Market Segmentation by Motivation: The Case of Switzerland

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LONG VERSION

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ABSTRACT

This contribution is about the segmentation of mature travel markets, as exemplified by Switzerland. Based on an extensive and representative travel survey covering 2,000 households and more than 11,000 trips, a situational, motivation-based travel market segmentation is proposed.

The clustering of motivations proves to be a valuable means to segment markets. The results reveal a diminishing role of socio-demographic segment descriptors. It is more the (anticipated) travel profile and the attraction of a certain destination which determines Swiss travel behavior.

Key Words: Market segmentation, motivation, Swiss travel market

INTRODUCTION: THE SWISS TRAVEL MARKET

In the past 20 years, Switzerland has experienced a remarkable growth in travel. The total number of private leisure trips taken is currently estimated at 14.2 million. However, not only foreign countries have been profiting from this boom: Switzerland has retained a stable market share of around 45% among Swiss tourists for the past few years (Schmidhauser 1996; Bieger and Laesser 1999).

A recent survey and analysis of the travel behavior of Switzerland's population has shown that the number of people traveling (net travel intensity) is still slightly increasing. The number of trips taken per person participating in leisure travel is beginning to stagnate though after a steady increase during the past few years (Bieger and Laesser 1999). In addition, the duration of trips has been constantly decreasing in the last quarter of a century. Both shortening of trips and decrease in travel intensity by persons actually participating in leisure travel are assumed to be related to significant time constraints in certain segments of the traveling public. Since the total number of days spent on international travel is stagnating, it is assumed that Switzerland's travel market is entering a stage of maturity.

PURPOSE OF THE STUDY

The segmentation of markets has become a valuable instrument in planning appropriate marketing strategies. Market segmentation by the grouping of customers with homogeneous needs and motivations helps to define quality perception, since it is necessary to align quality delivered to anticipated quality (Berry, Parasuraman and Zeithaml 1991).

In Switzerland there have been only descriptive delineations of market segments, shifting from a socio-demographic either toward travel motivations and/or a psycho-demographics approach (Bieger 1996). For the first time, the whole of the Swiss travel market (outbound) has been statistically segmented according travel motivations, thus suggesting the use of a situational approach already used in other areas of consumer research (Hill and Rieser 1993; Romeiss-Stracke 1995; Kotler 1997) and, in preliminary stages, in other tourist markets (Mazanec 1992).

The situational approach does not focus on the person as the center of interest but on the travel situation. A person is only one part of a given travel situation and is described in terms of socio-demographic, motivational, etc. factors. The other equivalent part is the trip itself e.g. choice of destination, duration, choice of accommodation, etc.

Switzerland thus proves to be a market that is not only interesting as a national case but also as a market paratype with regard to its degree of maturity. It also is one of the world's countries with the highest per capita international travel activity (WTO).

The purpose of this study is to delineate the motivations Swiss pleasure travelers have for traveling domestically and abroad, using a cluster market segmentation approach. It is hoped that this study will provide tourism marketers with insights into the travel behavior of people living in Switzerland, and help them to plan appropriate marketing strategies for this market. For researchers, the study is meant to contribute to the discussion of appropriate market segmentation criteria and the use of multivariate statistical methods for marketing research.

LITERATURE REVIEW

Travel Market Segmentation in General

Travel market segmentation can be achieved in various ways. In the tourist industry, most producers will often have no practical choice but to deal with certain segments, mainly because of the location and nature of their business (Middleton 1994). Their possibilities of adopting the product are limited. Segmentation criteria can be criteria such as purpose of travel, buyer needs, user characteristics, demographic, economic or geographic characteristics, psychographic characteristics, price, etc. (Middleton 1994, Bieger 1998). According to the contributions of Kotler (1997) or Chisnall (1985), it is necessary to focus on segments being discrete (clearly identifiable) and measurable (based on available market research data). From an implementation point of view, segments must further be viable (the potential revenue being higher than the costs of the segment marketing mix) and appropriate (segments have to be compatible with the overall position of the service producer).

Travel Market Segmentation by Motivation

One of the earliest studies on what motivates people to travel was published by Lundberg in 1971. He has developed a bundle of eighteen motivations assumed to influence travel. Crompton (1980) later identified nine motives on the basis of a number of in-depth-interviews, seven of which were classified as "socio-psychological", two as "cultural". Crompton's results have been substantiated by other studies (Crandall 1980; Rubenstein 1980).

According to Schewe (1990) and the above-mentioned authors, segmenting travelers on the basis of motivations with emphasis on various items is one of the most effective methods.

A Priori vs. Posteriori Segmentation

In today's tourism literature, a very large number of studies can be found that use different descriptors and discriminating variables to segment a market, including attributes for vacation (Crask 1981), benefits sought by travelers (Gitelston and Kerstetter 1990; Loker and Perdue 1992), personal value systems (Madrigal and Kahle 1994) or product bundles (Oh, Uysal and Weaver 1995).

Some of these studies have used *a priori* segmentation approaches, mainly because the segments were already known. Others have made use of *a posteriori* segmentation strategies, mainly identifying the sizes and number of visitor segments that were previously unknown, using factor-cluster statistical analysis. While *a priori* segmentation is based on the discretionary selection of variables, the *a posteriori* segmentation can be based entirely on empirically delineated segments; the outcome is therefore much more in-depth (Mazanec 1992; Smith, 1995; Formica and Uysal 1998).

