

## **EXPERTS' OPINIONS CONCERNING THE MINIMUM CONTENT OF A NATIONAL HOUSEHOLD TRAVEL SURVEY**

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**ABSTRACT**

Although an extensive literature is available concerning the design of travel surveys, fewer research initiatives have been carried out to determine the content of the survey itself. The objective of the present work is to identify such minimum set through a survey (MTSQ – Mini-Travel Survey Questionnaire) targeted to experts in this field. Moreover, it is investigated whether unanimity exists in the experts' opinions concerning the importance of various types of questions and whether regional and/or professional differences exist. The MTSQ survey was successfully completed by 81 respondents in October-November 2012, mainly from Europe and North America. The study identified the most important questions, which should form the core of any NHTS. This list is especially useful for countries which do not yet have implemented a NHTS, and for defining the set of questions in case a harmonized household travel survey spanning across different countries will be initialized. Secondly, the paper investigated whether unanimity exists in the experts' opinions. Our analyses clearly pinpointed different evaluations according to the experts' characteristics, thus it could be concluded that unanimity is certainly not complete. Thus, whenever developing standards for travel surveys these differences should be taken into account, according to both the prospective data users the intended data usages. Especially the differences with respect to the regional context (North-American versus European), and involvement with the NHTS should be acknowledged.

## 1. INTRODUCTION

Although, an extensive literature is available concerning the design of travel surveys, fewer research initiatives have been carried out to determine the content of the survey itself. The most noteworthy effort in this regard is the NCHRP report 571 (Stopher et al., 2008) that outlines the framework for a standardization of procedures for carrying out national travel surveys. Nonetheless, this report does not explicitly address which questions should be minimally asked in a national household travel survey (NHTS). To this end, a questionnaire was designed to elicit which questions should be minimally in a NHTS. Moreover, it is investigated whether unanimity exists in the experts' opinions concerning the importance of various types of questions and whether regional and/or professional differences exist.

The remainder of the chapter is organized as follows. First, the expert survey is discussed. Consequently, the methodology is outlined and the results are presented. Finally, a discussion and conclusion is provided.

## 2. EXPERT SURVEY

### 2.1 Setup of the MTSQ Survey

The goal of the Mini-Travel Survey Questionnaire (MTSQ) survey is to elicit travel survey experts' opinions on the importance of the various questions that are part of NHTS. The MTSQ questionnaire was divided into four parts. The first part contained questions concerning the professional profile of the experts and of the agencies they are affiliated with. The second part assesses the importance of questions which are related to the household (HH), and their two- and four-tier vehicle possession [HH1-HH3]. The third part mainly focused on the importance of various person-related aspects such as socio-demographic characteristics, geographical information about the home location and the usage of transport modes [PER1-PER3]. The fourth and final part was devoted to assess the necessity of various aspects of the trip diary [TRIP].

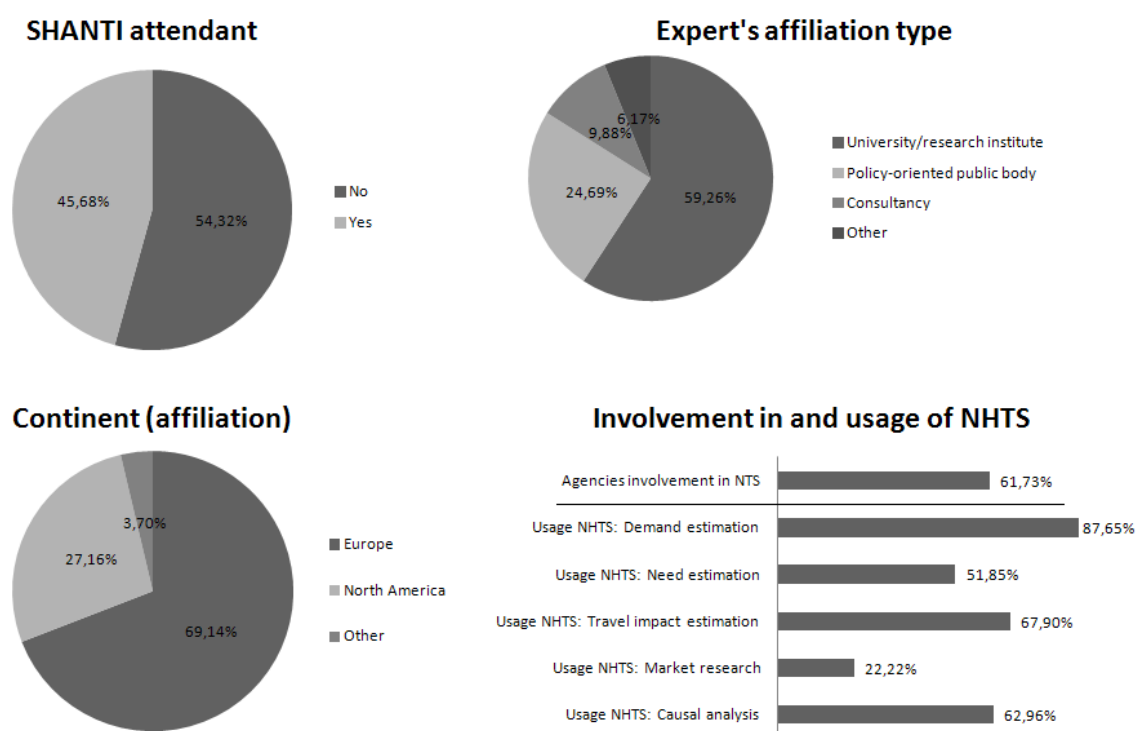
The majority of the questions to assess the importance of questions in a travel survey were ERSNO (Essential, Recommended, Secondary, No Opinion) questions. The following specific definition was used to define this ordinal scale:

