

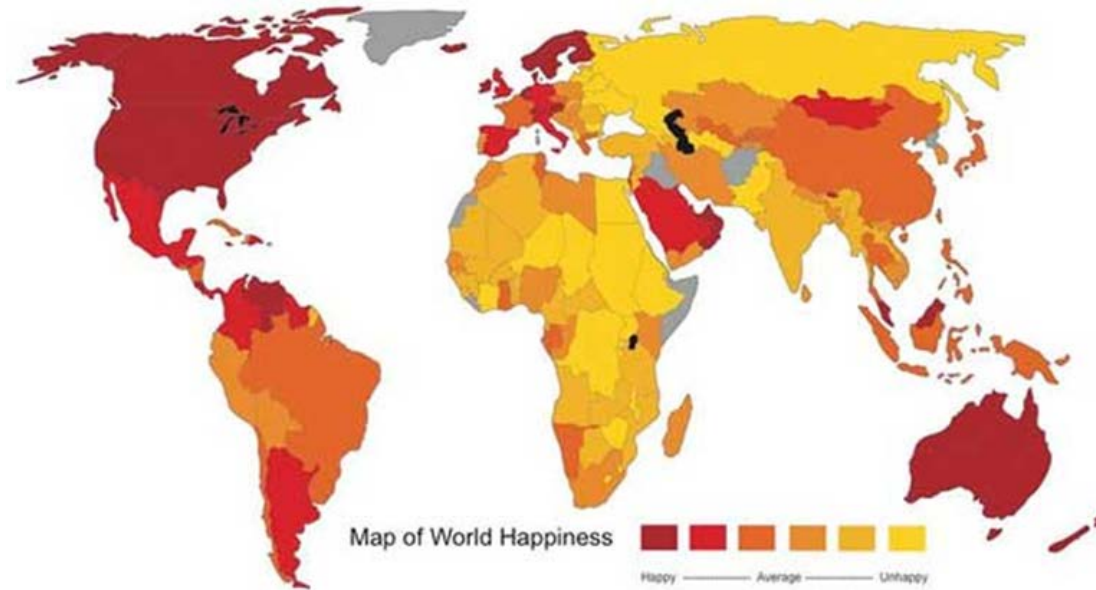
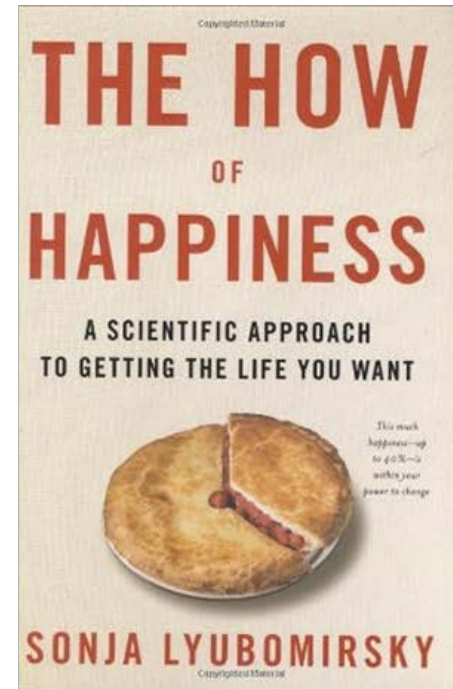
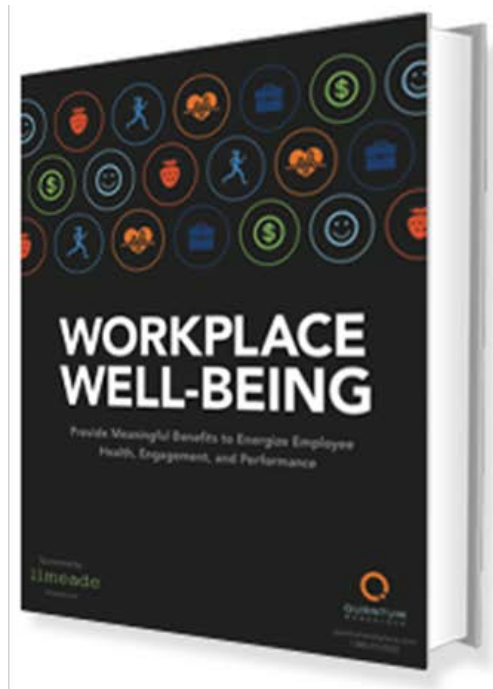
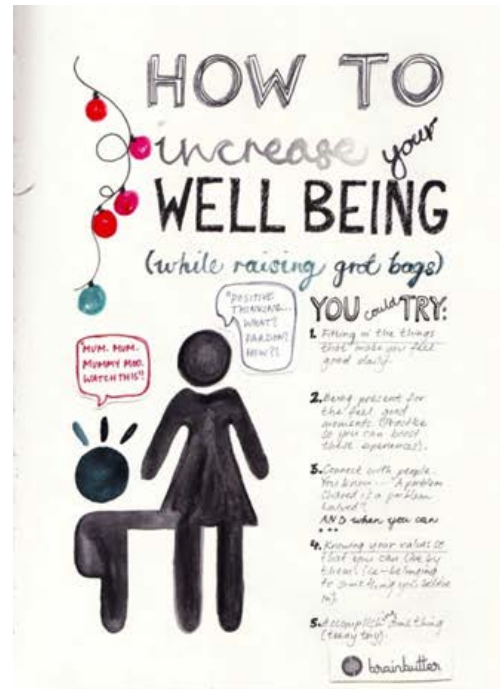
# ANALYSING THE LINK BETWEEN TRAVEL BEHAVIOUR, RESIDENTIAL LOCATION CHOICE AND WELL-BEING. A FOCUS ON TRAVEL SATISFACTION OF LEISURE TRIPS.

Jonas De Vos

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# INTRODUCTION

Increased interest in subjective well-being



Recently, studies have started analysing how people perceive their travel and how satisfied they are with it (i.e., travel satisfaction).

# RESEARCH QUESTIONS

1. What affects satisfaction with (leisure) trips?
2. What are the (possible) outcomes of travel satisfaction?
3. How is travel satisfaction related with (long-term) well-being?