Examples of the *a posteriori* approach can be found in Cha, McCleary and Uysal (1995, determining the motivations influencing Japanese tourism travelers to a select (certain) destination) or Formica and Uysal (1998, examining the behavioral characteristics of individuals attending the Spoleto Festival in Italy).

Push vs. Pull Demand Stimulation

Furthermore, it is important to differentiate between a push and pull demand stimulation (Cha, McKleary and Uysal 1995). The idea behind this dimensional approach lies in the assumption of people being pushed by their own internal forces and pulled by the external forces of the destination attributes (Gitelson and Kerstetter 1990, Yuan and McDonald 1990; Shoemaker 1989). Yuan and McDonald (1990) found that individuals from each of four countries (France, West Germany, U.K., Japan) traveled to satisfy the more or less same unmet needs; those needs could be characterized as push factors. However, the study also revealed that the pull factors (motivations to visit a particular destination) appeared to differ among the countries (the individuals expressed different levels of importance for the various factors among the countries). In their 1994 study, Jamzroy and Uysal further found that German overseas travelers displayed significant variations in push-motivations (differing from traveling alone or in groups as opposed to traveling as families, couples and tour groups), a result which will be partially confirmed in the study presented here.

For the research presented here, market segmentation by push motivation factors (measured by consumer surveys) at this point seemed to be an acceptable approach. Since marketing segments also seemed to be increasingly determined by situational motivations rather than by belonging to a certain socio-demographic or lifestyle group (Popcorn, 1996; Poon 1998), it was also reasonable to implement a situational approach.

METHOD

Data Collection

The study is based on data from the most recent "Swiss Travel Market". It consists of data collected on the leisure travel behavior of people living in Switzerland, conducted by the Institute for Public Services and Tourism at the University of St. Gallen. This project involved the collaboration and partnership of Switzerland Tourism, the Swiss Hotel Association, Touristik Union International (TUI), numerous national tourist representations in Switzerland, among others. This survey has been conducted every 2-3 years for the past 25 years. A continuation of the project on the same system of time intervals is planned.

The latest data collection took place in January and February 1999 on the travel behavior of 1998. All leisure trips with 1 or more overnight stays were covered. The research tool was a self-administered (written) interview on the basis of a structured questionnaire, conducted in 1,970 households. 95% of the sample was based on the "consumer jury" – a representative panel by the IHA.GfM (a market research institute in Switzerland). It covered the German- and French-speaking population of Switzerland. Another 5% of the sample was based on an ad-hoc sample. Originally, 2,578 households were contacted; 1,970 (76.4%) returned the questionnaire.

The goal of the data collection was to produce an actual and overall database on the travel behavior of Swiss and assimilated foreign citizens in Switzerland. Therefore, not only the "heads" of households, but all their members participated in the research project.

The data collected covered dimensions and criteria such as: destination, number of participants on the trip (household and other), duration of trip, day and month of departure, reason for travel, travel motives, sources of information, travel organization, point and time of sale of different components, means of transportation and accommodation, activities (sports and non-sports), outlay, etc. Besides that, each travel-related answer was connected with household structure and socio-demographic data, covering factors such as: number of persons in household, sex, date of birth, citizenship, education, profession, reasons for not traveling (filter), housing-situation, etc.

The study provides a representative database on the travel behavior of 95% of Swiss people (5.53 million) and 50% of foreign citizens (0.64 million). The major results and overriding findings were published in a short report (Bieger and Laesser 1999), and additionally in the Swiss market analysis by Switzerland Tourism and in journals for practitioners.

Selection of Travel Motivation Factors

Questions were raised concerning the following motivation factors (in parentheses: abbreviations):

- Participating in nightlife (Nightlife)
- Enjoying comfort, spoiling myself (Comfort)

- Taking and having time for my partner (Partner)
- Taking and having time for my family (Family)
- Enjoying landscape and nature (Nature)
- Broadening my mind, enjoying sightseeing (Culture)
- Being able to make flexible and spontaneous decisions (Liberty)
- Doing something for my looks and well-being (Body)
- Sports activities (Sports)
- Enjoying the sun and water (Sun)

The selection presented here is the result of cooperative theoretical and practical work between the authors and the collaborating partners. Although supported by Swiss literature sources (Kaspar 1996; Krippendorf 1996), it is more or less preconceived and based on three limiting facts:

- First, one goal was to find a setting which was free of redundant and generic motivation factors (which represent general vacation motives rather than the traveling motives of specific target groups).
- Second, the motivation factors examined needed to be similar or almost similar to those in other research investigations of the collaborating partners (with regard to research economics).
- Third: for reasons of convenience toward the persons interviewed, it was decided not to extend further the already very extensive questionnaire by a long list of possible yet perhaps irrelevant motivation items.