1. *essential*: it should be part of every national travel survey no matter what;
2. *recommended*: the item is recommended for methodological/analytical issues (e.g. weighting);
3. *secondary*: not essential and not (absolutely) required for methodological/analytical issues.

## 2.2 Description of the Response

The MTSQ survey was completed successfully by 81 respondents in October-November 2012.

Figure 1 provides an overview of the descriptive statistics of the respondents. The pie graph concerning the SHANTI attendance reveals that the respondents were well balanced between survey experts that took part of the SHANTI project and survey experts who had no involvement with the project. With regard to the affiliation type of the experts, it could be noted that that about 60% of the experts were working at a university or research institute, and about one quart for a policy-oriented public body. With respect to the geographical spread of the experts, it could be depicted that about 70% of the experts are affiliated with an organization based in Europe. The other experts are mainly based in Northern America. The large share of European experts is mainly due to the fact that the SHANTI project is a European project, and that policy recommendations based on the project results in first instance must be formulated in a European context. Notwithstanding, in the analysis of the results, explicit attention will be paid to potential differences between European and North American experts. Finally, the figure provides insight into the experts' agencies involvement and usage of the NHTS. The majority (about 62%) of the agencies of the experts was involved in the NHTS (either through the design, fieldwork or the official analysis) and the main use by the experts of the NHTS data was for demand estimation.



**Figure 1:** Descriptive graphs of the experts' characteristics

### 3. METHODOLOGY

Recall that the main objective of this paper is to investigate which questions are considered as essential elements of national travel surveys, and to assess which factors of the experts' professional profile are influencing these results.

To determine which questions are considered as essential the following prioritization (weighting) scheme was used on the 92 ERSNO (Essential, Recommended, Secondary, No Opinion) questions (see Table 1).

**Table 1:** Prioritization weights

Ordinal assessment	Weight
Essential	5
Recommended	2
Secondary	1
No opinion	0

The weights in the above table are multiplied by the respective share of respondents, in order to give a total score that expresses the degree of essentialness of each question. Let  $\pi_i^e$  be the share (expressed in %) of experts that find question  $i$  essential,  $\pi_i^r$  the share that recommend this question to be included,  $\pi_i^s$  the share that regard it as secondary, and  $\pi_i^{no}$  the share that has no opinion on question  $i$ , then the score  $S_i$  for question  $i$  is calculated as  $S_i = 5\pi_i^e + 2\pi_i^r + 1\pi_i^s (+0\pi_i^{no})$ , having a minimum score of 0 and a maximum score of 500. Table Y gives an overview of some possible combinations of the different shares. Questions with a score higher than 400, are considered as the key essential questions. This value of 400 corresponds to 70% finding the question essential (and a large enough share of the remaining 30% either recommends the question or considers it as a secondary question). Questions with a value above 350 are considered highly recommend (moderate essential) questions. Table 2 provides an overview of possible distributions of the ordinal assessment shares with their corresponding score statistics. Note that in the calculations these score statistics can be tabulated from a global perspective (all respondents pooled together) or by subgroup (e.g. the score of the Europeans and North Americans).