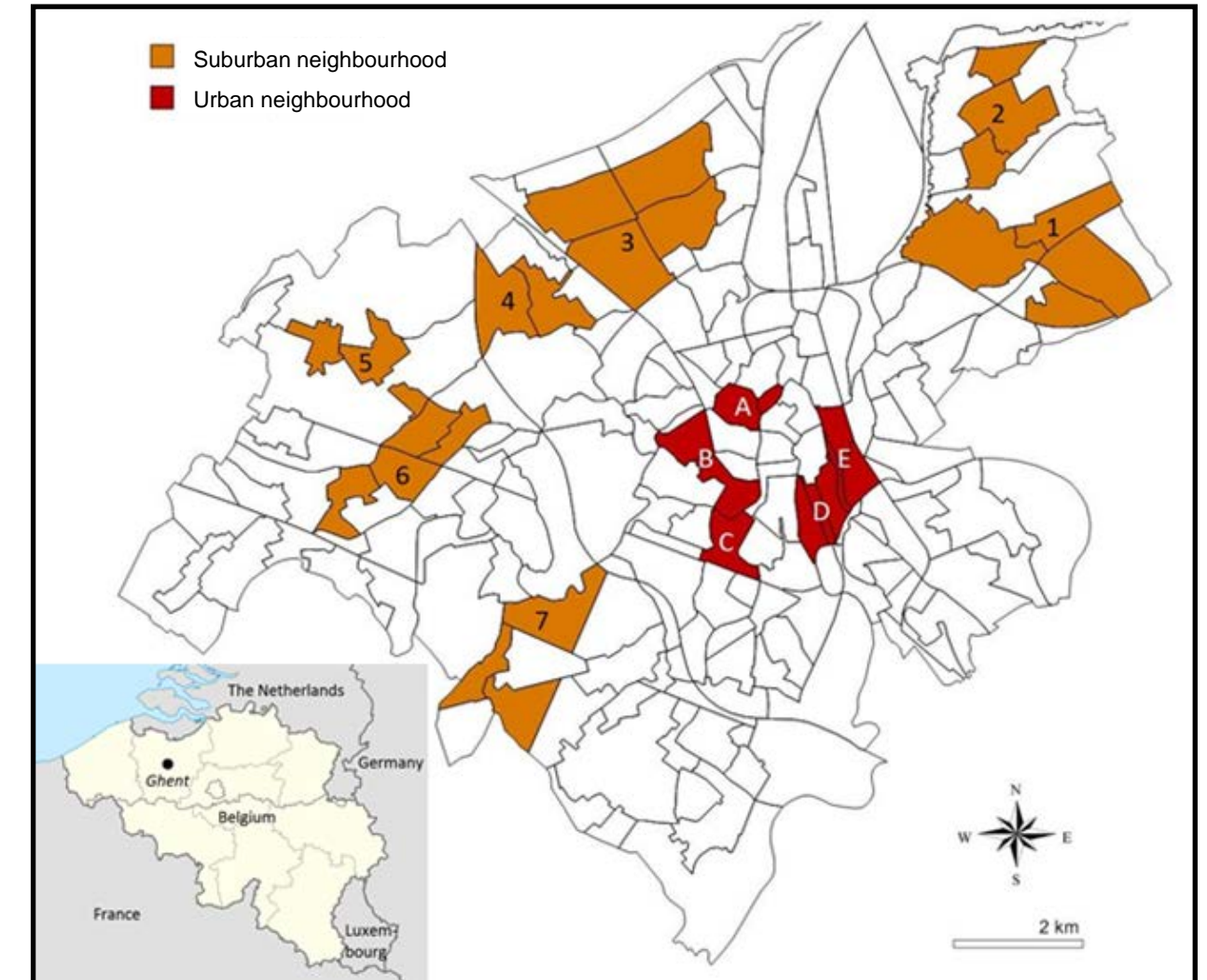
# DATA

## 2012 Internet survey on satisfaction with leisure trips and activities, and well-being

27,780 Invitations with a link to the survey were distributed in 5 urban and 7 suburban neighbourhoods within the city of Ghent

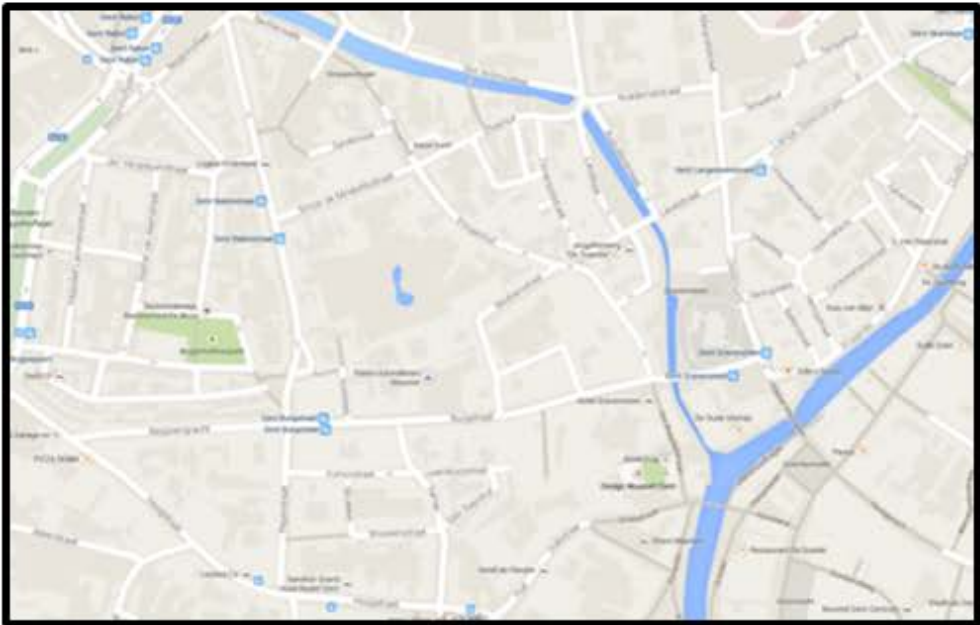
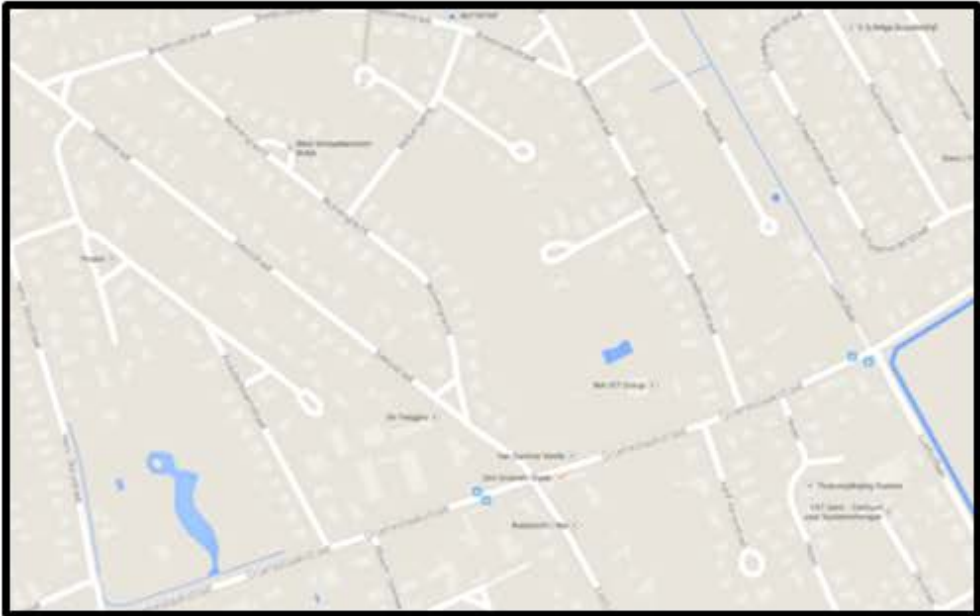
In the end, 1,807 respondents participated (response rate: 6,5%), of which 1,720 respondents completed the survey

In socio-demographic terms, the participants are roughly comparable to the population of the selected neighbourhoods