Table 1: Motivation Factors in the Swiss travel market (Share of Trips)

Insert Table 1 here

Source: Bieger and Laesser (1999)

Even if the selection is preconceived, the possibility of the study being flawed is rather small, for three reasons:

- TUI, in particular, have worked for quite some time with a majority of the factors of the selection presented here; their experience in targeting specific groups of travel by means of cluster-analysis on that basis has always been positive.
- A factor analysis to reduce this selection of items to factors was neither possible nor taken into consideration when designing the questionnaire (for cluster analysis without the need of a factor analysis to reduce the number of motives, see Formica and Uysal 1998; Cha, McCleary and Uysal 1995; Shoemaker 1994).
- The motivation factors finally used were validated by the ones mainly developed for the Swiss market in research and literature (Müller 1993, Schmidhauser 1996, Kaspar 1996, Krippendorf 1996, Forschungsgemeinschaft Urlaub und Reisen 1997).

The respondents were asked to classify the importance of each motive on a Likert scale from 1 (unimportant) to 2 (rather unimportant), 3 (rather important), 4 (very important) in the context of their travel decisions. The outcome is a set of 10 nominally classified motivation factors (of which the frequencies are presented in Table 1).

Process of Analysis

For the data analysis, a procedure recommended by Punj and Stewart (1983) was applied, not only because the authors offer experiences from more than a dozen research-projects in marketing (mainly U.S.) but also because that procedure has been used in several other similar research projects (Lanz 1999). Furthermore, results of research by Brogini (1998), and Backhaus et al. (1996), were considered when designing the process of research.

The data analysis for this study consisted of three stages (Table 2).

Table 2: Steps involved in the analysis

Insert Table 2 here

As a first step (a), a cluster analysis was performed on 10% of the 11,600 cases (trips) to determine the number of homogeneous groups formed by the data. This analysis employed an agglomerative hierarchical technique. To order the objects, Ward's algorithm was used; the squared Euclidean distance served as the measure of proximity (SPSS 1998). Quick Cluster (k-Means Cluster), an algorithm using the nearest centroid sorting method of clustering, was used to form groups from the entire sample using individual responses on the basis of motivations. Quick cluster is normally used with large samples and may be used after the number of clusters has been determined (Aldenderfer and Blashfield 1984; Jahnke 1988; Kaufman and Rousseeuw 1990).

Second (b), differences among groups in terms of motivations associated with each group were identified by using SPSS multiple discriminant analysis (MDA). A multiple discriminant analysis with clusters as the dependent variable was performed to define cluster membership and characteristics.

Third (c), cross tabulations with chi-square were employed to profile the clusters demographically and with regard to their travel behavior.

RESULTS

Cluster Analysis

A cluster analysis was employed to identify groups of respondents based on a similar motivation structure. An examination of the dendograms suggested that a 4-cluster-solution would be the most appropriate.

The means for each of the ten motivation factors for the members of each cluster were calculated, thus forming a motivational structure represented by 4 clusters (Table 3). The summarized information of the descriptive statistics revealed the importance of all factors for leisure travel for members of each cluster. Further, the results of a Tamhane T2 test indicated that statistically significant differences in terms of all ten motivation factors were found among the four clusters (the advantage of using Tamhane's T2 is that the variances within groups do not need to be of a similar size; SPSS 1998).

Table 3: Motivation Factor Means among Clusters

Insert Table 3 here

Table 3 indicates further that

- Nature (enjoying landscape and nature),
- Partner (taking and having time for my partner) and
- Family (taking and having time for my partner)

are among the strongest motivation factors in all four clusters.

The highest ratings of motivation factors relative to each cluster are as follows (share of trips taken):

- Cluster 1: none (16.8%)
- Cluster 2: Culture, Nightlife (21.7%)
- Cluster 3: Family (28.7%)
- Cluster 4: Partner, Nature, Liberty, Sun, Comfort, Sports, Body (32.8%)

The lowest ratings for the factors (least motivations) relative to each cluster are as follows (share of trips taken):

- Cluster 1: Body, Sun, Liberty, Culture, Partner, Comfort, Sports, Nature (16.8%)
- Cluster 2: Family (21.7%)
- Cluster 3: Nightlife (28.7%)
- Cluster 4: none (32.8%)

The F-Ratios, as determined through an interpretation of the MDA-Printout (Table 4) indicate that all motivation factors were significant in discriminating between the groups. However, the variables which differentiated the clusters most were "Family", "Partner", "Sun"; the variables which were the least useful were "Nightlife", "Sports", "Comfort".

Table 4: Tests of Equality of Group Means

Insert Table 4 here

Discriminant Analysis**Table 5: Multiple Discriminant Analysis of Motivations to Travel**

Insert Table 5 here

Three discriminant functions were generated using MDA (Table 6). Function 1 with an eigenvalue of 3.309 explained 65.2%, function 2 with an eigenvalue of 1.437 another 28.3% of the variation. Function 3 with an eigenvalue of 0.329 explained 6.5% of the remaining variation. The classification matrix revealed that 94% of the cases were classified correctly (the value for cross-validated group cases amounts to 93.8%).

Table 7 shows pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions. The variables are classified by absolute size of correlation within function.