**Table 2:** Illustration of the rank score computation

Essential %	Recommended %	Secondary %	Score
100	0	0	500
90	0	10	460
80	10	10	430
70	20	10	400
60	30	10	370
50	50	0	350
40	50	10	310

Next to the overall assessment of the degree of essentialness of various questions in a NHTS, the effect of the experts' professional profile on this assessment is elucidated. To this end, two types of analysis are carried out. At a more aggregate level, the impact of the experts' characteristics on the essentialness of the different questionnaire blocks is assessed by means of Poisson regression. Secondly, at the level of individual questions, the dependency of the response (in most instances essential or not essential) was assessed using Fisher's exact test. When computation times exceeded a clock time of 200 seconds, Monte Carlo estimation of the exact p-values was used instead of the direct estimation. The choice for exact tests rather than typical Pearson chi-square tests was made as the basic assumptions of the latter test

(80% of the expected cell frequencies larger or equal than 5) was likely to be violated, whereas the exact computations did not rely on parametric assumptions.

## 4. RESULTS

### 4.1 Overall Assessment Essentialness of Questions

Table 3 provides an overview of all the questions which were highlighted either (values above 400) as essential or highly recommended (values between 350 and 400). The table is organized according to the question block and the world score. In addition, the scores for the experts from Europe and North-America are tabulated as well. From this Table, it becomes clear that next to a multitude of trip-related attributes, especially the socio-economic profile of the household and individual are regarded as essential, as well as the access to and use of different transport modes. Table 4 displays the attributes that are esteemed to have a lower priority. Stage-related travel information, characteristics of the dwelling, household vehicles and parking facilities are indicated as less essential.

**Table 3:** Rank-scores for the essential and highly recommended questions

Block	Question	World	Europe	N.-America
HH1	Age/date of birth of the HH-members	471.61	471.42	468.20
HH1	Number of persons with the HH	466.67	462.50	472.73
HH1	Gender of the HH members	453.12	462.50	422.72
HH1	Occupation (active/non-active) of the HH-members	448.15	455.34	422.72
HH1	Date of the survey (YYYY/MM/DD)	445.67	426.79	500.00
HH1	Net household income (predefined categories)	380.26	348.24	459.08
HH1	Type of non-activity (e.g. retired, student, ...) of the HH-members	370.37	374.97	368.18
HH1	Work regime (full-time, part-time, ...) of the HH-members	359.29	330.36	427.26
HH3	Number of cars with the HH	456.79	442.85	486.35
PER1	Age / date of birth	475.30	483.92	449.99
PER1	Gender	464.20	473.21	436.37
PER1	Driving license for private vehicles (Y/N)	445.68	451.77	422.72
PER1	Possession of a PT card (season ticket/transit pass)	406.17	405.35	395.45
PER1	Importance Relation to the reference person (Spouse, child, ...)	364.20	337.47	413.66
PER2	Domicile for the travel day: geographical information	430.84	416.07	472.73
PER2	Domicile for the travel day: (not) at home	429.61	423.23	436.38
PER2	Domicile for the travel day: street of the domicile	350.63	294.64	486.35
PER3	Frequency of traveling by car as driver	386.43	398.19	368.21
PER3	Frequency of traveling by bus	379.02	392.87	354.54
PER3	Frequency of traveling by car as passenger	377.79	392.87	350.00
PER3	Frequency of traveling by tram	376.56	389.29	354.54
PER3	Frequency of traveling by train	376.56	389.29	354.54
PER3	Frequency of traveling by foot	369.14	378.60	354.54
PER3	Frequency of traveling by bike	369.14	383.92	340.94
PER3	Frequency of traveling by moped/motorcycle	353.06	371.43	313.63
TRIP	Departure point of the trip	479.03	469.63	500.00
TRIP	Destination point of the trip	475.29	464.31	500.00
TRIP	Main transport mode of the trip	470.37	457.15	500.00
TRIP	Departure time of the trip	464.21	448.23	500.00
TRIP	Arrival time of the trip	448.14	430.36	486.35
TRIP	Trip purpose (generic, e.g. list of 10 purposes)	434.57	442.85	404.56
TRIP	For each stage within the trip: transport mode	390.15	367.84	445.46