# DATA



# DATA

	Urban		Suburban		Total
	Sample	Population	Sample	Population	sample
<b>Age (distribution)</b>					
18-34 (%)	43.5	41.3	20.4	22.2	33.7
35-49 (%)	23.2	22.7	27.3	26.2	24.9
50-64 (%)	19.6	17.9	31.5	26.8	24.7
65 + (%)	13.7	18.1	20.7	24.8	16.7
<b>Gender</b>					
Female (%)	48.8	49.5	41.4	51.0	45.7
<b>Education</b>					
High educ. (university degree) (%)	82.1	N/A	70.8	N/A	77.3
<b>Household composition</b>					
Average household size	2.0	1.8	2.7	2.5	2.3
<b>Household net income/month</b>					
Low income (< 1750 euro) (%)	24.1	N/A	9.9	N/A	17.9
Avg. income (1750-3499 euro) (%)	49.3	N/A	49.4	N/A	49.4
High income (3500+ euro) (%)	26.5	N/A	40.7	N/A	32.7
<b>Household car possession</b>					
0 (%)	32.4	35.9	7.7	9.7	21.9
1 (%)	54.4	52.5	50.3	55.5	52.6
>1 (%)	13.2	11.6	42.3	34.8	25.5
N	991	23,279	729	23,440	1720
%	57.6	49.8	42.4	50.2	100

# 3 KEY VARIABLES

## 1. Travel satisfaction

### Satisfaction with Travel Scale (STS)

“Put a cross in the box that best correspond to your experience during your trip towards your most recent leisure activity”

Negative	-3	-2	-1	0	1	2	3	Positive
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enthusiastic
Fed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Engaged
Tired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Alert
Stressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Confident
Hurried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Trip was worst I can think of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Trip was best I can think of
Trip was low standard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Trip was high standard
Trip did not work out well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Trip worked out well



# 3 KEY VARIABLES

## 2. Activity satisfaction

### Satisfaction with Activity Scale (SAS)

“Put a cross in the box that best correspond to your experience during your most recent leisure activity”

Negative	-3	-2	-1	0	1	2	3	Positive
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enthusiastic
Fed up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Engaged
Tired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Alert
Stressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Confident
Hurried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Activity was worst I can think of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Activity was best I can think of
Activity was low standard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Activity was high standard
Activity did not work out well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Activity worked out well



# 3 KEY VARIABLES

## 3. Life satisfaction

### Satisfaction with Life Scale (SWLS)

“To which extent do you agree with the following 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


# RESULTS

## 1. What affects satisfaction with (leisure) trips?

### Travel mode

Positive adjective/statement ↓	Car	Public transport	Bicycling	Walking	All modes
Enthusiastic	1.25**	0.89**	1.45**	1.49**	1.31
Engaged	1.19**	0.64**	1.05	1.19	1.12
Alert	0.21	0.02**	0.25	0.32*	0.22
Calm	1.46	1.32	1.30**	1.60**	1.45
Confident	1.42**	1.22	1.21**	1.39	1.36
Relaxed	1.37	1.22	1.26*	1.61**	1.39
Trip was best I can think of	1.13**	0.93**	1.22	1.44**	1.19
Trip was high standard	1.21**	1.13*	1.38*	1.38*	1.27
Trip worked out well	1.68**	1.46**	1.77	2.00**	1.74

 statistically higher (\* p < 0.1; \*\* p < 0.05) than the average value for the three other modes combined

 statistically lower (\* p < 0.1; \*\* p < 0.05) than the average value for the three other modes combined

# RESULTS

## 1. What affects satisfaction with (leisure) trips?

### Travel-related attitudes

- Mode-specific attitudes

A positive stance towards a certain mode improves travel satisfaction when using that mode

- Travel-liking attitudes

People with a negative stance towards travelling in general (e.g., people perceiving travel time as wasted time) will have lower travel satisfaction levels compared to people who like travelling



# RESULTS

## 1. What affects satisfaction with (leisure) trips?

### Trip duration

Trip duration has a negative affect on travel satisfaction, especially for car and public transport users

### Trip companionship

Travelling alone results in lower levels of travel satisfaction compared to travelling with others

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

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

# RESULTS

## 1. What affects satisfaction with (leisure) trips?

### Residential location

Living in an urban neighbourhood results in lower levels of travel satisfaction compared to living in suburban neighbourhoods

Differences in travel satisfaction according to the residential location can partly be explained by varying age distributions. Positive effect of age on TS and older residents in suburban neighbourhoods → higher TS for suburban residents.

After accounting for socio-demographics, travel satisfaction levels of urban residents are only significantly lower for car and public transport use

# RESULTS

## 1. What affects satisfaction with (leisure) trips?

### Residential location X travel-related attitudes

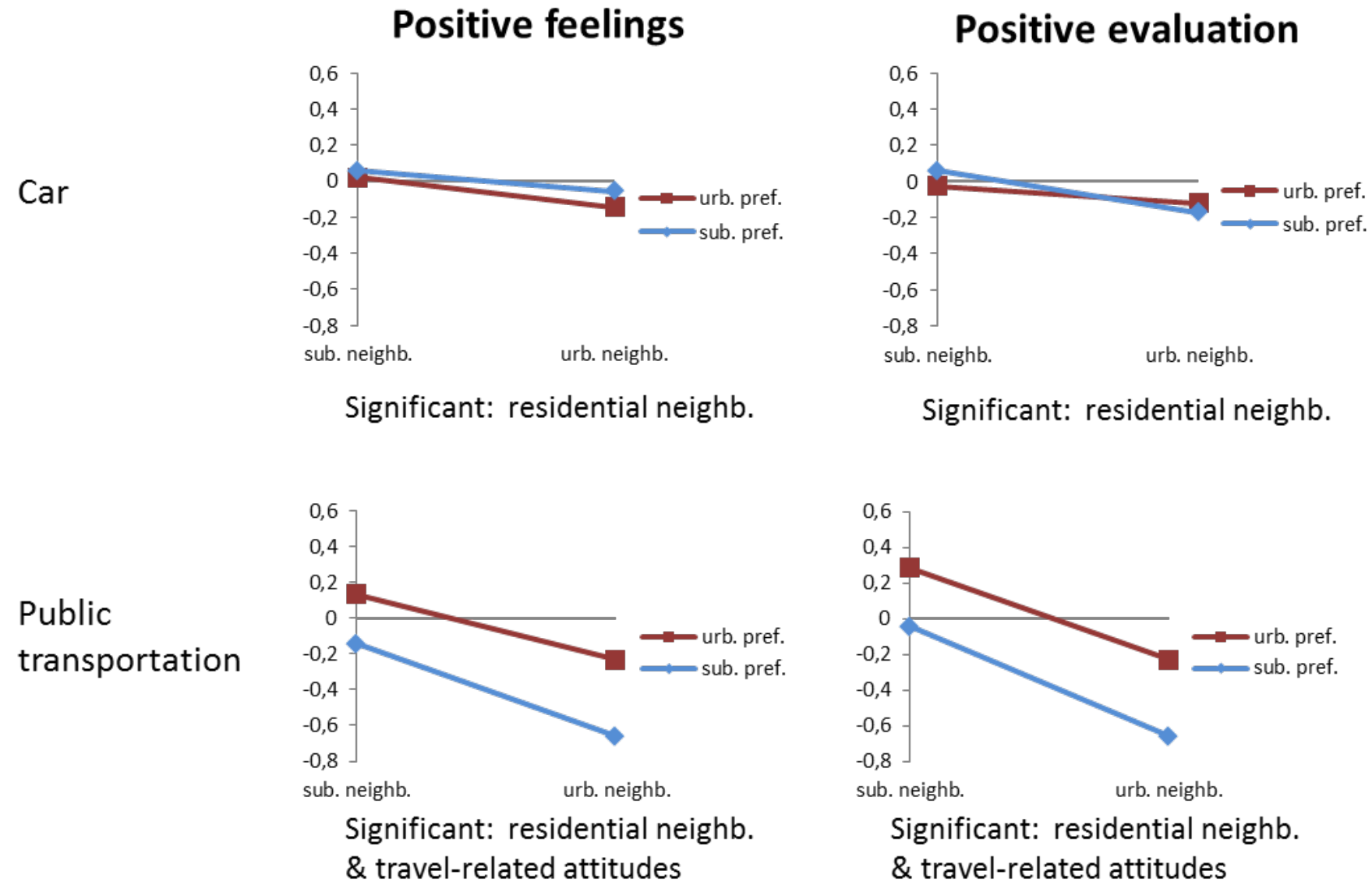
Are people who live in their preferred residential neighbourhood (based on travel preferences) more satisfied with travel compared to people who do not?

