

STABILITY IN OUTBOUND TRAVEL MOTIVATION: A NORWEGIAN EXAMPLE

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Only travel and leisure motives with some degree of stability are likely to contribute to predictions of travel choice or behavior. Eight motive scales, based on previous research and consultations with a travel company, were used in a survey of outbound tourists from Norway ($n = 243$). Their stability was tested in a quasi-experimental pre/post design. Respondents' trip abroad was used as the "experimental treatment," and postintervention measurements were taken at two different points in time: either after 1 week or after 2 months. Internal consistency proved satisfactory for seven out of eight motive scales tested. Confirmatory factor analysis also lends some support to the single-scale factor models. All seven scales show satisfactory test-retest reliability. A small, but statistically significant, difference between pre- and posttravel motives emerged in the powerful repeated-measurements analysis. A difference of this magnitude is not likely to have any practical significance, however. The interval difference between post- and premeasurements (1 week vs. 2 months) had no significant effect. The travel motives measured in the study thus may be trusted to be relatively lasting and stable phenomena. For the use of travel motives for predicting travel choices and behavior, this is a necessary, although insufficient, precondition.

Key words: Tourist motivation; Stability; Quasi-experiment

Introduction

Travel Motives

In general, theories of motivation picture imply a dynamic process of internal psychological factors (needs, wants, and goals). More precisely, the term motivation is defined in terms of choosing an activity or task to engage in, establishing the level of effort to put into it, and determining the degree of persistence over time (Campbell & Pritchard,

1976; Kanfer, 1990). Motives thus have direction as well as strength (Solomon, 1992), and lead to goal-oriented behavior.

Applying this general mode of thought to leisure tourism, it suggests that leisure travelers have reasons for choosing specific journeys and activities. Without going into potential distinctions between wishes, needs, wants, preferences, and hopes, we conveniently view all the person's explanations of leisure travel as aspects of the more com-

prehensive concept of "motives." Conceptual differences are then lost, of course, which may well be needed in other contexts. According to Heckhausen (1989, p. 8), a motive is a lasting disposition within the individual, indicating some sort of stability over time. But our simple concept of motive does include Solomon's (1992) understanding that motives may have different directions and strength, and that such differences have behavioral consequences. According to Gnoth (1997), a distinction should be made between the two related but different constructs "motive" and "motivation," where motivation is viewed as more dependent on the situation than motives.

The concern of tourist motivation research, then, is *why* people travel during their vacations. Motivation to travel may be defined as the "set of needs which predispose a person to participate in a touristic activity" (Pizam, Neuman, & Reichel, 1979, p. 195). Tourist motivation is a growing research area, and may clearly deserve more attention (Fodness, 1994; Pearce, 1988; Ryan & Glendon, 1998). The "why" question of tourism has been presented as one of the most difficult within this research area (Crompton, 1979). Nevertheless, numerous researchers have sought to identify the motives of pleasure vacations (Beard & Ragheb, 1983; Cha, McCleary, & Uysal, 1995; Crompton, 1979; Dunn Ross & Iso-Ahola, 1989; Kleiven, 1998, 1999).

A journey starts with the individual recognition of needs, which can be influenced by various incidents (e.g., earlier experience, word of mouth from friends and relatives, and other types of communication). These drives are described as internal and external forces (Wilkie, 1994), and as push and pull factors (Dann, 1977). An internal drive is sociopsychological energy, while external forces comprise marketing stimuli and product attributes. In the present study, the focus is on the "push" factors. They are hypothesized as motives that reside in the twin concepts of "anomie" and "ego-enhancement" (Dann, 1977), which further correspond with Iso-Ahola's (1982) "escaping" and "seeking" motives among tourists.

Some researchers discuss *universal* lists of tourist motives for traveling (Crandall, 1980; Crompton, 1979; Tinsley, 1984). Crompton (1979) identified nine principal motivations for pleasure vacations:

escape from a perceived mundane environment, exploration and evaluation of self, relaxation, prestige, regression, enhancement of kinship relations, facilitation of social interaction, novelty, and education. Crandall (1980) recognized 17 categories of tourist motivation: enjoyment of nature/escape from civilization, escape from routine and responsibility, physical exercise, creativity, relaxation, social contact, meeting other people, heterosexual contact, family contact, recognition/status, social power, altruism, stimulus seeking, self-actualization, achievement/challenge/competition, killing time/avoiding boredom, and intellectual aestheticism.