**Table 4:** Rank-scores for the remaining (non-essential, non-highly recommended) questions

Block	Question	World	Europe	N.-America
HH1	Educational background of the HH-members	328.40	330.34	313.62
HH1	Type of occupation (e.g. blue vs white-collar worker) of the HH-members	295.07	296.43	290.88
HH1	Dwelling/housing type	262.94	248.24	300.00
HH1	Dwelling/housing ownership	219.75	203.56	254.52
HH1	Internet connection (Y/N)	207.40	196.42	227.27
HH1	Landline telephone availability (Y/N)	190.10	164.28	245.43
HH2	Number of mopeds/motorcycles within the HH	308.64	319.63	268.17
HH2	Number of bicycles within the HH	271.61	289.29	209.12
HH2	Mileage last 12 months of the moped/motorcycle	211.13	237.50	145.47
HH2	Total mileage of the moped/motorcycle	170.40	182.14	136.38
HH2	Year of construction of the moped/motorcycle	150.61	158.93	131.81
HH2	Power of the engine of the moped/motorcycle	140.75	157.16	104.58
HH2	Year of purchase of the moped/motorcycle	140.73	146.42	122.76
HH2	Cylinder capacity of the engine of the moped/motorcycle	139.49	153.56	109.12
HH2	Type/model of the moped/motorcycle	122.23	126.82	113.66
HH2	Brand of the moped/motorcycle	113.59	107.14	131.82
HH3	Availability of the car (fully/partially available)	328.40	317.85	345.47
HH3	Energy source of the car	324.70	332.14	295.46
HH3	Importance Total mileage for the last 12 months of the car	311.09	328.55	254.55
HH3	Category of car (e.g. car, delivery van, camper, other)	275.28	260.73	295.44
HH3	Year of construction of the car	259.24	275.02	222.74
HH3	Options for parking the car during the night (e.g. in the street)	254.34	257.14	245.43
HH3	Year of purchase of the car	234.59	212.49	286.36
HH3	Type/model of the car	232.11	203.56	286.34
HH3	Costs for parking the car during the night (e.g. free)	220.97	185.71	290.91
HH3	Cylinder capacity of the engine of the car	192.60	196.42	159.09
HH3	Power of the engine of the car	190.11	201.78	149.99
HH3	Brand of the car	167.89	141.08	227.29
HH3	Method of acquisition of the car (e.g. new/2nd hand/company)	164.21	166.07	150.00
HH3	Fiscal/taxable power of the engine of the car	149.38	151.79	150.00
PER1	Main occupation (e.g. blue-collar, white-collar, student, ...)	348.16	351.78	331.82
PER1	Educational background	344.46	357.15	290.91
PER1	Other occupation (worker/student/not applicable)	319.74	332.13	277.28
PER1	Work flexibility (fixed hours, flexible hours)	287.66	276.81	313.62
PER1	Number of working hours / week	276.55	255.37	313.64
PER1	Work regime (night, day, shifts, ...)	259.29	253.60	268.19
PER1	Number of years holding driving license for private vehicles	240.74	250.01	200.01
PER1	Mobile phone owned for personal use (Y/N)	198.74	176.78	231.83
PER1	Additional information about workers	197.51	178.58	231.81
PER1	Mobile phone owned for professional use (Y/N)	171.63	157.12	195.47
PER1	Personal email consulted at least once a week (Y/N)	167.93	166.06	159.09
PER1	Professional email consulted at least once a week (Y/N)	151.86	142.87	159.09
PER2	Domicile for the travel day: full address of the domicile	333.33	282.14	472.73
PER2	Domicile for the travel day: parking possibilities	304.97	266.08	377.30
PER2	Domicile for the travel day: parking costs	282.71	228.56	390.90
PER3	Frequency of traveling by taxi	340.74	337.48	354.54
TRIP	Self-reported trip distance of the trip	335.82	357.15	272.71
TRIP	For each stage by car as driver: number of occupants	328.38	298.21	399.99
TRIP	For each stage within the trip: departure point	319.73	278.55	413.66
TRIP	For each stage within the trip: destination point	312.32	267.84	413.66
TRIP	For each stage within the trip: duration	304.96	282.12	363.63
TRIP	For each stage within the trip: departure time	301.24	258.91	395.45
TRIP	For each stage within the trip: arrival time	301.24	258.91	395.45
TRIP	Bearing of the costs of the trip (full, partly, none)	260.51	216.06	354.55
TRIP	Trip purpose (very detailed, e.g. list of 40 purposes)	251.88	237.47	295.44