		Actual neighborhood		
		Urban neighborhood	Suburban neighborhood	Total
Travel & Land use preferences	Urban preferences	611 (35.5%)	303 (17.6%)	914 (53.1%)
	Suburban preferences	380 (22.1%)	426 (24.8%)	806 (46.9%)
	Urban dissonant		Suburban consonant	
	Total	975 (56.7%)	745 (43.3%)	1720 (100%)



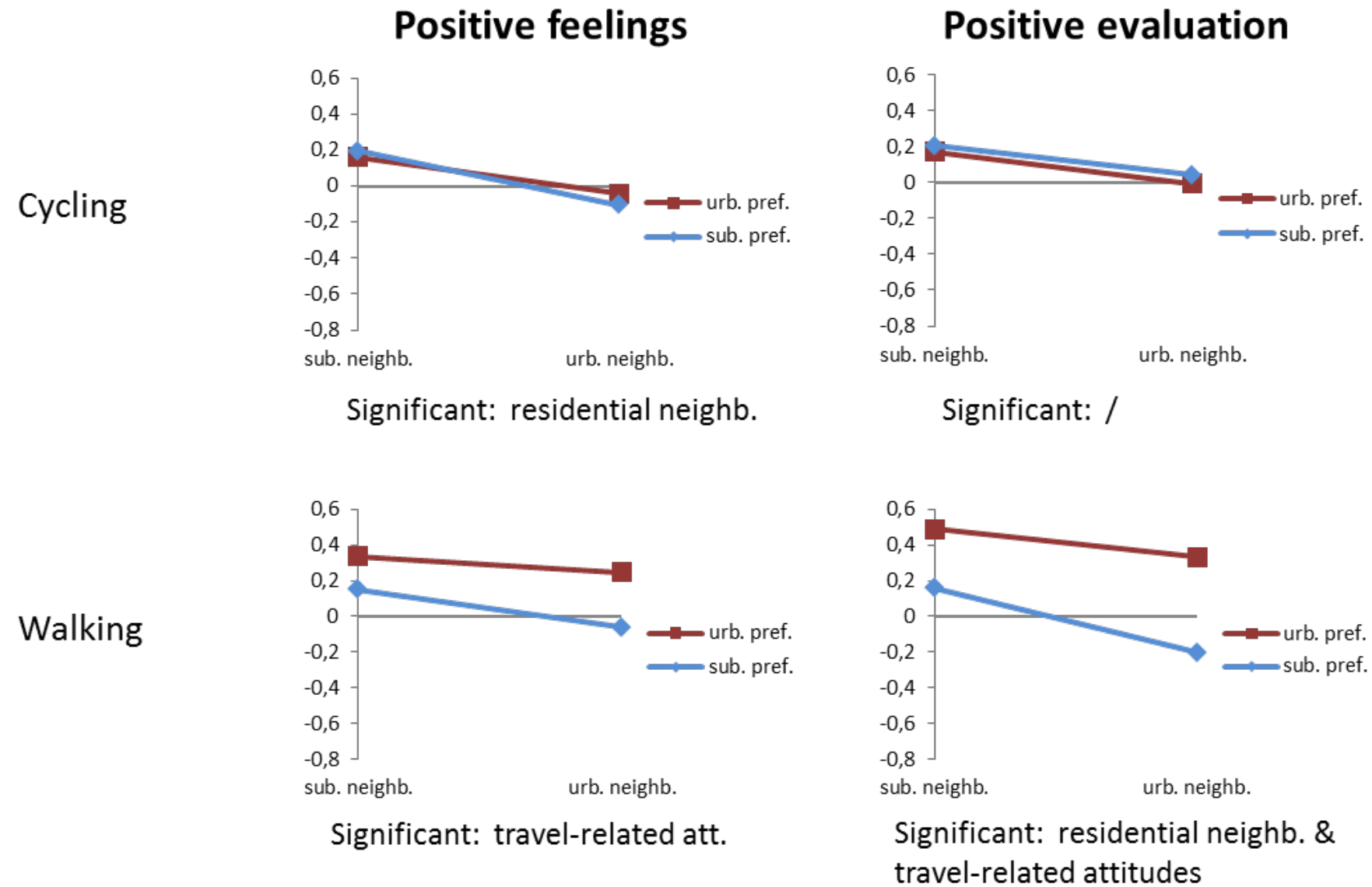
# RESULTS

## 1. What affects satisfaction with (leisure) trips?



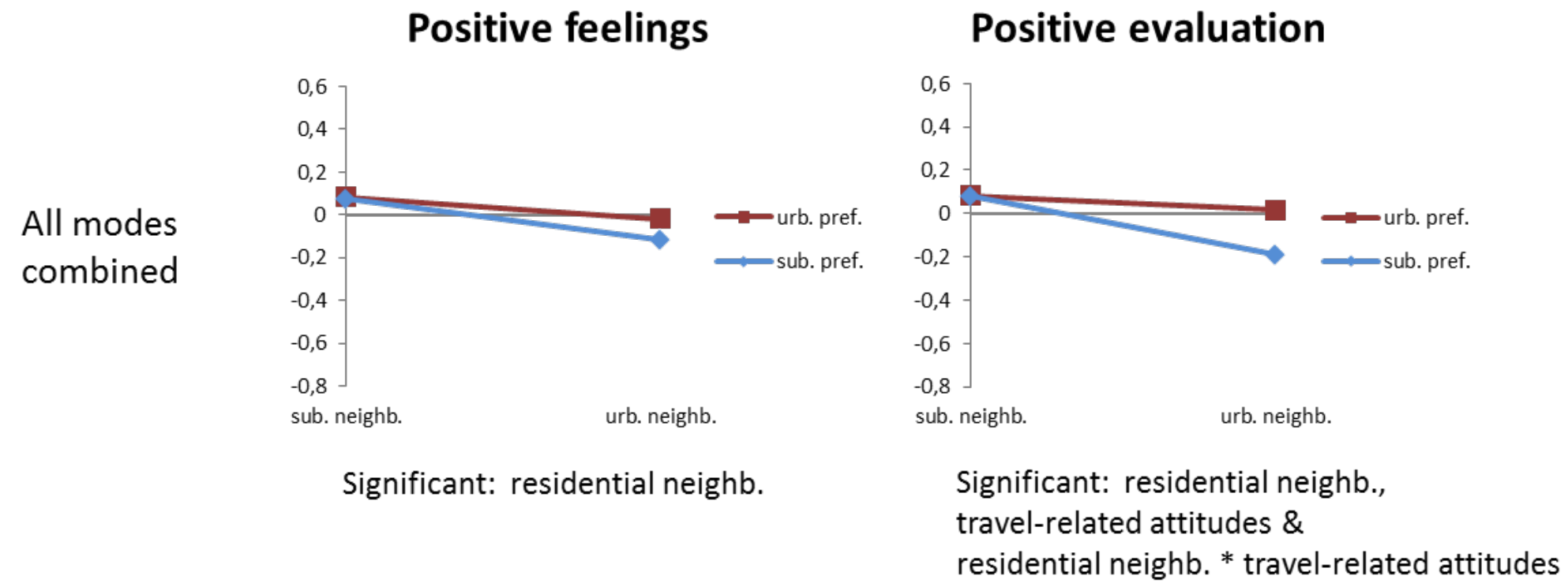
# RESULTS

## 1. What affects satisfaction with (leisure) trips?



# RESULTS

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# RESULTS

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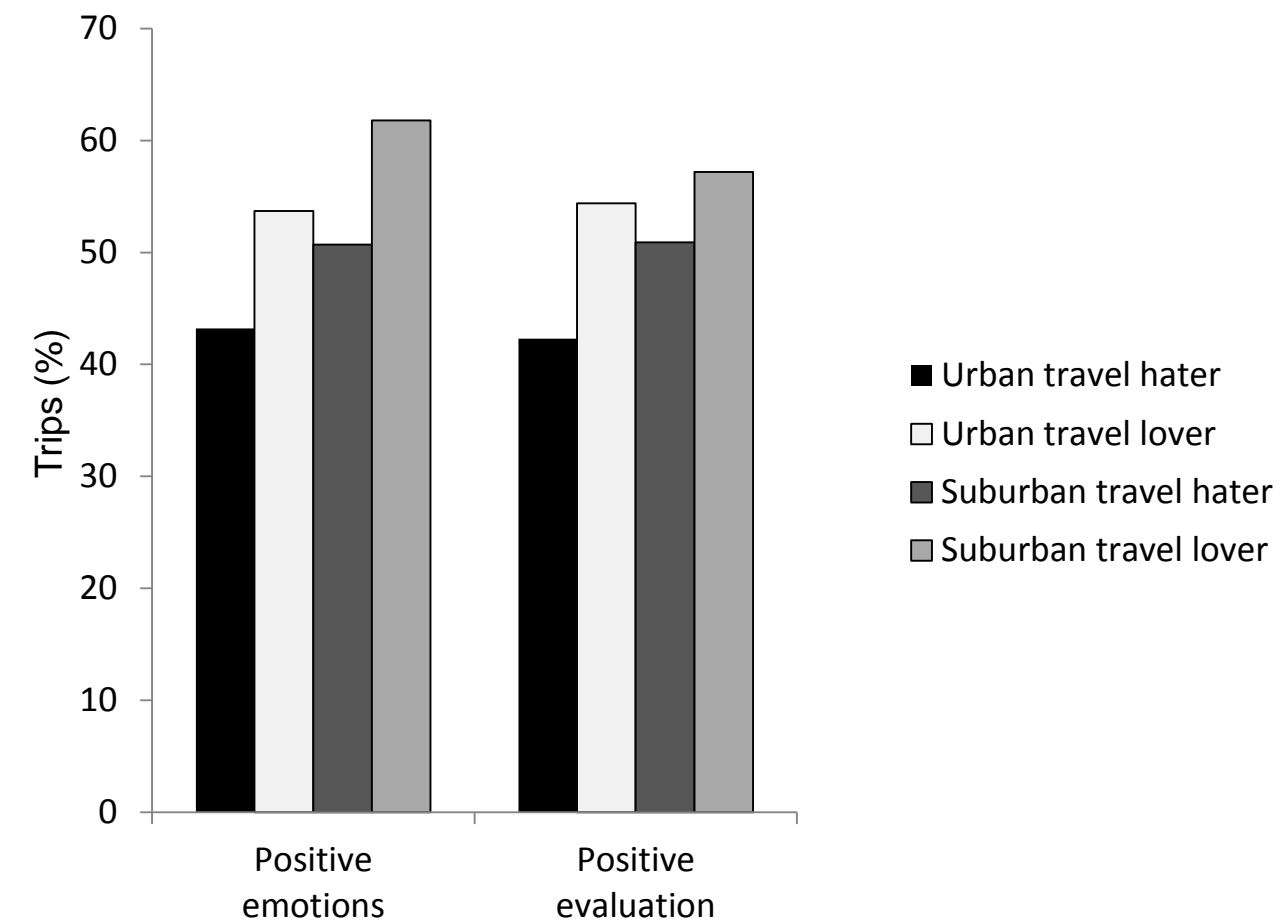
Residential location X travel-related attitudes

		Residential neighbourhood		Total
		Urban neighbourhood	Suburban neighbourhood	