Beard and Ragheb (1983) presented four subscales for measuring leisure motivation dimensions: Intellectual, Social, Mastery/Competence, and Stimulus Avoidance. The scales in the Beard and Ragheb study proved highly reliable, with alpha values above 0.90. This may be one of the reasons why several other projects have been based on the Beard and Ragheb study (Kleiven, 2000; Lounsbury & Hoopes, 1988; Sefton & Burton, 1990).

Within the last two decades, numerous empirical studies of the motives of *specific* tourist groups have been carried out. Gitelson and Kerstetter (1998) identified four benefits sought by North Carolina visitors: relaxation, excitement, social, and exploration. Cha et al. (1995) distinguished six motive factors among Japanese tourists: relaxation, knowledge, adventure, travel bragging, family, and sports. Bieger and Lasser (2002) revealed 10 different factors among Swiss pleasure travelers: nightlife, comfort, partner, family, nature, culture/sightseeing, liberty, body, sports, and sun. The 10 factors which were employed in a cluster analysis providing yielding four different motive based segments: compulsory travel, cultural/hedonism, family travel, and me(e/a)t (body and verbal communication) marketing. The segments in the Bieger and Lasser study show travel profile regarding background variables as well as choices related to the trip. These examples derived from various tourist studies show that while travel motives for different tourist groups overlap to some degree, certain distinctions are also present.

Kleiven's (1998, 1999, 2005) research on motive factors among Norwegian vacationists was based on several quantitative studies (Beard & Ragheb, 1983; Cha et al., 1995; Driver, Tinsley,

& Manfredi, 1991; Haukeland, 1993; Jamroz & Uysal, 1994; Schmidhauser, 1989; Tinsley, 1984). Through factor analyses, Kleiven identified eight motivational factors for Norwegian leisure and tourism: sun/warmth, family, friends, accomplishment, culture, nature, peace/quiet, and fitness.

Motive Stability

Crawford, Godbey, and Crouter (1986) pointed out that the use of surveys to map the recreation wishes and motives of the public raises the question of the stability of such preferences before and after a trip. Survey results are not likely to be useful to long-term planning if leisure motives or wishes are changing all the time. The authors also noted three different ways of analyzing stability: factor stability (using factor analysis), rank-order stability (using correlations), and mean stability (using *t*-test or ANOVA). Addressing the stability question in a survey of leisure preferences and activities in married couples, Crawford et al. were able to show that "preferences for specific leisure activities remain relatively stable across a two-year time span in terms of pattern or rank-order stability" (p. 112).

Lounsbury and Hoopes (1988) emphasized the rather general point that "One of the minimum essential characteristics of variables under study in any field is that they demonstrate some degree of stability over five years of time" (p. 118). This is highly relevant to tourism market research involving motives or preferences. Here, travel and leisure motives with some degree of stability are likely to contribute more to predictions of travel choice or behavior than motives that fluctuate from day to day.

In an interview study of adult Knoxville citizens, Lounsbury and Hoopes (1988) found quite high correlations across a 5-year interval for five leisure *activity* factors. Correlations for six leisure *motive* factors (achievement, supervise others, social, creative, physical, and mental activity) were more moderate, but clearly statistically significant. The authors concluded that both types of constructs were "generalizable over a five year period and appear to represent rather stable individual difference variables" (p. 132). The results from the Lounsbury and Hoopes study indicate stability among motives in general. The study was performed on

one sample, indicating that individual motives are a stable phenomenon when measured with a 5-year time gap. Previous studies, however, did not address *short-term variations* in travel motives. Even within a frame of long-range stability in a population, individual motives may well be influenced by travelers' experiences on the trip, as exemplified in the next subsection.

It should also be noted that previous findings do not necessarily hold for other scales, other populations, and different cultures. Wishing to study the role of motive in predicting travel choices, behavior, and satisfaction for Norwegian outbound vacationists, a replication was needed to ascertain the stability of motives in this specific context. Hence, the present study will have a Norwegian sample, focusing on travelers' motives before and after their trip abroad.

Nonetheless, the existing literature suggests that motives may be understood as relatively enduring personal attributes. Therefore, the hypothesis for our study is that travel motives will not be much different before and after the trip. However, alternate hypotheses are also feasible.