TRIP	For each stage within the trip: self-reported distance	246.90	246.40	240.89
TRIP	For each stage by car as driver: parking costs	240.77	189.29	354.56
TRIP	For each stage by car as driver: specification of the car	239.50	217.87	290.92
TRIP	For each stage by car as driver: type of parking place	237.04	196.45	322.71
TRIP	For each stage by car as driver: parking search time	217.29	194.66	254.57

## 4.2 Influencing Factors

Recall that next to the overall assessment of essentialness, the influence of the experts' professional profile on this assessment is assessed. At an aggregate level, it is investigated how the different attributes of the experts' professional profile affect the number of ERSNO questions that are considered as essential. Poisson regression models were developed to estimate the impact on the total number of questions, as well as to estimate the impact on the number of questions per question block. The models predicting the total number of questions provide insight on differences in the overall necessity of questions, i.e. the size of the potential minimum (essential) NHTS. The analysis at the block level is required as the analysis of the total number of questions might hide fundamental differences which are present at the block level. After all, different blocks might counterbalance the overall assessment. Table 5 provides the p-values of the significance tests of the influence of the characteristics of the expert's profile of the 72 different Poisson models. The parameter estimates of these models are presented in Table 6.

From Table 5 it can be seen that, at the overall assessment of essentialness significantly depends on the continent, the involvement in the NHTS, the use of the NHTS for demand estimation, market research and causal analysis. From Table 6, one can observe that North American experts appear to consider 17.4% more questions as essential when compared to their European counterparts. This is also supported by Figure 2 that relates the share of European and North-American experts to the percentage of questions that are considered essential by these experts. Besides, the use of the NHTS for demand estimation and causal analysis result in an evaluation of respectively 15.4% and 8.4% more questions as essential. In contrast, active involvement in the NHTS survey process and the use of the NHTS for market research decreases the number of questions marked as essential by 11.8% and 9.1%.

With respect to the first block of household questions, only one aspect of the expert's profile plays a role, namely the use of the NHTS for causal analysis: when the expert uses the NHTS for causal analysis, he or she esteems 14.9% more questions as essential. In contrast to the first block of household questions, the expert's profile plays a significantly larger role in the second block of the household questionnaire. European experts are attributing considerably more weight to this type of questions in comparison to their North-American counterparts, as the latter consider 45% questions less as important. With respect to the other questionnaire blocks, the most striking difference is the difference between European and North-American experts with respect to the assessment of the second block of person questions (geographical information about the home location): North-American experts evaluate on average 68.7% more questions as essential.



**Table 5:** P-values of the Type III significance tests of the Poisson models predicting the number of essential questions\*

Expert's profile	ALL	HH1	HH2	HH3	PER1	PER2	PER3	TRIP
SHANTI attendance	0.967	0.488	<i>0.020</i>	0.547	0.354	0.619	0.772	0.163
Affiliation type <sup>1</sup>	0.789	0.831	<i>0.028</i>	<i>&lt;0.001</i>	0.534	0.782	<i>0.030</i>	0.222
Continent <sup>2</sup>	<i>&lt;0.001</i>	0.124	<i>0.018</i>	0.193	0.836	<i>&lt;0.001</i>	0.281	<i>&lt;0.001</i>
NHTS involvement	<i>&lt;0.001</i>	0.943	<i>0.042</i>	0.540	0.968	<i>0.002</i>	0.726	<i>&lt;0.001</i>
NHTS use: demand estimation	<i>0.010</i>	0.396	0.179	<i>0.058</i>	0.405	0.266	0.878	0.172
NHTS use: need estimation	0.133	0.768	<i>0.049</i>	0.774	<i>0.066</i>	0.654	<i>0.006</i>	0.572
NHTS use: impact assessment	0.210	0.488	<i>&lt;0.001</i>	<i>0.007</i>	0.518	0.951	0.344	0.300
NHTS use: market research	<i>0.026</i>	0.167	0.543	0.716	0.251	0.849	<i>0.027</i>	0.943
NHTS use: causal analysis	<i>0.027</i>	<i>0.098</i>	0.983	0.984	<i>0.074</i>	0.859	<i>0.009</i>	0.736