Travel-liking attitudes	Travel haters	606 (35.2%) Urban travel haters	360 (20.9%) Suburban travel haters	966 (56.2%)
	Travel lovers	385 (22.4%) Urban travel lovers	369 (21.5%) Suburban travel lovers	754 (43.8%)
	Total	991 (57.6%)	729 (42.4%)	1720 (100%)

# RESULTS

## 1. What affects satisfaction with (leisure) trips?

Residential location X travel-related attitudes



Significant:

Res. location,  
Travel liking

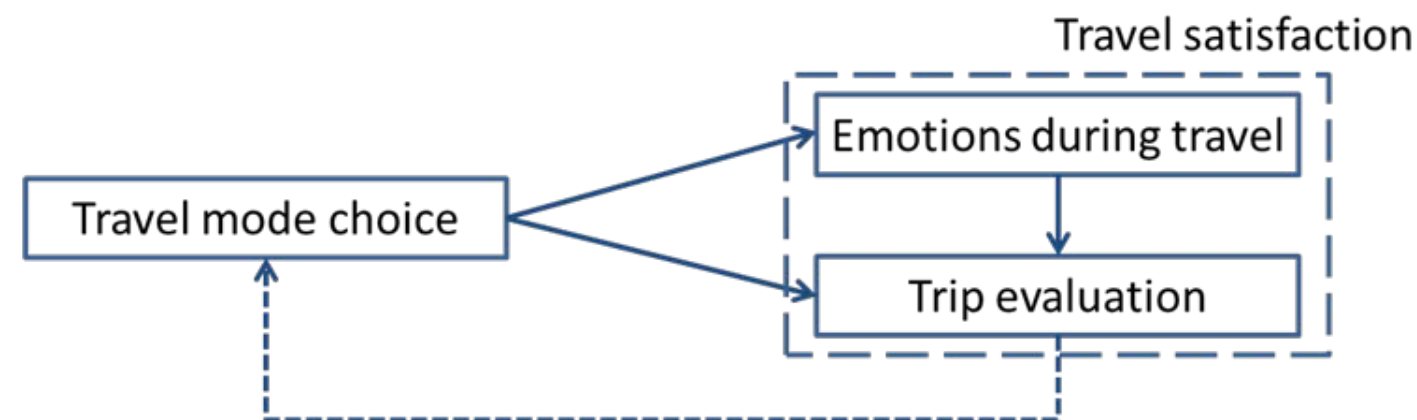
Res. location (only  
for travel haters),  
Travel liking

# RESULTS

## 2. What are the (possible) outcomes of travel satisfaction?

### Mode choice

Travel satisfaction can affect future travel mode choices as a retrospective evaluation of a past episode – which in itself is a function of the emotions experienced during that episode – can affect the prospective choice of an alternative in order to maximise happiness.