Alternate Hypotheses and the 1-Week/2-Month Difference

Another approach would be not to take stable travel motives for granted. Several different processes may be hypothesized to induce short-term motive change after travel. Actually, there may be reasons for expecting travel motives to *increase* after a trip, as well as reasons for expecting the opposite effect. It could be speculated that the closer measurement is to the ended trip, the stronger the influence of the vacation is, also with regard to expressing prepurchase motives. This shows the relevance of testing prepurchase motives following two *different* postpurchase intervals.

Firstly, if one sees travel motives as important to the trip chosen, a very satisfying experience may be reinforcing to such motives. Through a simple conditioning process, then, the positive travel experience may result in *higher* motive levels. Sun-and-warmth wishes, for example, may be associated with the pleasant outcome of the trip, and will grow even stronger as a consequence of the satisfying experiences. A clear prediction may be made

from this hypothesis: If travel motives have been satisfied, they will be *stronger* after the trip than before.

Secondly, still viewing the vacation trip as partially resulting from peoples' travel motives, one may also arrive at the opposite prediction. If you go somewhere to accomplish certain goals and the endeavor proves successful, the motive may well be satisfied. Following satisfaction, a *reduction* of motive strength would be expected. A specific prediction therefore follows this hypothesis: If travel motives have been satisfied, they will be *weaker* shortly after the trip than before.

To both hypotheses, a supplement may be offered. The travel experiences will have their maximal effect on motives right after the trip, followed by a gradual return to pretravel motive states. To be able to cover this possibility, posttravel surveys should be conducted not only right after the trip, but after some time as well. Accordingly, we decided to collect about half of the posttravel data immediately after the trip, and the other half about 2 months later.

Scales and Attenuation of Test–Retest Coefficients

Several researchers (Dann, 1995; Glendon, 1998; Iso-Ahola, 1982) have discussed the dimensionality of motivation, and gave advice on testing and selecting measures of tourist preferences and motives with care.

Scale development from scratch may be time consuming, however. Therefore, Kleiven's (1998, 1999, 2005) scales were used as a starting point for the present study. Also, his scales had been developed for the Norwegian context, and might provide some interesting comparability. Other ideas were also incorporated in our measurements, however. For a closer account of the items and scales chosen, see below under Methods.

Lounsbury and Hoopes (1988) discuss a relevant point concerning the fact that since only error-free measures with perfect reliability can produce perfect test–retest correlations, imperfect reliabilities will have an attenuating effect on correlations. Nunnally (1978) offers a formula for correcting this attenuation, however, utilizing the internal consistency coefficients (Cronbach alphas) of pre- and

posttest measures. Having observed less than perfect correlations between their test and retest scores, Lounsbury and Hoopes (1988) use the formula to estimate "true" stability coefficients, showing what the test–retest correlations would have been if better internal consistency had been obtained. A similar procedure may be needed for our study, if weak alpha values are found.

Research Issues

The study thus will address four research issues:

- Identify measurements for motive factors that are relevant to Norwegian outbound leisure tourism.
- Assess the stability of the factors, both in terms of: factor structure (using confirmatory factor analysis), rank-order stability (using correlations), and mean stability (using *t*-test or ANOVA).
- Correct test–retest coefficients for attenuation if motive scales have low internal consistency (alpha reliability).
- See if the stability is consistent across two different test–retest intervals (1-week or 2-month intervals).

Method

Design

A survey was selected as the research method, and only Norwegian outbound travelers participated in the study. The study employed a quasi-experimental design, with one within-subjects factor and one between-subjects factor.

Their trip was viewed as our experimental "treatment," and data for all subjects were collected both before and after the trip. This repeated-measure part of the design constitutes the within-subjects factor.

For the between-subjects factor, two different time intervals were used between the two measures. The posttravel data for some travelers were gathered only 1 week after their trip, while a 2-month interval between pretest and posttest was used for the remaining informants.

Subjects

The respondents were recruited from two cities in Northern Norway, including both genders as

well as people of different ages. A total of 260 subjects who expected to travel abroad for their summer holiday were asked to participate in the study, and were informed that a follow-up study would also be carried out after their tour. The respondents were asked to identify themselves by name or initials (they had an opportunity to stay anonymous) and remember the identification for the follow-up. The subjects were recruited among the following types of tourists: 1) Norwegian tourists traveling on a 1-week trip to Mallorca, Spain (May 2002), and 2) Norwegian tourists traveling abroad on different types of trips (e.g., by car, bus, flight, etc., with various time schedules, during the summer of 2003). In the charter tourist group, the "pretrip" questionnaires were handed out and collected at the airport just before departure, and the "posttrip" questionnaires were administered during the return flight for the 1-week-between group. Some of the charter tourists were followed up after about 7–8 weeks after arriving back home. Concerning the second tourist group, the questionnaires were handed out during May and June, and a follow up was made 1 week after (for those traveling on a 1-week vacation) and about 2 months after (for the rest).