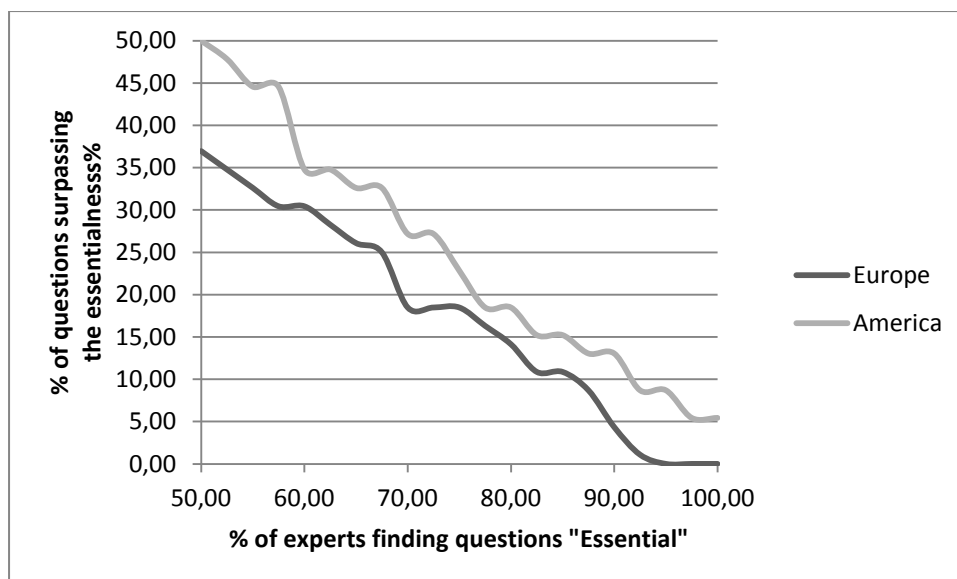
\*Bold italic values indicate significant effect (level of significance of 10%)

<sup>1</sup> For the effect size estimation of the continent only the responses Europe and North-America were taken into account

<sup>2</sup> For the effect size estimation of the affiliation type only universities, policy bodies and consultancy agencies were taken into account

**Table 6:** Parameter estimates of the Poisson models predicting the number of essential questions\*

Block	Expert's profile	Level	Est.	S.E.	Mult. Eff.
ALL	Continent	North America (vs Europe)	0.160	0.038	+17,4%
ALL	NHTS involvement	Yes (vs No)	-0.126	0.035	-11,8%
ALL	NHTS use: demand estimation	Yes (vs No)	0.143	0.056	+15,4%
ALL	NHTS use: market research	Yes (vs No)	-0.096	0.043	-9,1%
ALL	NHTS use: causal analysis	Yes (vs No)	0.080	0.036	+8,4%
HH1	NHTS use: causal analysis	Yes (vs No)	0.139	0.084	+14,9%
HH2	SHANTI attendance	Yes (vs No)	0.445	0.192	+56,1%
HH2	Affiliation type	Consultancy (vs University)	-0.993	0.461	-63,0%
HH2	Continent	North America (vs Europe)	-0.599	0.253	-45,0%
HH2	NHTS involvement	Yes (vs No)	0.426	0.210	+53,1%
HH2	NHTS use: need estimation	Yes (vs No)	0.384	0.195	+46,8%
HH2	NHTS use: impact assessment	Yes (vs No)	-0.695	0.190	-50,1%
HH3	Affiliation type	Policy (vs University)	-0.526	0.140	-40,9%
HH3	NHTS use: demand estimation	Yes (vs No)	0.346	0.183	+41,3%
HH3	NHTS use: impact assessment	Yes (vs No)	-0.291	0.108	-25,2%
PER1	NHTS use: need estimation	Yes (vs No)	0.151	0.082	+16,3%
PER1	NHTS use: causal analysis	Yes (vs No)	0.155	0.087	+16,8%
PER2	Continent	North America (vs Europe)	0.523	0.124	+68,7%
PER2	NHTS involvement	Yes (vs No)	-0.373	0.119	-31,1%
PER3	Affiliation type	Policy (vs University)	0.281	0.106	+32,4%
PER3	NHTS use: need estimation	Yes (vs No)	0.260	0.095	+29,7%
PER3	NHTS use: market research	Yes (vs No)	-0.272	0.123	-23,8%
PER3	NHTS use: causal analysis	Yes (vs No)	0.264	0.102	+30,2%
TRIP	Continent	North America (vs Europe)	0.362	0.072	+43,6%
TRIP	NHTS involvement	Yes (vs No)	-0.356	0.067	-30,0%



**Figure 2:** The share of experts in relation to the percentage of questions that are considered essential by them

Next to the dependency of the response was assessed using Fisher's exact test. Table 7, provides the information of the questions that were queried in addition to the ERSNO questions. From this Table it becomes clear that North-American experts put a larger accent on querying all members of the household, and desire a more precise level of geographical detail in the trip diary.

