

## What remains from vacations? Relevance and value of vacation memories

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### Abstract

“Some of the most important benefits of a trip are precisely the memories one brings back”, is argued by two economists discussing the relationship between utility and happiness (Kimball & Willis, 2006). This paper presents empirical research on the issue based on a representative standing panel of the Swiss population (n=1003) and contributes to the literature inquiring the relevance and value of vacation memories along two dimensions: Satisfaction With Life (SWL), and Willingness To Pay (WTP).

The key concepts used in this paper are defined in Table 1.

*Table 1: Psychological concepts*

Concept	Definition
<b>Satisfaction With Life</b>	“a cognitive judgmental process dependent upon a comparison of one’s circumstances with what is thought to be an appropriate standard” (Diener, Emmons, Larsen & Griffin, 1985: 71)
<b>Memory Utility</b>	“current utility depends not only on current consumption, but also on past consumption” (Bao, Dai & Yu, 2018: 22)
<b>Emotions</b>	“affective states characterized by episodes of intense feelings associated with a specific referent (such as a person, an object, or an event) and instigate specific response behaviors” (Cohen & Areni, 1991, as cited in Prayag, Hosany, Muskat & Chiappa, 2015: 42).

As vacation memories refer to cognitive processes, we choose to measure SWL (“a cognitive judgmental process” according to Diener et al., 1985: 71) over other related concepts such as well-being, happiness, Quality Of Life (QOL), etc. Regarding SWL, we argue that the vacation memory is relevant for individuals’ SWL, because people tend to remember, or are reminded of their past vacations regularly (Kim, 2018). Life satisfaction immediately after the trip positively depends on trip experience (Sirgy, Kruger, Lee & Yu, 2011). Heterogeneity was found in the relation between vacations and QOL in a standing panel of 1000 observations (Dolnicar, Yanamandram & Cliff, 2012). A review of studies on the issue confirmed the relevance of vacations for QOL (Uysal, Sirgy, Woo & Kim, 2016). Our empirical strategy for evaluating SWL consists in using the 5-item scale developed by Diener et al. (1985), completed towards the end of the survey, when respondents have been considering at length a spontaneously remembered vacation. We then use a principal component based on these five items for our estimations.

In a first part of our research, we regress the SWL variable on various determinants, looking for evidence of the impact of vacation memories. The theoretical rationale behind this is the assumption that individuals not only

derive utility from present consumption, but experience also memory utility (a concept proposed by Gilboa, Postlewaite & Samuelson, 2016) from past consumption, in our case vacations.

Table 2 contains the results and largely confirms the relevance of vacation memories for current SWL, our utility construct.

Table 2: Results of the OLS regression

	B	Std. Error	Beta	t	Sig.	
(Constant)	-4.238	0.768		-5.516	0.000	
Memorability (7pt. Likert)	0.118	0.043	0.089	2.770	0.006	MEMORY UTILITY
Trip satisfaction (7pt. Likert)	0.179	0.037	0.157	4.895	0.000	
Trip duration	0.007	0.002	0.113	3.569	0.000	
Ln(time in past)	-0.236	0.059	-0.126	-4.007	0.000	
Vacation as Single*	-0.233	0.111	-0.068	-2.099	0.036	
Vacation as Couple*	0.107	0.064	0.053	1.669	0.095	
Distance "continents"	0.047	0.029	0.066	1.599	0.110	
Distance "culture"	-0.069	0.037	-0.076	-1.844	0.065	
Vacations per year	0.041	0.016	0.084	2.497	0.013	PRESENT UTILITY
Vacation importance (7pt. Likert)	-0.008	0.021	-0.012	-0.375	0.708	
Importance material goods in expenditure (7pt. Likert)	-0.039	0.021	-0.057	-1.841	0.066	
Importance life experiences in expenditure (7pt. Likert)	0.071	0.026	0.090	2.731	0.006	
Gross household income per month	0.075	0.025	0.101	3.025	0.003	
Age	0.121	0.048	2.048	2.502	0.013	
Age**2	-0.003	0.001	-4.510	-2.644	0.008	
Age**3	1.807E-5	0.000	2.543	2.761	0.006	
Married	0.189	0.070	0.094	2.697	0.007	

Dependent Variable: REGR factor score 1 for analysis 2, Rsq(adj.) 0.135; df 988

\*Reference: Family, Friends, Groups

Overall, the estimations confirm that memory utility, in this case concerning past vacations, have a relevant impact on satisfaction with life. Though not in the center of interest, this is evidence on the intricacies of priming in SWL and happiness surveys.