Among the potential respondents 17 individuals did not participate in the pretrip survey, due to change in holiday plans or reluctance to participate in the survey. In addition, three persons could not be reached for the posttrip survey. The pretrip response rate was 93% (243 of 260) and the posttrip rate 92% (240 out of 260).

Measurement and Motive Scales

Travel motives were measured through 36 items, asking the respondent to indicate the importance of each item on a 5-point scale. Response categories ran from Not important (1) through Neutral (3) to Very important (5).

Most motive items were adapted from eight existing four-item summed scales (Kleiven, 1998, 1999): Sun/Warmth, Accomplishment, Family, Friends, Culture, Nature, Peace/Quiet, and Fitness. After consultations with representatives from the tourism industry, however, important alterations were made.

Eleven new items were introduced, as indicated

in Table 1. In the Sun/Warmth scale, the item "feel the heat of the sun" was replaced by "sunbathing." "Swim in clean water" and "get a tan" were replaced by two other "swim" items: "swim in the sea" and "swim in the pool." The item "play at the beach" was also added to this scale. In the Culture scale, "satisfying an interest in history" was replaced by "practicing your foreign language skills."

A Hedonism scale was also added, following suggestions given by Haukeland (1993). The six items for this scale were: to be romantic, experiencing the special atmosphere, have enough time to do whatever you like, travel around, travel to have fun, and travel to change lifestyle.

The Nature scale (Kleiven, 1998, 1999) was removed from the present study. The reason for that is that the Nature scale received rather low scores in the Kleiven study, and thus was expected not to be important to Norwegian outbound charter tourists. One item from this scale, "experiencing landscape and nature," was nevertheless retained, but moved to the Culture scale.

Preliminary analyses indicated that not all alterations were equally useful, however. Items not improving alpha values were dropped from further analyses, as indicated in Table 1. Table 3 will show the final set of scales and items that resulted from this reduction.

Results

For data analyses, the programs SPSS (Norusis, 1994) and Mplus (Muthén & Muthén, 1998) were used. Preliminary analyses indicated no interesting differences between data from the two waves of data collection. The complete data set, therefore, were used in our analyses. The mean importance for the single motives (pre- and posttest measures) is presented in the Table 2.

Scale Reliabilities

The scale reliabilities were assessed using Cronbach's alpha (Cronbach, 1951) and test-retest correlations, as shown in Table 3.

On the first seven scales, alpha values ranged from 0.73 to 0.90 on both pre- and posttest measures. This result indicates substantial internal consistency in the scales, and we view it as satis-

Table 1
Kleiven's Scales and Our Adjusted Scales for "Norwegian Outbound Tourism"

Kleiven's Scales	Adjusted Scales
Sun/warmth	Sun/swim
a) feel the heat of the sun	a) sunbathing ^a
b) enjoy the beach and swimming	b) swim in the sea ^a
c) get a tan	c) swim in a pool ^a
d) swim in clean water	d) play at the beach ^{a,b}
	e) enjoy the beach and swimming
Accomplishment	Accomplishment
a) learning something new	a) learning something new
b) developing personal interest/hobby	b) developing personal interest/hobby
c) showing your skills	c) showing your skills
d) using skill and knowledge	d) using skill and knowledge
Family	Family
a) having time for the family	a) having time for the family
b) keeping in touch with family living elsewhere	b) keeping in touch with family living elsewhere
c) being with children of my relatives	c) being with children of my relatives
d) see to it that the children have a pleasant vacation	d) see to it that the children have a pleasant vacation
Friends	Friends
a) keeping in touch with friends	a) keeping in touch with friends
b) getting to know new people	b) getting to know new people
c) eat and drink in good company	c) eat and drink in good company
d) not being lonely during the vacation	d) not being lonely during the vacation
Culture	Culture
a) experiencing art and culture	a) experiencing art and culture
b) seeing well-known places or sights	b) seeing well-known places or sights
c) getting to know other countries and cultures	c) getting to know other countries and cultures
d) satisfying an interest in history	d) practicing your foreign language skills ^a
	e) experiencing landscape and nature ^b
Nature	
a) experience landscape and nature	
b) feeling you belong in nature	
c) experience the silence of nature	
d) see and experience Norway	
Peace/quiet	Peace/quiet
a) getting away from push and stress	a) getting away from push and stress
b) getting away from noise and pollution	b) getting away from noise and pollution
c) recovering strength	c) recovering strength
d) avoid the push and stress of traveling	d) avoid the push and stress of traveling
Fitness	Fitness
a) getting a workout	a) getting a workout
b) working out, really tiring your body	b) working out, really tiring your body
c) taking care of your health	c) taking care of your health
d) getting in shape	d) getting in shape
	Hedonism
	a) to be romantic ^{a,b}
	b) experiencing the special atmosphere at the destination ^{a,b}
	c) have enough time to do whatever you like ^{a,b}
	d) travel around ^{a,b}
	e) travel to have fun ^{a,b}
	f) travel to change lifestyle ^{a,b}