# RESULTS

## 2. What are the (possible) outcomes of travel satisfaction?

### Attitudes

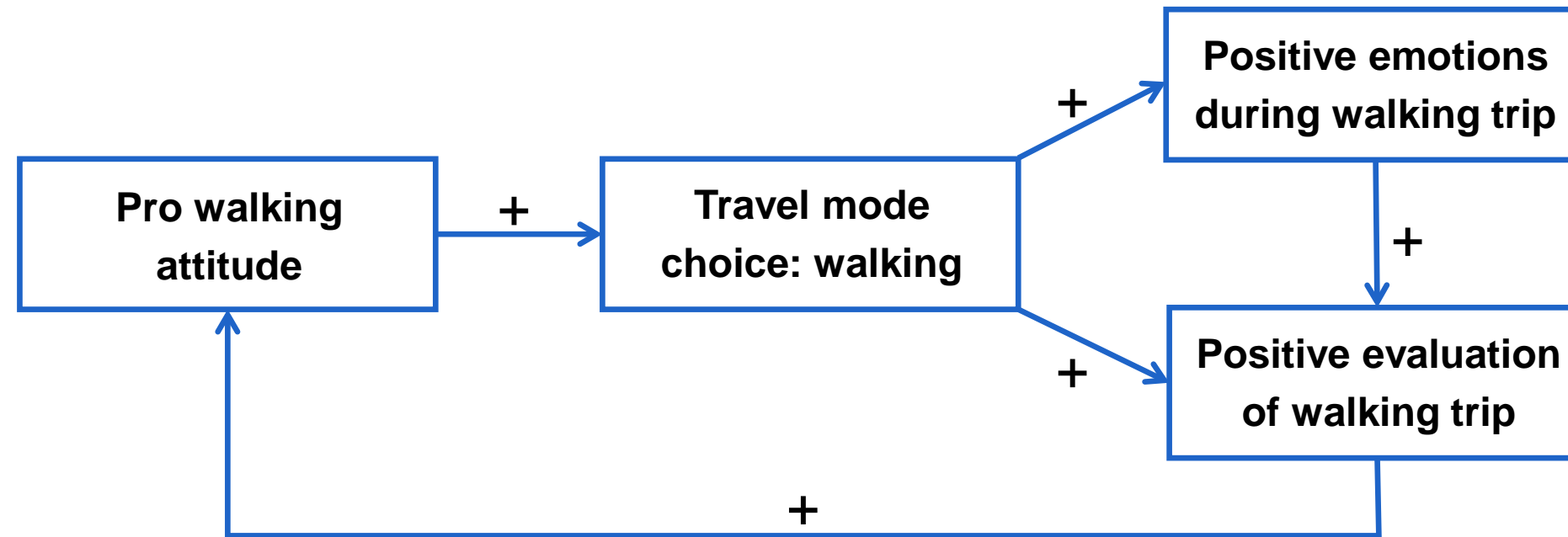
it is plausible that (a) satisfying trip(s) with a certain mode will result in a more positive stance towards that specific mode.

# RESULTS

## 2. What are the (possible) outcomes of travel satisfaction?

### Attitudes and mode choice

Travel satisfaction might affect travel-related attitudes, which in turn can influence mode choice



# RESULTS

## 2. What are the (possible) outcomes of travel satisfaction?

### The residential location

People who are not satisfied with their daily travel might also not be satisfied with their residential location as their residential neighbourhood might force them to travel in an undesired way.

Effect from travel satisfaction on the residential location (choice) might also be indirect through travel-related attitudes (residential self-selection)

# RESULTS

## 3. How is travel satisfaction related with long-term well-being?

Travel satisfaction can be regarded as a part of subjective well-being (SWB)

SWB consist of four elements: the presence of positive feelings, the absence of negative feelings, domain satisfaction and overall satisfaction with life.

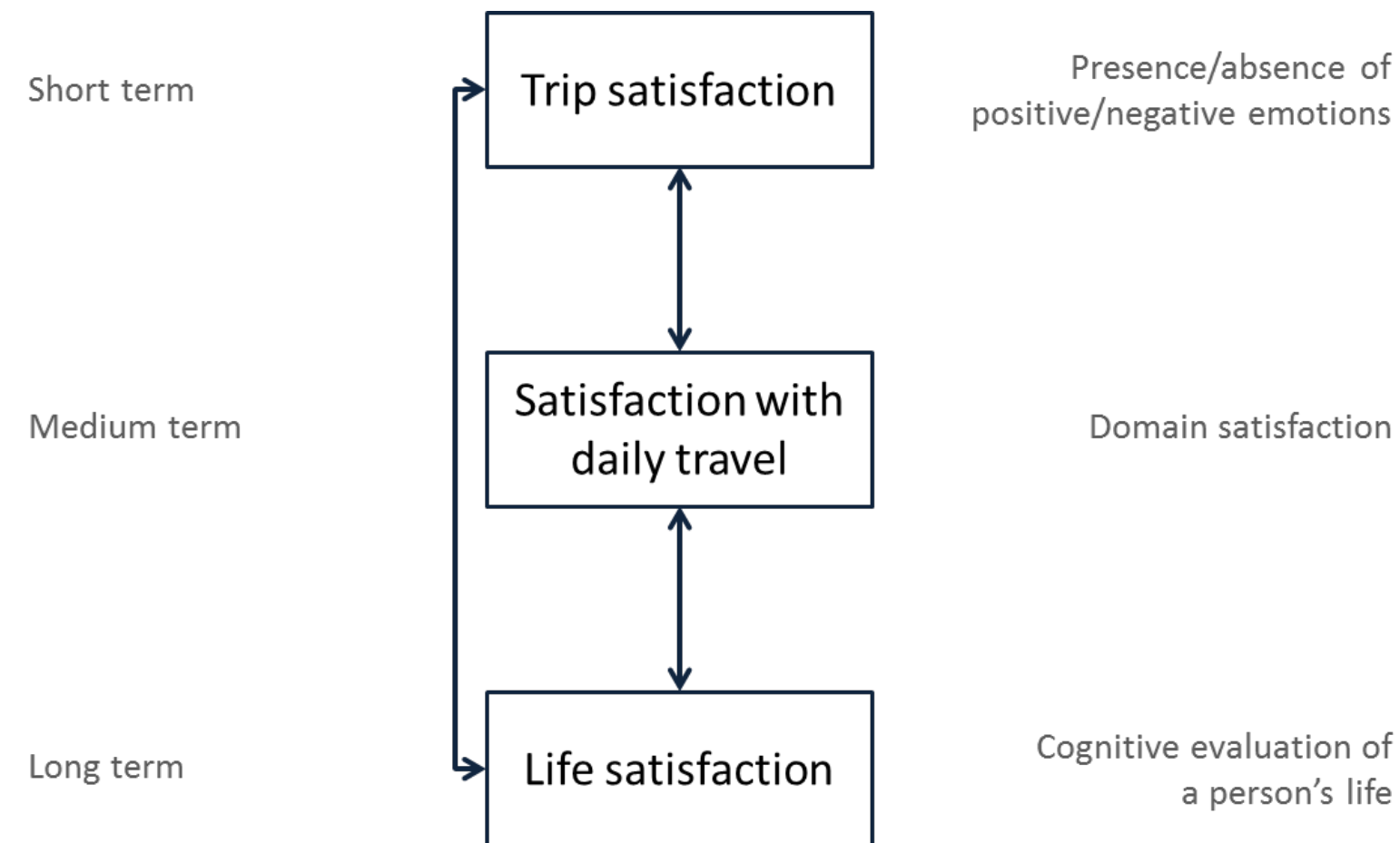
Travel satisfaction can refer to the presence/absence of positive/negative feelings (i.e., a person's mood) during trips and satisfaction with daily travel.