Table 6: Functions at Group Centroids

Insert Table 6 here

Table 7: Structure Matrix

Insert Table 7 here

Chi-Square Tests: Segment Demographics and Travel Behavior

A number of cross-tabulation calculations were performed to provide not only a demographic profile of each of the clusters (Table 8) but also to delineate findings on their travel behavior (Table 10). The chi-square statistic was utilized to determine whether distribution differences were significant or due to chance variations. The results of the analysis revealed that all profile variables differed significantly between the clusters.

Although there are determining interrelations between a respondent's profile variables and the affinity of that traveler with a specific cluster, the importance/ relevance of that interrelation needs to be differentiated. This was achieved on the basis of calculating symmetric (phi) and directional measures (lambda) (see Table 9 for the demographic profile and Table 11 for the travel profile).

This procedure revealed that from the socio-demographic point of view only "age" and "size of the household" were of any significant relevance (according to Backhaus et al. 1996, Phi needs to be .3 or above to signal any real and not merely statistical relevance of a given

interrelation). As expected, the lambdas for "Variable dependent" revealed lower values than those for the cluster dependent.

Table 8: Demographic Profile of the Four Clusters of Swiss Travelers (in %)

Insert Table 8 here

Table 9: Symmetric and Directional Measures of Demographic Profile Variables

Insert Table 9 here

The determining character of the travel profile variables turned out to be stronger. All variables proved to be significantly relevant (Table 11). Surprisingly it is the cluster (representing a motivational structure) which depends on travel profile variables (rather than vice versa, as one would expect). The following aspects play a key role:

- The offers of the destination significantly influence a given motivational structure.
- The number of participating persons (household and/ or other) turns out to be a determining factor.
- It is the type of trip taken which influences the motivational structure and not – as one would expect - the other way around.

The interpretation of the above results leads to the general assumption that travelers from Switzerland form their motivational structure on the basis of a specific travel profile rather than making autonomous decisions and then structuring their trips. Generally, they would like somebody or something to tell them what they want to do.

Table 10: Travel Profile of the Four Clusters of Swiss Travelers (in %)

Insert Table 10 here

Table 11: Symmetric and Directional Measures of Travel Profile Variables

Insert Table 11 here

DISCUSSION AND INTERPRETATION

The results of the analysis reveal a split between cluster 1 and clusters 2-4.

Cluster 1: Compulsory Travel

Traveling for "leisure" reasons can be as demotivating as traveling for regular business reasons. 17% of all travel situations (Cluster 1) seem to be determined rather by non-voluntary factors. Possible obligations can be indirectly derived from the highest cluster-specific values of a number of factors such as "Family" (in combination with "Nature" and "Sports") with regard to the level of motivations or "Visiting Friends and Relatives" regarding the level of the type of trip taken. That travel situation is typified by the relative highest share of persons younger than 36 and traveling alone. Major destinations are Switzerland, Germany, France and North-Western Europe. The trips are relatively short, averaging 1-2 nights.

Cluster 2: Cultural Hedonism

The travel situation of cluster 2 can be characterized as a hedonistic one. In almost 22% of all observable travel situations, people aim at combining nature and culture, going away for 2-7 nights. They want to enjoy comfort together with their partner. Consequently, that cluster has the relative highest share of two persons being in a travel group. They come from one or two-person households in more than 60% of all cases, are highly educated (highest relative value of Bachelor' and Masters' degrees) and have a comparatively high income (based on rather privileged job profiles). The choice of destinations includes all of Switzerland's neighboring countries, Northern Europe and all long-haul destinations. Last but not least, 50% of travelers in that group are older than 45.

Cluster 3: Family Travel

In Cluster 3, family definitely matters. In almost 29% of all observable travel situations, spending time with one's partner and children is of central importance (more than 30% of people in that travel situation are younger than 15; more than 60% of all travel groups are larger than 2 persons). The key type of travel is "Visiting friends and relatives". The major destination of that cluster is Switzerland (64% of all trips). Again (like in Cluster 1), trips are comparatively short.

Cluster 4: Me(e/a)t Marketing

In Cluster 4 (33% of all observable travel situations), all motivation factors seem to matter very much (including family, partner, etc.). The socio-demographic profile of this cluster differs only slightly (and not statistically) from cluster 3. The main distinction can be observed in the travel profile. In contrast to most situations of cluster 3, in which the trip ends somewhere in the mountains or by a lake in Switzerland and includes visiting friends and relatives,

the destinations chosen in this cluster are mostly situated by an ocean and therefore outside Switzerland. Not surprisingly, the duration of that kind of trip is usually more than 7 nights. There is another important distinguishing factor: The prominent position of the motivation factor "Liberty" in is a possible indication of the long assumed need for "soft individualism" and demand for multiple options in a destination: people want to spend time with their closest social group while having the option of withdrawing for certain moments to follow their individual interests at the same time and in the same location.

Family Travel vs. Liberty/ Hedonism/ Culture/ Nature Travel

Me(e/a)t Marketers resemble Cultural hedonists in many ways, which leads to another separation.