The most interesting covariates in the memory part of our regression are memorability and trip satisfaction, on the one hand, and the time in past of the remembered vacation. While the role of satisfaction confirms existing research, the positive effect of memorability adds to existing research, as it regards a spontaneously remembered vacation. The effect on SWL is positive and smaller, but comparable in size to the one of trip satisfaction. An alternative specification of memorability, using three principle components of emotions when remembering the vacation, confirmed this result. The negative sign of the logarithm of the time in past represents a clear indication of discounting a vacation of a given duration, which in itself has a positive impact. In an alternative specification, we inserted the discounted vacation duration, finding the best fit for a discount factor of 1.2, very similar in size to the 1.27 we receive from the Ln coefficient. Regarding the variables not linked to the remembered vacation, but vacations in general, we find that frequency of vacations enhances

SWL, while the importance attributed to vacations does not. We tested the robustness of our findings performing ordered logistic regression on single items of the Diener SWL scales, confirming these results.

The second part of our research follows from the first one, adopting an economic perspective. If vacation memories are relevant for SWL, then we should find evidence for their impact on behavior. Therefore, we are searching evidence on the WTP for vacation memories. As a first empirical test, we estimated an expenditure function, regressing the expenditure per day of the remembered vacation on a similar set of variables as above. Doing so implies, that individuals remembering a vacation, simultaneously evoke vacation characteristics and perform an evaluation of the vacation in terms of memorability, emotions, etc. Our results return significant marginal WTP (MWTP) for memorability of around 21 CHF per Likert point (note that the frequency distribution of memorability in our sample implies that this is the MWTP for reaching the highest grade of memorability). In accordance with theory, MWTP is diminishing in vacation duration. Time in past of the remembered vacation has no significant influence on WTP, which might be interpreted as a confirmation of our assumption of an economic evaluation in the past, rather than in the present. We intend to explore this issue more in depth in future research. DIY stands for vacation where the respondent took part in the organization of transport, accommodation and visited attractions, where the value is equal to the sum of the three dummy variables. As could be expected, vacations with a large involvement of the holidaymaker in the organization are “cheaper”, everything else being equal.

Table 3: Results of the OLS regression for Expenditure per vacation day

	B	Std. Error	Beta	t	Sig.	
(Constant)	-396.248	3012.811		-2.391	0.017	
Memorability (7pt. Likert)	21.630	8.853	0.073	2.443	0.015	VACATION MEMORY
Trip duration	-1.435	0.420	-0.105	-3.420	0.001	
Ln(time in past)	8.586	12.530	0.021	0.685	0.493	
Family vacation *	40.294	15.788	0.079	2.552	0.011	
Vacation with friends *	-43.757	16.367	-0.080	-2.673	0.008	
DIY	-21.266	5.451	-0.118	-3.901	0.000	
Importance material goods in expenditure (7pt. Likert)	20.268	4.540	0.135	4.464	0.000	CONTROLS
Importance life experiences in expenditure (7pt. Likert)	-0.606	5.398	-0.003	-0.112	0.911	
Gross household income per month	25.656	5.188	0.156	4.945	0.000	
Age	21.847	10.504	1.655	2.080	0.038	
Age*2	-0.435	0.217	-3.324	-2.007	0.045	
Age*3	0.003	0.001	1.775	1.989	0.047	
Married	79.424	15.140	0.178	5.246	0.000	

Dependent Variable: Expenditure/day, Rsq(adj.) 0.182; df 988

\*Reference: Single, Groups

In a next step, we will have to corroborate this first evidence distinguishing different types of vacations, and identify the marginal WTP for single memorability items. We will then also analyze revisit intention. First results not presented here seem to confirm Kim (2018), who finds that Memorable Tourism Experiences (MTEs) are

the most influential determinant of behavioral intentions. We add new evidence concerning memorability in terms of the time in past, interpreting it as further evidence for the existence of a memory utility of vacations (Gilboa et al., 2016).

Future research will consider integrating the SWL, WTP and Revisit Intention, analyzed separately in this paper in a structural equation model.

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