respondents or 48.8%), 9.5% (or 115 respondents) used public transport, 22.5% (or 272 respondents) cycled, while 19.2% (or 233 respondents) walked to their leisure activity. Since Table 2 indicates that walking results in significantly higher levels of trip satisfaction compared to using other modes, we made a binary variable by subdividing respondents into two groups: respondents cycling or using a car or public transport (0) vs. respondents walking (1). We also asked respondents to indicate how long they travelled to reach their most recent leisure activity. Eight possible time frame answers were provided: 0-5 minutes; 5-10 minutes; 10-15 minutes; 15-20 minutes; 20-30 minutes; 30-45 minutes; 45-60 minutes; and more than 60 minutes. Based on the average scores and p-values from Table 3, we created a binary variable by giving trips shorter than 10 minutes a value of 0 (accounting for 34.7% of the trips) and trips longer than 10 minutes a value of 1 (accounting for 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, compared to travelling together with others (see Table 4), 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. Since Table 5 indicates that satisfaction levels of respondents participating in cultural/sport activity as active participant are significantly lower 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. SEM has – since the 1970s – mainly been used in sociology and psychology research and more recently – since the 1980s and on a regular base since 2000 – also in travel behaviour studies (Golob 2003; Van Acker and Witlox 2010). 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.

A SEM analysis consists of two parts: a measurement model and a structural model. A measurement model specifies the relationships between latent variables and their observed indicators, while the structural model examines relationships between the latent variables. Since our variables are directly observed (manifest variables) or are latent variables constructed by averaging scores, a measurement model has not been specified. A covariance analysis is used to estimate the coefficients of the structural model. A model covariance matrix is fitted on a sample covariance matrix, while iteratively minimizing the differences between the predicted and observed values. The smaller the dissimilarity between these matrices, the better the model fits the data (e.g. Bollen 1989; Kline 2005).

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 and this for both models. The greater the Mahalanobis distance the greater the contribution to the departure from multivariate normality (Mokhtarian and Ory 2009). Based on this information, 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, by far 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 (see, for instance, Golob 2003).

7. Results

In this section we analyse the results of the applied SEM of the model presented in Figure 2. Table 7 contains the most common goodness-of-fit measures of the model and shows that the model specifications fit the data well; goodness-of-fit measures are satisfactory. In the following sections we will examine the results (i.e. direct, indirect and total effects of the included links) of this structural equation model.

Table 7. Goodness-of-fit measures of the suggested model. Description and recommended values are based on Mokhtarian and Ory (2009).

| Model fit indices | Recommended values | Model-based values |
|---|--------------------|--------------------|
| χ^2/df | < 5 | 3.75 |
| RMSEA (Root mean square error of approximation) | < 0.08 | 0.05 |
| GFI (Goodness-of-fit index) | > 0.9 | 0.99 |
| AGFI (Adjusted goodness-of-fit index) | > 0.9 | 0.96 |
| NFI (Normed fit index) | > 0.9 | 0.97 |
| RFI (Relative fit index) | > 0.95 | 0.92 |
| IFI (Incremental fit index) | > 0.9 | 0.98 |
| CFI (Comparative fit index) | > 0.9 | 0.98 |

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

Table 8 and Figure 3 show 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 earlier studies, stating that the evaluation of an activity episode is a function of the emotions experienced during that episode (e.g. Kahneman et al. 1997; Miron-Shatz et al. 2009; Suzuki et al. 2014).

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 8 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 8. Standardised direct (D), indirect (I) and total (T) effects of the links in the model displayed in Figure 2 (N = 1,172)