- Cultural Hedonism and Me(e/a)t Marketing include all situations in connection with touring around, getting to know new cultures and sights, spending some time at a beach (possibly at a long-haul destination), having as many options as possible. The major difference lies in the age and the size of travel group: While (knowingly) among Cultural Hedonists, people travel in parties of 2, with M(e/a)t Marketers the travel group is larger, including children, teenagers or young adults in most cases. The pressure to go sightseeing in the later cluster is less dominant (due to the structure of the travel party agewise and interestwise); rather, it includes situations which lead to a classical vacation on the beach. Further, the duration of trips under travel situations described by Me(e/a)t Marketing is comparatively higher than with the Cultural Hedonists.
- In the group of the Family Travelers on the other hand, children are younger and the income (and buying power for traveling) smaller than in the one of Me(e/a)t Marketers. That leads to the visiting of friends and relatives, preferably in the Swiss mountains (summer and winter).

Practical Marketing Purposes

According to these results, a number of descriptive results can be derived for practical marketing purposes (see Table 12).

Table 12: Marketing Segments according to situational motivation structure

Insert Table 12 here

CONCLUSION

The clustering of motivations proved to be a valuable means of segmenting markets. The socio-demographic situation of individual travelers seems to be least relevant. It is more the anticipated travel profile (including the attraction of a certain destination) which determines travel behavior. Therefore, it is not the individual's needs or benefits sought in traveling which become important but the total structure of the travel group. Time as a scarce good is intensifying that basic situation. Under these circumstances, the decision-making process concerning the selection of activities and of an appropriate destination becomes very difficult.

When segmenting the Swiss market, where travelers usually take more than one trip a year, marketers end up differing on the basis of either distinctive offers ("Cultural Hedonism" and "Me(e/a)t Marketing" with a market potential of 52% of all trips), and/or reasons for traveling which aim at spending time with the family and visiting friends and relatives voluntarily (Family Travel) or out of obligation (Compulsory Travel) (Push, with a market potential of 48% of all trips).

For Cultural Hedonists and Me(e/a)t Marketers, the options communicated by the destination on the basis of products and services are of value in themselves, not only because they enable the traveler to outline his individually relevant needs but more because they facilitate the travel group's decision-making process by providing an optimal mix of individually necessary options. Therefore, the offer of a destination and the quality of its communications becomes crucial. The tourist-to-be most probably decides on the number of options offered.

Family Travel is determined rather by a push-situation and is therefore not influenced by a destination's communication. It is the availability of products desired by the travelers which determines the attraction of a destination. The tourists-to-be know exactly what they want and therefore do not need as much decision-making support as those in the other clusters.

About half of all travel situations are determined by the search for time-saving multiple options in order to spend time with the relevant social group (partner, family, friends). Offers create demand, with the communication of these offers being a valued service in itself.

Last but not least, the results and the research process lead us to the conclusion that cluster analysis leads to a relevant situational segmentation of travel markets on the basis of trips accomplished. But the results also show some limitations. In many cases, motivation structures lead to similar destination choices and other specific travel patterns and are determined in the same way. That interrelation makes it necessary to observe the dependency closely and work with one-way and symmetrical measures such as phi and lambda.

REFERENCES

- Aldenderfer, M.S. and R.K. Blashfield (1984). Cluster Analysis. Beverly Hills: Sage
- Backhaus, K., Erichson, B., Plinke, W. and R. Weiber (1996). Multivariate Analysemethoden, 8th edition. Berlin: Springer
- Berry, L.L., Parasumraman, A. and V.A. Zeithaml (1991). Quality Service. New York: Free Press
- Bieger, Th. and Ch. Laesser (1999). Reisemarkt Schweiz 1998 – Kurzbericht. St. Gallen: IDT-HSG
- Bieger, Th. (1996). Management von Destinationen und Tourismusorganisationen. München and Wien: Oldenbourg
- Bieger, Th. (1998). Dienstleistungsmanagement. Bern/ Stuttgart/ Wien: Haupt
- Brogini, M. (1998). Über Kundengruppen zur Marktstruktur – Das Modell der Segmentintensität. Bern: Berner betriebswirtschaftliche Schriften Band 18
- Cha, S., McCleary, K.W. and M. Uysal (1995). "Travel Motivations of Japanese Overseas Travelers: A Factor-Cluster Segmentation Approach." Journal of Travel Research, Summer: 33-39
- Chisnall, P.M. (1985). Marketing: A Behavioural Analysis, 2nd edition. London: McGraw-Hill
- Crandall, R. (1980). "Motivations for Leisure." Journal of Leisure Research, 12 (1): 45-53
- Crask, M.R. (1981). "Segmenting the Vacationer Market: Identifying the Vacation Preferences, Demographics, and Magazine Readership of Each Group." Journal of Travel Research, Fall: 29-34
- Formica, S. and M. Uysal (1998). "Market segmentation of an International Cultural-Historical Event in Italy." Journal of Travel Research, Spring: pp. 16-24
- Forschungsgemeinschaft Urlaub und Reisen e.V. (1997). Die Reiseanalyse RA 97. Hamburg: FUR
- Jahnke, H. (1988). Clusteranalyse als Verfahren der schliessenden Statistik. Göttingen: Vanenhoeck & Ruprecht
- Jamezroy, U. and M. Uysal (1994). "Travel Motivation Variation of Overseas German Visitors." Journal of International Consumer Marketing, 6 (3/4): pp. 135-160
- Gitelson, R.J. and D.L. Kerstetter (1990). "The Relationship Between Socio-Demographic Variables, Benefit Sought and Subsequent Vacation Behavior: A Case Study." Journal of Travel Research, Winter: 24-29
- Hill, W. and I. Rieser (1993). Marketing Management, 2nd edition. Bern/ Stuttgart: Haupt
- Kaspar, C. (1996). Tourismuslehre im Grundriss, 5. Aufl.. Bern/ Stuttgart/ Wien: Haupt
- Kaufman, L. and P.J. Rousseuw (1990). Finding Groups in Data – An Introduction to Cluster Analysis. Wiley Series in probability and Mathematical Statistics. New York: Wiley
- Kotler, P. (1997). Marketing Management: Analysis Planning and Control. London: Prentice Hall