# RESULTS

## 3. How is travel satisfaction related with long-term well-being?

Travel satisfaction can be regarded as a part of subjective well-being (SWB)



# RESULTS

## 3. How is travel satisfaction related with long-term well-being?

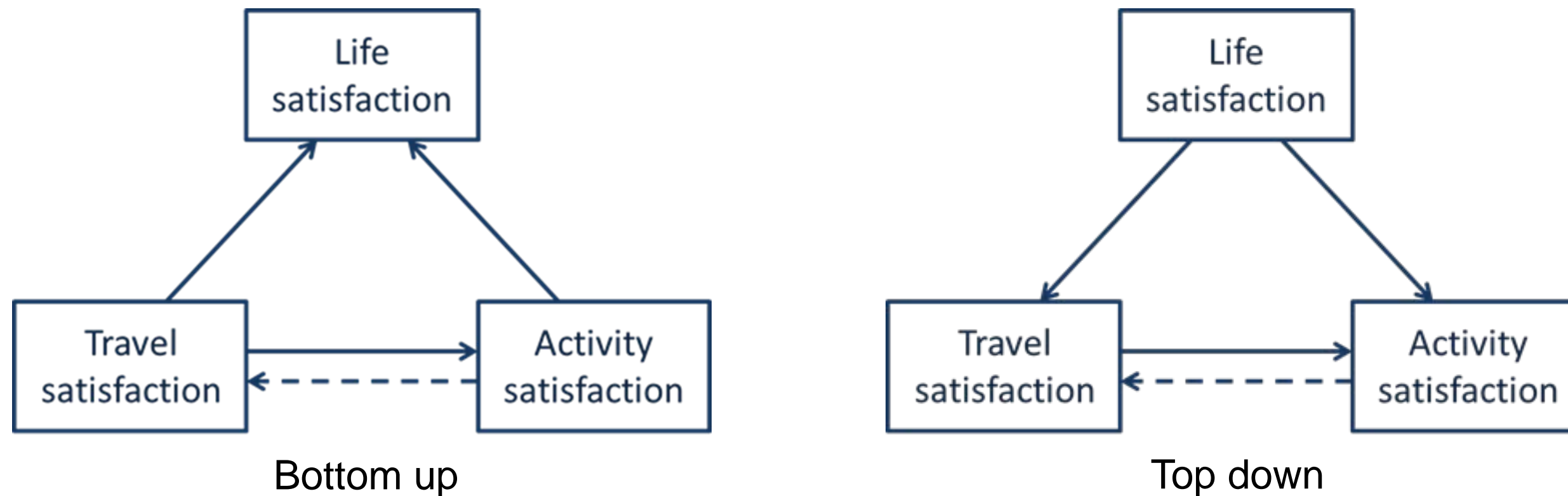
Travel (satisfaction) can affect life satisfaction (but also eudaimonic well-being (e.g., achieving personal growth and realising the best in oneself)) in different ways:

- Direct through experienced emotions during trips
- Indirect through enabling participation in spatially spread activities
- Indirect through spill-over effects of the trip on the activity at the destination
- Trips where travel is the activity (e.g., jogging, recreational cycling, joy riding)
- Potential travel

# RESULTS

## 3. How is travel satisfaction related with long-term well-being?

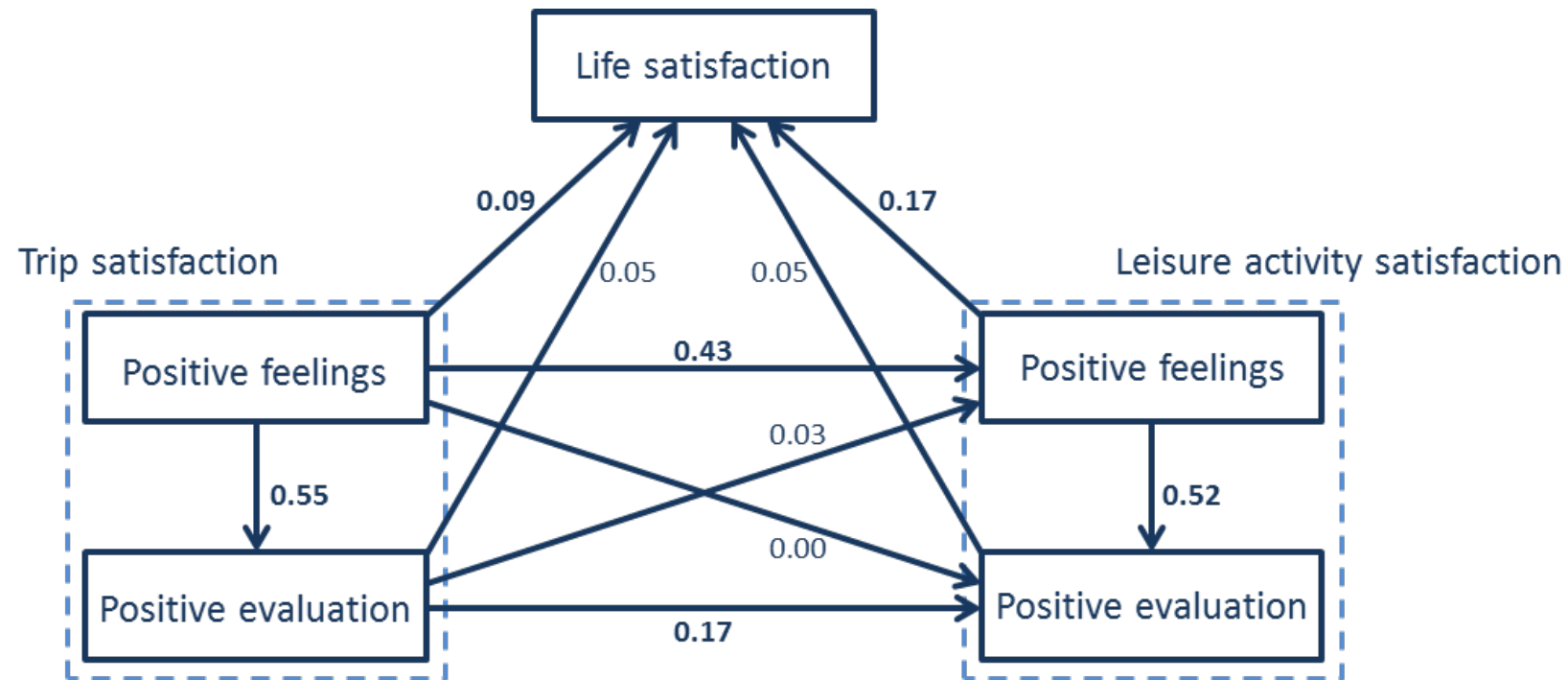
However, besides bottom-up effects from travel (and activity) satisfaction on life satisfaction, top-down effects from life satisfaction on travel (and activity) satisfaction might also exist.