^aThese items were included after consultations with the cooperating travel company.

^bThese items were left out of the final analyses due to low alpha values.

Table 2
Prepurchase Motives in Prepurchase and Postpurchase Situations

Motives	Prepurchase		Postpurchase	
	Mean	SD	Mean	SD
Sun/swim				
a) sunbathing ^a	3.52	1.20	3.47	1.22
b) swim in the sea ^a	3.48	1.26	3.34	1.23
c) swim in a pool ^a	3.01	1.32	3.10	1.33
d) play at the beach ^{ab}	3.26	1.47	3.26	1.33
e) enjoy the beach and swimming	3.55	1.27	3.40	1.30
Accomplishment				
a) Learning something new	2.18	1.07	3.45	1.05
b) Developing personal interest/hobby	3.02	1.15	2.96	1.19
c) Showing your skills	2.56	0.96	2.25	1.10
d) Using skill and knowledge	3.61	1.12	2.49	1.09
Family				
a) having time for the family	3.93	1.27	3.69	1.33
b) keeping in touch with family living elsewhere	2.73	1.41	2.83	1.31
c) being with children of my relatives	3.55	1.40	3.54	1.28
d) see to it that the children have a pleasant vacation	3.50	1.61	3.50	1.54
Friends				
a) keeping in touch with friends	3.16	1.38	3.11	1.32
b) getting to know new people	3.18	1.13	3.28	1.15
c) eat and drink in good company	3.86	0.96	3.81	1.04
d) not being lonely during the vacation	3.71	1.10	3.71	1.15
Culture				
a) experiencing art and culture	3.16	1.24	3.06	1.22
b) seeing well-known places or sights	3.13	1.18	3.15	1.21
c) getting to know other countries and cultures	3.50	1.10	3.46	1.13
d) practicing your foreign language skills ^a	3.80	1.02	3.76	1.08
e) experiencing landscape and nature ^b	3.91	0.85	3.89	0.87
Peace/quiet				
a) getting away from push and stress	4.08	0.99	4.15	0.97
b) getting away from noise and pollution	3.45	1.18	3.51	1.14
c) recovering strength	4.19	0.88	4.15	0.91
d) avoid the push and stress of traveling	3.65	1.17	3.64	1.04
Fitness				
a) getting a workout	2.97	1.10	2.89	1.16
b) working out, really tiring your body	2.35	1.07	2.37	1.14
c) taking care of your health	3.351	1.09	3.36	1.16
d) getting in shape	2.89	1.13	2.87	1.20
Hedonism				
a) to be romantic ^{ab}	3.44	1.20	3.35	1.24
b) experiencing the special atmosphere at the destination ^{ab}	4.04	0.78	3.94	0.88
c) have enough time to do whatever you like ^{ab}	4.28	0.82	4.30	0.73
d) travel around ^{ab}	3.15	1.12	3.31	1.16
e) travel to have fun ^{ab}	3.48	1.02	3.58	1.04
f) travel to change lifestyle ^{ab}	2.38	1.08	2.57	1.23

^aThese items were included after consultations with the cooperating travel company.

^bThese items were left out of the final analyses due to low alpha values.

factory for our four-item summed scales (Pedhazur & Schmelkin, 1991).

The last scale, does not, however, appear to measure Hedonism in a consistent manner. With pre- and posttest alphas of 0.46 and 0.52, respectively, it fails to meet accepted standards of internal consistency (Murphy & Davidshofer, 1994).