- Krippendorff, J. (1996). Die Ferienmenschen – Für ein neues Verständnis von Freizeit und Reisen. Bern: Zytglogge
- Lanz, E. (1999). Methodenzirkel zur Clusteranalyse. Bern: FIF
- Loker, L.E. and Perdue, R.R. (1992). "A Benefit-Based Segmentation of a Nonresident Summer Travel Market." Journal of Travel Research, Summer: pp. 30-35
- Lundberg, D.E. (1971). "Why Tourists travel." Cornell HRA Quarterly, February: pp. 75-81
- Madrigal, R. and L.R. Kahle (1994). "Predicting Vacation Activity Preferences on the Basis of Values-System Segmentation." Journal of Travel Research, Winter: pp. 22-28
- Mazanec, J. (1992). "Classifying Tourists into Market Segments: A Neural Network Approach." Journal of Travel and Tourism Marketing, 1 (1): pp. 39-60
- Middleton, V.T.C. (1994): Marketing in Travel and Tourism. Chichester: Heinemann
- Oh, H.M., Uysal, M. and P. Weaver (1995): "Product Bundles and Market Segments Based on travel Motivations: A Canonical Correlation Approach." International Journal of Hospitality Management, 14 (2): pp. 123-137
- Popcorn, F. (1996). Clicking: Der neue Popcorn Report: Trends für die Zukunft. München: Heyne
- Punj, G. and D.W. Stewart (1983): "Cluster Analysis in Marketing Research: Review and Suggestions for Applications." Journal of Marketing Research, Volume XX (May 1983): pp. 134-148
- Romeiss-Stracke, F. (1995): Service Qualität im Tourismus. München: ADAC
- Rubenstein, C. (1980). "Report on How Americans View Vacations." Psychology Today, May: pp. 62-76
- Schmidhauser, H.P. (1996). Reisemarkt Schweiz 1995/ 96. St. Gallen: ITV-HSG
- Schewe, Ch. (1990). "Get in Position for the Older Market." American Demographics, 12 (6): pp. 38-44
- Shoemaker, S. (1989). "Segmentation of the Senior Pleasure Travel Market." Journal of Travel Research, Winter: pp. 14-21
- Shoemaker, S. (1994). "Segmenting the U.S. Travel Market According to Benefits Realized." Journal of Travel Research, Winter: pp. 8-21
- Smith, S.L.J. (1995). Tourism Analysis: A Handbook. 2nd Edition. London: Longman
- SPSS (1998): Users Guide Base 8.0/ Applications Guide Base 8.0. Chicago: SPSS
- Yuan, S. and C. McDonald (1990). "Motivational Determinants of International Pleasure Time." Journal of Travel Research, Fall: pp. 7-13

Table 1: Motivation Factors in the Swiss travel market (Share of Trips)

Motivation Factor	Share of Entries "Very Important"	Share of Entries "Rather important"	Share of Entries "Rather unimportant/ unimportant" (cumulative)
Nightlife	2.9%	7.7%	89.5%
Comfort	16.8%	29.8%	53.4%
Partner	40.7%	30.0%	29.3%
Family	46.1%	19.1%	34.7%
Nature	47.0%	33.2%	19.9%
Culture/ Sightseeing	24.4%	27.2%	48.4%
Liberty	21.0%	30.8%	48.1%
Body	2.0%	6.3%	91.7%
Sports	17.4%	16.7%	66.0%
Sun	17.4%	16.7%	66.0%

Table 2: Steps involved in the analysis

Step 1:	Cluster Analysis of respondents based on the predefined factors of motivation Result: Identification of number of clusters
Step 2:	Discriminant analysis of motivations (MDA) Result: Identification of discriminating factors for each cluster
Step 3:	Chi-Square tests on different variables Result: Identification of significant cluster descriptors

Table 3: Motivation Factor Means among Clusters

Factor (Abbr.)	Cluster (Number/ Share of Trips)				F-Ratio	Sig. Level
	1	2	3	4		
	Compul- sory Travel n=1'560 16.7%	Cultural Hedonism n=2'020 21.7%	Family Travel n=2'670 28.7%	Me(e/a)t Marketing n=3'054 32.9%		
Nightlife	1.42	1.58	1.18	1.51	119.471	.000
Comfort	1.56	2.42	1.99	2.82	626.583	.000
Partner	1.46	2.55	3.15	3.60	1,855.385	.000
Family	1.84	1.36	3.69	3.53	4,414.134	.000
Nature	1.89	3.38	3.10	3.54	1,410.386	.000
Culture	1.47	3.19	1.79	2.78	1,431.714	.000
Liberty	1.43	2.65	2.03	3.11	1,177.487	.000
Body	1.09	1.29	1.15	1.86	784.606	.000
Sports	1.74	1.61	1.80	2.57	400.792	.000
Sun	1.30	1.66	1.47	2.95	1,610.384	.000

Note: Respondents were asked to indicate their reasons for travel when taking a holiday (1=not at all important; 2=rather unimportant; 3=rather important; 4=very important).