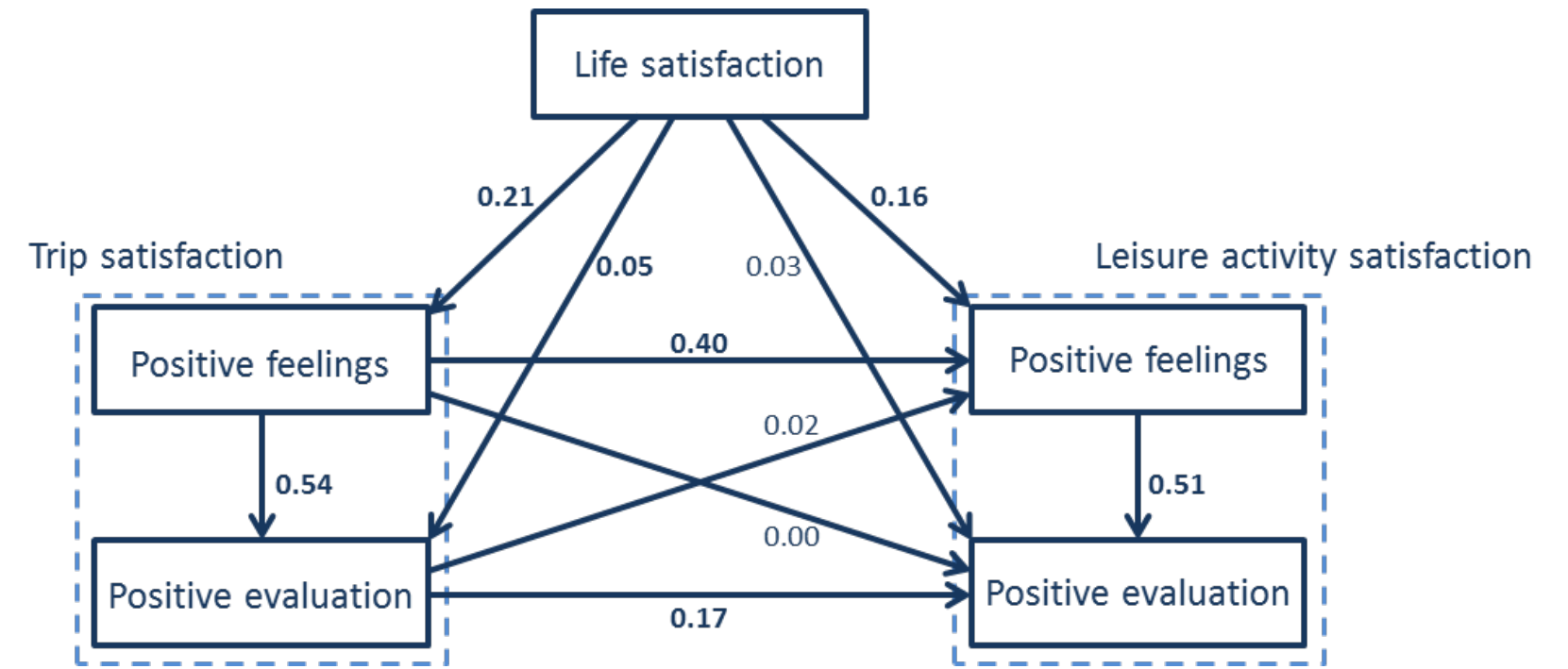
# RESULTS

## 3. How is travel satisfaction related with long-term well-being?

Bottom up



top down



# RESULTS

## 3. How is travel satisfaction related with long-term well-being?

Spill-over effects exist from trip satisfaction on satisfaction with the leisure activity at the destination. The mood during the leisure activity is strongly affected by the mood during the foregoing trip, while the evaluation of this activity is affected by the evaluation of that trip.

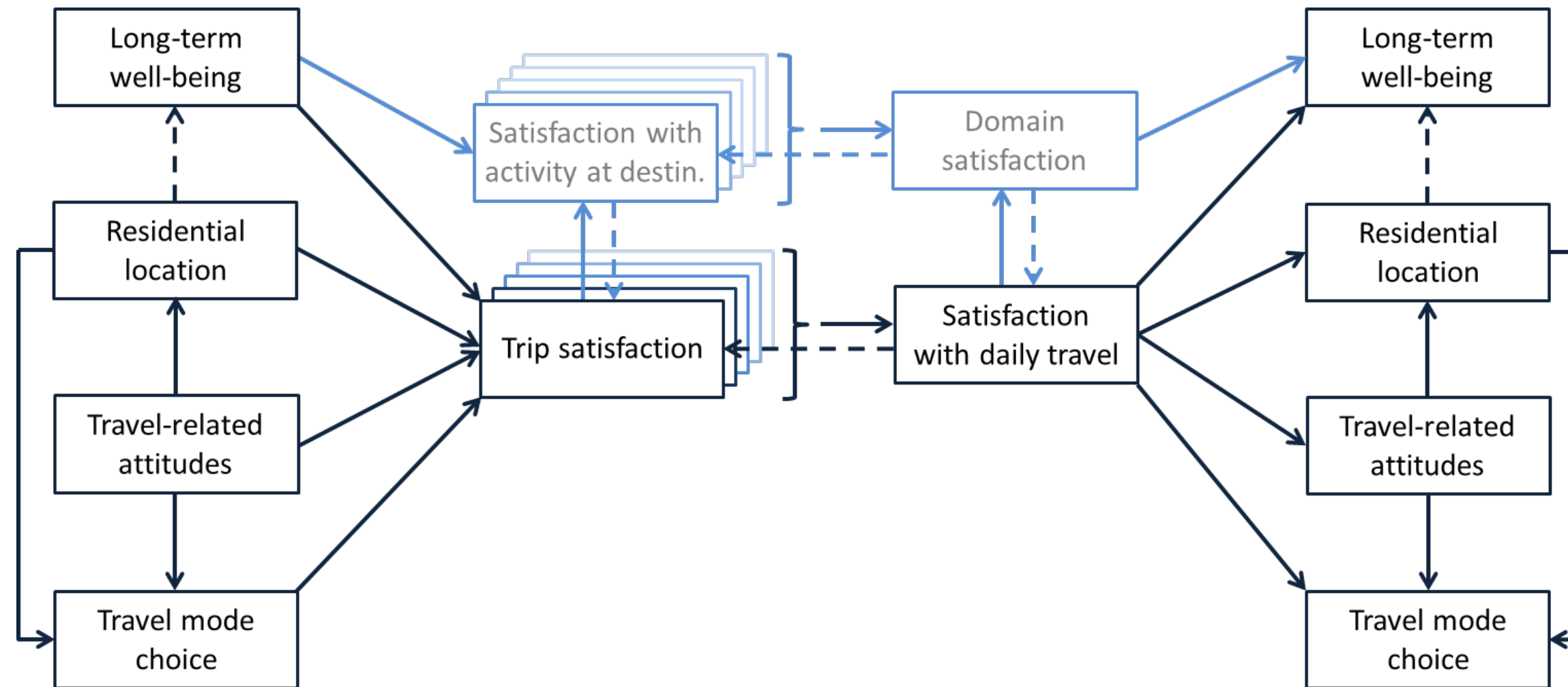
Satisfaction with out-of-home leisure activities has an important effect on life satisfaction, while satisfaction with the trip towards this activity mainly has an indirect effect on life satisfaction, through satisfaction with the leisure activity.

Results indicate a strong positive effect of life satisfaction on both travel satisfaction and activity satisfaction (especially on the emotions experienced during these episodes).



# CONCLUSION

Travel satisfaction seems to play an important role in travel behaviour processes



Thank you for your attention!

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