| Endogenous variables → | Positive feelings trip | | | Positive evaluation trip | | | Positive feeling activity | | | Positive evaluation activity | | | Eudaimonic well-being | | | Life satisfaction | | |
|---|------------------------|---|-------------|--------------------------|-------------|--------------|---------------------------|-------------|--------------|------------------------------|-------------|--------------|-----------------------|-------------|-------------|-------------------|-------------|-------------|
| | D | I | T | D | I | T | D | I | T | D | I | T | D | I | T | D | I | T |
| Exogenous variables | | | | | | | | | | | | | | | | | | |
| Travel mode choice (walking) | 0.08 | - | 0.08 | 0.05 | 0.05 | 0.09 | - | 0.04 | 0.04 | - | 0.03 | 0.03 | - | 0.01 | 0.01 | - | 0.02 | 0.02 |
| Trip duration (+ 10 minutes) | -0.02 | - | -0.02 | -0.07 | -0.03 | -0.09 | - | 0.02 | 0.02 | - | -0.02 | -0.02 | - | -0.01 | -0.01 | - | -0.01 | -0.01 |
| Trip company (with others) | 0.15 | - | 0.15 | 0.02 | 0.08 | 0.10 | - | 0.07 | 0.07 | - | 0.05 | 0.05 | - | 0.02 | 0.02 | - | 0.03 | 0.03 |
| Type of activity (active participation in a cultural or sport activity) | - | - | - | - | - | - | -0.10 | - | -0.10 | -0.11 | -0.05 | -0.17 | - | -0.04 | -0.04 | - | -0.03 | -0.03 |
| Activity company (with others) | - | - | - | - | - | - | 0.07 | - | 0.07 | 0.09 | 0.04 | 0.13 | - | 0.03 | 0.03 | - | 0.02 | 0.02 |
| Endogenous variables | | | | | | | | | | | | | | | | | | |
| Positive feelings trip | - | - | - | 0.55 | - | 0.55 | 0.47 | - | 0.47 | - | 0.32 | 0.32 | - | 0.13 | 0.13 | 0.08 | 0.12 | 0.20 |
| Positive evaluation trip | - | - | - | - | - | - | - | - | - | 0.16 | - | 0.16 | - | 0.02 | 0.02 | 0.05 | 0.01 | 0.06 |
| Positive feeling activity | - | - | - | - | - | - | - | - | - | 0.54 | - | 0.54 | 0.18 | 0.08 | 0.26 | 0.10 | 0.14 | 0.24 |
| Positive evaluation activity | - | - | - | - | - | - | - | - | - | - | - | - | 0.15 | - | 0.15 | 0.01 | 0.08 | 0.09 |
| Eudaimonic well-being | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.53 | - | 0.53 |
| Squared multiple correlations | 0.03 | | | 0.33 | | | 0.24 | | | 0.40 | | | 0.09 | | | 0.35 | | |

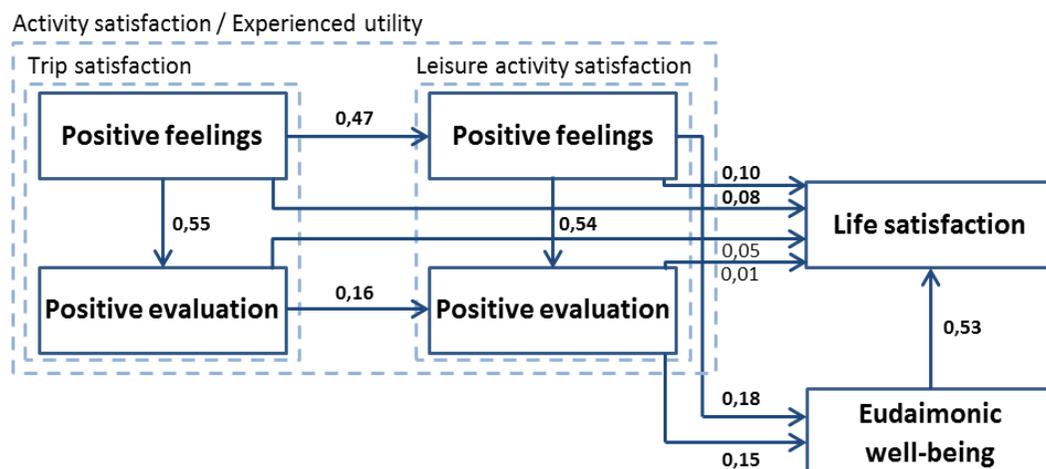


Figure 3. Standardised direct effects (bold: significant at $p < 0.05$). Effects of trip characteristics on trip satisfaction and of leisure activity characteristics on leisure activity satisfaction have been suppressed to enhance readability, but are shown in Table 8.

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.

To put our findings in perspective, our study has two main limitations: (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. This 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 (Diener et al. 2006; Eid and Diener 2004; Huta and Ryan 2010).⁵ 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 (Brickman and Campbell 1971). However, studies do indicate that long-term well-being is not stable over the course of an entire life

⁵ According to Diener et al. (2006) and Eid and Diener (2004) life satisfaction is stable over time as it is moderately heritable and is strongly correlated with personality factors.

span and can vary over longer time periods (i.e. periods of numerous years) (Diener et al. 2006; Ehrhardt et al. 2000). 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 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 2). In this respect, it is worth noticing that Bergstad et al. (2011) 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 (e.g. LaMondia and Bhat 2012). 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.

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