Table 4: Tests of Equality of Group Means

Factor	Wilk's Lambda	F	Df1	Df2	Sig.
Family	.373	5,202.693	3	9,300	.000
Partner	.574	2,300.090	3	9,300	.000
Sun	.616	1,929.236	3	9,300	.000
Culture	.653	1,648.910	3	9,300	.000
Nature	.665	1,559.935	3	9,300	.000
Liberty	.697	1,347.567	3	9,300	.000
Body	.774	905.338	3	9,300	.000
Comfort	.811	721.993	3	9,300	.000
Sports	.869	468.932	3	9,300	.000
Nightlife	.952	155.092	3	9,300	.000

Table 5: Multiple Discriminant Analysis of Motivations to Travel

Discriminant Function	Eigenvalue	Canonical Correlation	Wilk's Lambda	Chi-Square	Sig.
1	3.309	0.876	0.072	24,504.5	.000
2	1.437	0.768	0.309	10,924.8	.000
3	0.329	0.497	0.753	2,643.3	.000

Table 6: Functions at Group Centroids

Cluster number	Function 1	Function 2	Function 3
Cluster 1	-2.807	-.806	.768
Cluster 2	-1.158	1.775	-.423
Cluster 3	.290	-1.454	-.633
Cluster 4	2.207	.315	.442

Table 7: Structure Matrix

Factor	Function 1	Function 2	Function 3
Partner	0.449*	0.015	-0.359
Family	0.561	-0.651*	-0.120
Culture	0.153	0.553*	-0.173
Liberty	0.289	0.339*	0.020
Comfort	0.216	0.236*	0.041
Sun	0.368	0.195	0.583*
Nature	0.317	0.281	-0.520*
Body	0.250	0.158	0.411*
Sports	0.183	0.002	0.363*

*Largest absolute correlation between each variable and any discriminant function

Table 8: Demographic Profile of the Four Clusters of Swiss Travelers (in %)

Demographic (Chi Square Value/ Significance Level):	Com- pulsory Travel 16.8%	Cultural He- donism 21.7%	Family Travel 28.7%	Me(e/a)t Mar- keting 32.8%	Total 100.0%
Gender (19.73/ .003):					
- Male	48	45	48	48	48
- Female	52	55	52	52	52
Age (808.51/ .000):					
- Up to 15	18	4	31	25	21
- 16-25	9	10	6	8	8
- 26-35	32	25	27	22	26
- 36-45	13	11	15	19	15
- 46-55	13	21	10	14	14
- 56-65	8	14	6	8	9
- 66-75	6	13	4	3	6
- 75+	1	2	1	1	1
Educational Level (527.53/ .000):					
- Basic Compulsory Schools (Elementary, Junior High)	16	13	15	16	14
- Technical or Trade School (with degree)	30	34	29	32	31
- High School graduate	22	29	18	19	21
- Bachelor's degree	9	11	7	7	9
- Master's degree (university)	6	8	5	4	5
- Missing Values	17	5	27	22	19
Job Profile (714.45/ .000):					
- Top Management	2	3	2	2	2
- SME Director/ Owner	4	5	3	3	4
- Free Profession (Doctor, Artist, ...)	3	3	2	2	2
- Middle Management	13	15	12	10	12
- Commercial/ Technical Employee	27	28	21	26	25
- Retired	7	16	5	5	8
- Working from Home	17	17	19	19	18
- In School/ Training/ College/ University	6	6	4	5	6
- Other/ Missing Values	21	11	32	31	31
Size of Household (1152.49/ .000):					
- 1 Person	12	16	3	3	7
- 2 Persons	32	47	21	28	31
- 3 Persons	18	12	23	17	18
- 4 Persons	22	14	31	33	26
- 5 Persons	13	7	18	14	14
- 6 Persons	3	2	3	4	3
- more than 6 persons		2	1	1	1
Household Income in CHF (368.84/ .000)					
- – 3,249	5	7	3	2	4
- 3,250 – 4,049	4	5	4	4	4
- 4,050 – 4,849	9	8	8	7	8
- 4,850 – 5,649	11	11	20	15	15
- 5,650 – 6,449	14	11	15	12	13
- 6,450 – 7,249	8	11	9	13	11
- 7,250 – 8,049	15	10	12	13	13
- 8,050 – 9,649	8	12	8	10	10
- more than 9,649	20	21	14	14	17
- Missing Values	6	4	7	9	5

Errors in percentage total due to rounding

Table 9: Symmetric and Directional Measures of Demographic Profile Variables

Variable	Phi (Cluster dependant)	Lambda (Cluster dependant)	Lambda (Variable dependant)
Gender	.050	.000	.000
Age	.320	.064	.000
Educational Level	.248	.043	.000
Job Profile	.299	.064	.017
Size of Household	.379	.109	.052
Household Income	.215	.037	.027