Scale reliability was also assessed through test-retest correlations, and in the last column of Table 1 we see values ranging from 0.83 to 0.95 for all scales. According to this statistic, therefore, Hedonism also has an acceptable reliability. In view of its low alpha values, however, the Hedonism scale was dropped from further analyses.

Table 3
Reliability Measures of Eight Motive Scales

Scale	Alpha Value Pretest	Alpha Value Posttest	Test–Retest Correlation
Sun/warmth	0.87	0.81	0.93
Accomplishment	0.79	0.83	0.86
Family	0.84	0.80	0.95
Friends	0.77	0.73	0.92
Culture	0.82	0.85	0.95
Peace/quiet	0.75	0.81	0.90
Fitness	0.87	0.90	0.87
Hedonism	0.46	0.52	0.83

Scale Intercorrelations

As shown in Table 4, the patterns of factor correlations from pre- and posttravel data (above and below the diagonal) are quite similar.

Confirmatory Factor Analyses

Another way of assessing the quality of the scales is to use confirmatory factor analysis. For each scale, we then assume a simple factor model with one latent and four manifest variables. The results of confirmatory factor analyses of the pre- and posttest data from the seven motive dimensions are shown in Table 5.

Judging by the chi-square statistic, the expected factor structure is only partially confirmed. A satisfactory fit is obtained only on four scales of the pretest and three in the posttest measurements, as indicated by bold type in the table. For about half of the scales, therefore, the model is a good approximation to the actual covariances in the data set.

As for the remaining half, it may be noted that

most *p*-values are far from hopeless. Furthermore, if two of the error terms within each of these scales are allowed to correlate, very convincing fits are achieved. Seen as a whole, therefore, the single-scale confirmatory factor analyses do lend some support to our measurement factors.

Unfortunately, it was not possible to combine the seven single-scale models into a common seven-scale model. This extensive model (329 free parameters) simply overtaxes our limited sample (227), and a stable “Maximum Likelihood” solution could not be obtained. Bentler (1995) suggests that the ratio of sample size to number of free parameters should be at least 1:10. With our material, this was not possible.

Means and Mean Differences

To assess the effects of the within-subjects and the between-subjects factors of the design, a mixed-design ANOVA was carried out. A second within-subjects factor was added in the analysis, by using the seven remaining motive scales as repeated measures. Results are shown in Table 6.

First, there is a significant Retest effect. Summing data from all seven scales into pretest and posttest grand means, the two conditions prove to be different. Secondly, there is a significant Scales effect, indicating that the seven scales yield different mean scores. Neither the Interval factor nor the four interaction effects nor the Internal factors were statistically significant.

The difference between pretest and posttest means was also analyzed for each scale separately, using “paired samples” *t*-test. Only for one scale—Friends—was the posttravel mean significantly

Table 4
Scale Intercorrelations

	1	2	3	4	5	6	7
1. Sun/warmth		0.41	0.30	-0.05	-0.21	0.34	0.12
2. Family	0.35		0.21	0.03	-0.14	0.30	-0.10
3. Friends	0.32	0.28		0.26	-0.06	-0.34	0.12
4. Accomplishment	-0.07	0.02	0.25		0.54	0.22	0.28
5. Culture	-0.25	-0.19	-0.06	0.52		-0.13	0.25
6. Peace/quiet	0.31	0.26	0.30	0.12	-0.08		0.24
7. Fitness	0.18	-0.12	0.14	0.29	0.25	0.29	

Pretravel figures above the diagonal, posttravel below the diagonal.

Table 5
Chi-Square Values From CFA of Seven Motive Scales

Scales	Pretest			Posttest		
	Chi-Square	df	p	Chi-Square	df	p
Sun/warmth	5.304	2	0.0691	15.913	2	0.0003
Accomplishment	3.683	2	0.1560	20.478	2	0.0000
Family	2.171	2	0.3342	5.418	2	0.0653
Friends	8.460	2	0.0142	0.137	2	0.9359
Culture	6.920	2	0.0307	1.584	2	0.4495
Peace/quiet	4.834	2	0.0875	13.855	2	0.0010
Fitness	12.704	2	0.0017	7.947	2	0.0184

higher than the pretravel one. However, the *direction* of the pre/post difference was the same for all scales.

Figure 1 may help to interpret the mean differences of the Retest and the Scales factors. For easy reference, the means of a nationally representative sample (Kleiven, 2000) is also included in the graph.