**Table 7:** Dependency of the non-ERSNO questions on the region of the expert

Response	Europe	N.-America
<i>Household members to be surveyed (p-value Fisher's exact test: 0,0141)</i>		
All household members	58.93%	95.45%
All adults and selection of children	14.29%	0.00%
Selection of adults and children	12.50%	0.00%
Adults only	10.71%	0.00%
No opinion	3.57%	4.55%
<i>Number of mopeds/motorcycles to be queried (p-value Fisher's exact test: 0,3420)</i>		
<i>Number of cars to be queried (p-value Fisher's exact test: 0,3328)</i>		
<i>Average trip frequency per mode: numerical vs ordinal (p-value Fisher's exact test: 0,2976)</i>		
<i>Average trip frequency per mode: Mo-Fr vs entire week (p-value Fisher's exact test: 0,0821)</i>		
Workdays (Mo-Fr)	19.64%	40.91%
All seven days	80.36%	59.09%
<i>Minimum level of geographical detail in trip diary (p-value Fisher's exact test: &lt;0.0001)</i>		
Full address	39.29%	95.45%
Street of the address	25.00%	0.00%
Municipality	26.79%	4.55%
Adm. level 1 above municipality	0.00%	0.00%
Adm. level 2+ above municipality	3.57%	0.00%
No opinion	5.36%	0.00%

With regard to role of the different aspects of the experts' profiles, Table 8 provides the summary results of the individual Fisher's exact tests that are carried out at an individual question level. The table provides the percentage of questions (in the questionnaire block) that are significantly depending on the profile characteristic. Overall, regional differences (i.e. differences between North-American and European experts) appear to be the most determinant. Overall, in 29.3% of the questions the continent played a significant role,

peaking to 66.7% in the second block of the person questionnaire. Next to the continent, the active involvement in the NHTS survey process accounts for many of the differences.

**Table 8:** Percentage of questions that are significantly depending (Fisher's exact test) on the expert's profile

Expert's profile	ALL	HH1	HH2	HH3	PER1	PER2	PER3	TRIP
SHANTI attendance	7.6%	7.1%	20.0%	0.0%	17.6%	0.0%	0.0%	4.8%
Affiliation type	9.8%	7.1%	10.0%	13.3%	17.6%	0.0%	11.1%	4.8%
Continent	29.3%	21.4%	30.0%	26.7%	5.9%	66.7%	0.0%	57.1%
NHTS involvement	22.8%	35.7%	10.0%	6.7%	5.9%	50.0%	0.0%	47.6%
NHTS use: demand estimation	4.3%	7.1%	0.0%	6.7%	5.9%	0.0%	0.0%	4.8%
NHTS use: need estimation	6.5%	7.1%	0.0%	0.0%	11.8%	0.0%	33.3%	0.0%
NHTS use: impact assessment	10.9%	14.3%	40.0%	13.3%	5.9%	0.0%	0.0%	4.8%
NHTS use: market research	5.4%	7.1%	10.0%	6.7%	5.9%	0.0%	0.0%	4.8%
NHTS use: causal analysis	4.3%	7.1%	0.0%	6.7%	11.8%	0.0%	0.0%	0.0%

## 5. DISCUSSION AND CONCLUSION

In this study, the essentialness of an extensive list of questions, regularly asked in NHTS, was assessed. For each of the questions a score value was determined to express the degree of essentialness. The study identifies the most pregnant questions, which should form the core of any NHTS. This list is especially fruitful for countries which do not yet have implemented a NHTS, and for defining the set of questions whenever a harmonized multi-country household travel survey will be initialized. Moreover, in an area where budgetary constraints are confining the scope of NHTS, it provides a framework for safeguarding the most essential information.

Secondly, the paper investigated whether unanimity exists in the experts' opinions. The different analysis clearly pinpointed differences concerning the experts' characteristics, thus it could be concluded that unanimity is certainly not complete. Thus, whenever developing standards for travel surveys these differences should be taken into account. Especially the differences with respect to the regional context (North-American versus European), and involvement with the NHTS should be acknowledged.

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## 7. REFERENCES

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