Table 10: Travel Profile of the Four Clusters of Swiss Travelers (in %)

Travel Profile (Chi Square Value/ Significance Level):	Compulsory Travel 16.8%	Cultural He- donism 21.7%	Family Travel 28.7%	Me(e)a/t Mar- keting 32.8%	Total 100.0%
Destination (1452.9/ .000)					
- Switzerland	58	27	64	34	45
- Austria (neighboring)	4	5	5	5	5
- Germany (neighboring)	9	7	4	2	5
- France (neighboring)	12	14	7	11	11
- Italy (neighboring)	5	12	8	16	11
- Spain	2	6	3	11	6
- Portugal	0	1	0	0	0
- Greece	1	2	1	4	2
- Other Mediterranean countries	1	2	1	2	1
- Northwest Europe	4	6	2	1	3
- Scandinavia	1	2	2	1	1
- Eastern Europe	1	2	1	1	1
- North Africa/ Middle East	1	3	0	2	2
- North and Central America	1	6	1	5	4
- South America	0	1	0	1	0
- Africa (Central and South)	0	1	0	1	1
- Australasia	0	3	1	3	2
Household-Members attending Trip (2342.3/ .000)					
- 1 Person	40	38	7	8	20
- 2 Persons	38	57	30	41	41
- 3 Persons	12	3	29	18	16
- 4 Persons	9	2	28	28	19
- 5 Persons	1	0	5	4	3
- 6 Persons	0	0	1	1	1
Total Size of Travel Group (Household + other) (1190.42/ .000)					
- 1 Person (traveling alone)	15	8	3	2	6
- 2 Persons	29	48	21	29	32
- 3 Persons	12	5	19	13	13
- 4 Persons	14	11	29	29	21
- 5 Persons	4	2	11	8	7
- 6 Persons	2	3	4	6	4
- more than 6 Persons	24	23	13	13	17
Type of Trip taken (1362.262/ .000)					
- Vacation by the Ocean/ by a Lake	4	11	8	33	17
- City Trip	5	19	5	6	9
- Sightseeing Tour by Coach / Bus/ Rail	1	20	6	9	10
- Cruise	1	2	1	1	1
- Vacation in the Countryside	2	4	4	6	4
- Vacation in the Montains (Summer)	4	5	12	5	7
- Health-oriented Trip	1	2	1	2	2
- Winter Vacation in the Snow	5	1	9	9	6
- Winter Vacation in Warm Areas	0	1	0	2	1
- Other Sports Trip	4	3	3	3	3
- Events Trip	15	6	3	1	5
- Visit to a Fun Park/ Resort	2	2	3	1	2
- Study Tour	1	5	0	1	2
- Trip to learn a Language	1	1	0	0	0
- Shopping Trip	4	2	1	1	2
- Visiting Friends and Relatives	31	8	34	13	19
- Other	29	8	10	7	10
Duration of Trip (1'491.548/ .000)					
- 1 night	25	9	11	2	10
- 2-3 nights	32	25	25	9	21
- 4-7 nights	31	36	38	34	35
- 8-14 nights	10	19	17	37	22
- 15-21 nights	1	6	6	12	8
- more than 21 nights	1	5	3	6	4

Table 11: Symmetric and Directional Measures of Travel Profile Variables

Variable	Phi (Cluster dependant)	Lambda (Cluster dependant)	Lambda (Variable dependant)
Destination	.426	.137	.000
Members (Household)	.541	.146	.007
Size of Travel Group	.392	.108	.029
Type of Trip taken	.605	.217	.120
Duration of Trip	.407	.112	.015

Table 12: Marketing Segments according to situational motivation structure

Prominent Socio-demographic and Travel Profile Groups	Compulsory Travel	Cultural Hedonism	Family Travel	Me(e/a)t Marketing
Age	Up to 35	46 and above	Up to 35	Up to 45
Education	Compulsory schools (Elementary, Junior High), Technical or Trade school, High school graduate	Trade/ Technical school-, Bachelor-, Master degree	Compulsory Schools (Elementary, Junior High), Technical or Trade school, High school graduate	Compulsory schools (Elementary, Junior High), Technical or Trade schools, High school graduate
Job profile	Free Profession, Middle Management, Employee	Middle Management, Employee, Retired	Various Jobs	Commercial/ technical employee, Working from home
Size of Household	1-3 persons	1-2 persons	3-5 persons	3-4 persons
Household Income	more than CHF 5,650	more than CHF 6,450	CHF 4,050–CHF 7,249	CHF 4,850 – CHF 8,049
Destination	Switzerland, France, Germany	France, Italy, Germany	Switzerland	Mediterranean area
Participants	1-2 Persons	1-2 Persons	3-4 Persons	3-5 Persons
Type of Trip	Events Trip, Visiting Friends and Relatives	Sightseeing Tour, City Trip, Study Tour	Visiting Friends and Relatives, Vacation in the mountains, Winter vacation in the snow	Vacation by the ocean, Winter vacation in the snow, Vacation in the countryside
Duration	1-3 nights	2-7 nights	2-7 nights	8-21 nights