Obviously, the pre- and posttest scale means are rather similar. Summed across all seven scales, however, the posttest mean (3.31) is slightly lower than the pretest mean (3.35), resulting in a significant pre-/posttest mean difference.

Differences between the scales are larger, as would be expected from the larger *F*-value of that factor. The means of the Sun/Warmth, Friends, and Peace/Quite scales are higher than, for example, the means of Accomplishment or Fitness.

It may perhaps also be noted that while the

mean scores of Sun/Warmth, Culture, and Peace/ Quiet are *higher* than those of the national sample, the mean scores of the remaining scales are *lower*.

Summary

The responses to the four research issues of this study are:

- Seven motive factors were measured in an internally consistent manner: sun/swim, family, friends, accomplishment, culture, peace/quiet, and fitness. Some scales were highly correlated.
- These motive factors were stable across a 2 month period, both in terms of: rank-order stability (using correlations) and mean stability (using *t*-test or ANOVA).
- Test–retest coefficients were high, indicating no need for correction for attenuation.

Table 6
ANOVA of Pretest/Posttest, Scale, and Interval Length Differences

Source	Sums of Squares	df	Mean Square	F	Sig.
Within-subjects effects					
Retest	1.253	1	1.253	12.719	0.00
Retest*interval	0.242	1	0.242	2.456	0.12
Error (retest)	23.345	237	0.099		
Scales	430.649	6	71.775	45.237	0.00
Scales*interval	4.222	6	0.704	0.443	0.85
Error (scales)	2256.205	1422	1.587		
Retest*scales	0.305	6	0.051	0.579	0.75
Retest*scales*interval	0.544	6	0.091	1.032	0.40
Error (retest*scales)	124.874	1422	0.088		
Between-subjects effects					
Intercept	36606.856	1	36606.856	9741.639	0.00
Interval	4.204	1	4.204	1.119	0.29
Error	890.592	237	3.758		

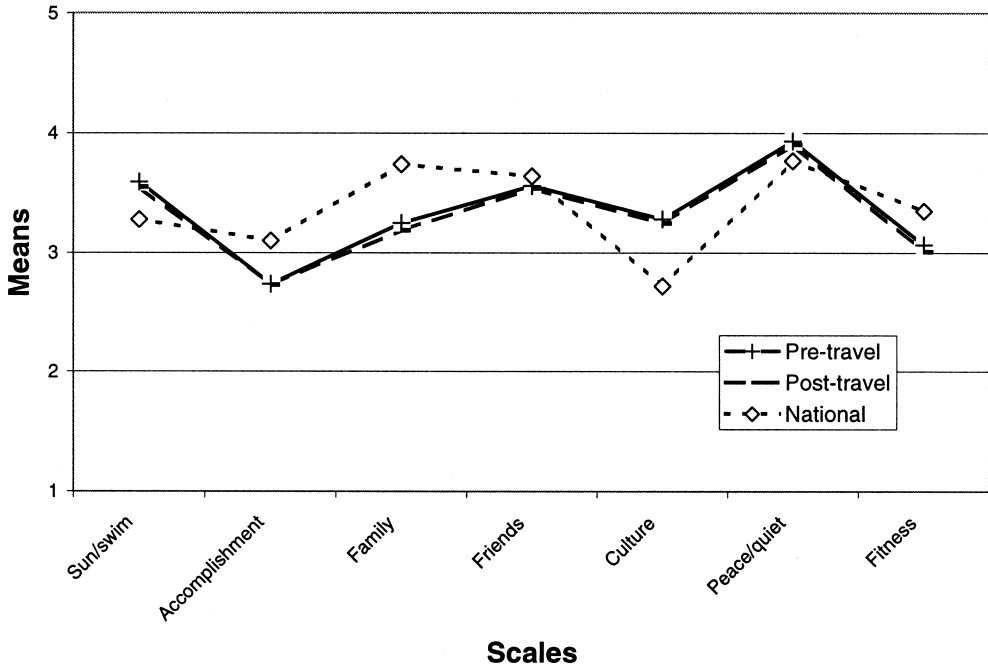


Figure 1. Mean pre- and posttest scores of the seven scales.

- It did not matter if the second set of data was collected after 1 week or after 2 months: motive measurements obtained before a trip abroad were very similar to both types of posttrip measurements.

Discussion

Measurements

The present study's attempt to replicate and improve the eight existing scales of Norwegian leisure and tourism (Kleiven, 1998, 1999, 2005) may be viewed as moderately successful. Following hints from a cooperating travel company focusing on outbound tourism, some items were added and others deleted from the original scales. Although not all substitutions were equally successful, the adjusted travel motive scales appear to work rather well. Out of the eight scales of the study, seven had a satisfactory internal consistency, as judged by Cronbach's alpha. The high reliabilities were also confirmed in the posttravel part of the study.

Only one scale, Hedonism, was dropped because of insufficient alpha levels.

There are, however, rather high correlations between some of the scales, consistent with previous research on similar scales. This brings up the question of divergent validity: Do the seven scales in fact measure seven different things? The high intercorrelations may suggest that a smaller number of scales could be sufficient, or that models with higher-order factors should be explored. And, of course, a combined model with seven uncorrelated scales will hardly be adequate. It is not possible, however, to explore such combined models with our limited sample. For the time being, therefore, we have no "better guess," than the seven-scale model.

Nevertheless, with confirmatory factor analysis, we did find some support for the single-scale factor models. About half of the 14 (7×2) scale models tested were clearly consistent with the covariances in the data, while a good fit for the remaining half was found after allowing within-scale

pairs of correlated error terms. We view these results as adequate for our purposes.

All in all, then, we believe that our seven motive measures are adequate. The alpha scores and the single-factor confirmatory factor analyses both clearly indicate that each measure is internally consistent. The question of divergent validity should be kept in mind, however.

Test-Retest Reliability, Attenuation, and Factor Stability

Convincing evidence for factor stability was found in the correlations between the pretravel and the posttravel motive measurements. For the seven scales kept for our final analyses, all test-retest correlations were in the range of 0.85–0.95. We see this as indicating a test-retest reliability that is clearly satisfactory.

With reliability figures in this range, we see no need to correct for attenuation the way Lounsbury and Hoopes (1988) did. As Nunnally and Bernstein (1994) point out, “increasing reliabilities much beyond .80 in basic research is often wasteful of time and money. Measurement error attenuates correlations very little at that level” (p. 265).

Also when considering the scale means, we believe that factor stability is confirmed. Although the general posttravel motive level was slightly lower (3.31 vs. 3.35 on a 5-point scale) than the pretravel level, we view these numbers as very similar. Within the 1–5 range, the 0.04 difference amounts to only 1/80 of the full scale. However, statistically significant in the powerful “repeated measurement” analysis, the difference obviously is very small in absolute terms. It should also be borne in mind that when seen separately, only one of the seven scales had a statistically significant pre/post difference.

As shown both in Table 5 and Figure 1, the differences *between the seven scales* are much larger than the differences *within the scales* “before/after.” If one views the interscale differences as a relevant “yardstick” for which differences in the data may deserve attention, pre/post differences simply are very small. All in all, therefore, we tend not to attach much importance to the observed across-scales difference between pre- and posttravel measures.

To sum up, then, high test-retest correlations and small differences in scale means both indicate high factor stability in our seven travel motive factors.

Motive Decrease and the Two Time Intervals

Even though small, the pre/post motive difference is nevertheless consistent with the alternate hypothesis that a partial reduction of motive strength would be expected after a satisfying vacation.

The effect is not limited to the time right after the trip, however, the small difference also persists after 2 months. Our data do not indicate any difference between the two different test/retest intervals; the analysis of variance shows no effect of the “Interval” factor. Interaction effects involving the “Interval” factor also were not significant. While the results perhaps lend some support to the motive reduction hypothesis, it does not support the notion of a diminishing effect.

Our present data also diverge from the alternate hypothesis in other ways. If the strength of motives is reduced by the trip, we find it difficult to see why the Friends scale proves to be the best example of this. More importantly, however, the magnitude of the pre/post difference should be sobering.

We tend to conclude, therefore, by viewing the motives measured in the study as relatively lasting and stable phenomena, consistent with the results of previous studies. People’s set of travel motives simply changes very little from before to after a vacation trip abroad.

This is encouraging to both researchers and practitioners, because stable travel motives is a necessary condition for the use of motives in travel behavior prediction models. As pointed out by Crawford et al. (1986) and Lounsbury and Hoopes (1988), changing phenomena are not likely to be useful in this context.

It should be equally clear, however, that stable motives is by no means a *sufficient* condition for adequate travel behavior models. Other factors (e.g., money, health, competence, practical opportunities) undoubtedly also play a part here, perhaps exerting even more influence on actual travel behavior. To properly assess the role of travel motives, therefore, further research, including additional central influences, is needed.

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