1. ABSTRACT

Extreme snowboard sports as a part of active sport tourism have not been in the focus of tourism and leisure research. A number of studies deals with the categorisation and classification of extreme sports, risky or adventures sports or trend sport developments and their ecological impacts and consequences for destination stakeholders (Hlavac and Baumgartner 2000). While contributions shed more light upon the motives of extreme sports athletes and on their perception of sport’s risks (Örley 2005, Opaschowski 2000, Celsi et al 1993, Gonzales and Bello 2002, Palmer 2002), the literature that investigates economic impacts of extreme sports is scarce (Hlavac and Baumgartner 2000).

Another, more than relevant question of consumer behaviour research addresses extreme sport athletes’ personality traits (Allport 1961, Allport and Allport 1921, Allport and Odbert 1936, Apter 1992). The empirical personality psychological traits approach as well as the differential psychology put the individual in the focus of their analyses with the aim to gain more insight into inter- and intra-individual behaviour patterns (Amelang and Ahrends 1984, Amelang and Bartussek 1994).

Individuals under investigation are freestyle snowboarders which include the competitive disciplines half pipe, big air and slopestyle. This group of snowboarders is economically relevant as for instance 88.73% of all Austrian skiing destinations offer suitable resources (Internet 1). Especially snowboard competitions and snowboarder-related events play an increasing role in tourism destinations value chains (e.g. events such as the Air & Style in Munich counted more than 27000 visitors in 2006 (Internet 2)). The probands are all supported by sponsors and are actively snowboarding at least 50 days per year.

To learn more about the group of freestyle snowboarders the authors develop three research questions to be answered in their study:

• What are the main personality traits of freestyle snowboarders?
• Do freestyle snowboarder display certain common behaviour patterns?
• Which (product/service development) implications for tourism destinations can be derived from these findings?

The paper attempts to build a bridge between psychology and social sciences to close the above mentioned research gap and to derive new findings about this under-investigated segment which in many cases include typical lead users consumers (von Hippel 1986; Bidmon and Matzler 2006).
Several approaches with reference to the customer involvement in the product development process can be found in the literature, for example in the “lead user” discussion (von Hippel 1986), „co-development“ (Anderson and Crocca 1993, Neale and Corkindale 1998), „co-opting customer competence“ (Prahalad and Ramaswamy, 2000), „user involvement“ (Alam 2002), „consumer involvement“ (Pitta and Franzak 1996), and „customer interaction“ (Gruner and Homburg 2000). However, according to Matthing, Sandén and Edvardsson (2004) explicit definitions of these concepts are often missing. Instead, various variables are used to describe these concepts, such as degree or intensity of customer participation (Alam 2002, Gruner and Homburg, 2000), or stages of the innovation process (Alam 2002, von Hippel 1986). Moreover, the majority of studies, focusing primarily on customer involvement in the product or service development process are based on research from the area of the New product development (e.g., Anderson and Crocca 1993, Ciccantelli and Magidson 1993, Von Hippel 1986, 2001; e.g., Anderson and Crocca, 1993, Ciccantelli and Magidson, 1993, Von Hippel 1986, 2001). According to Matthing et al. (2004), only four studies focused on customer involvement within the development of new services (Alam 2002, Martin and Horne 1995, Martin, Horne and Schultz 1999, Thomke 2003). However, in none of the studies it is described, which customers or groups of customers are suitable to be involved in the product development process of services. In particular, it remains unclear what personalities they should have, to incorporate valuable contributions for the development process, has not been investigated yet. For this reason, in the empirical part of this work the authors will analyse the personality of freestyle snowboarders to derive possible implications for the tourism product development.

2.1 Market segmentation

The term as well as the concept of “market segmentation” was first introduced by Smith (1956). Even Smith (1956) recognized that in markets different consumer schemes can exist, and that it would be rational to adjust product and marketing measures to consumer demands. So Weinstein (1987, 4) stressed, that “Segmentation is the process of partitioning markets into segments of potential customers with similar characteristics who are likely to exhibit similar behaviour purchase.” In the literature various approaches and theories for segmentation of customer groups are found, based on often similar criteria. The different segmentation criteria are discussed in the following contents:

- Demographic and socio-economic characteristics
- Consumer lifecycle
- Behavioural attributes as segmentation criteria
- Psychographical features
- Benefit segmentation
- Psychological attributes

Their suitability, to create a causal relationship towards the expectations or the purchase, consumption or use behaviour of the customer will thereby be used as a quality criterion. Table 1 summarizes once again the various segmentation approaches. The variables that will help the individual approaches to segment markets, as well as the advantages and disadvantages of various approaches, are shown.
<table>
<thead>
<tr>
<th>Segmentation approach</th>
<th>Variables</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic and socio-economic characteristics</td>
<td>Age, gender, level of education, income/purchasing power, occupation, geographical features, ethnicity and religion Social status or social class, family role</td>
<td>Easy and inexpensive to collect Many secondary data available</td>
<td>Can not explain relevant behaviour No predictors for future behaviour ? serve merely as descriptors</td>
</tr>
<tr>
<td>Consumer lifecycle</td>
<td>Consists of demographic and socio-economic variables: Age, marital status, family size</td>
<td>Can help to develop products</td>
<td>See demographic and socio-economic characteristics</td>
</tr>
<tr>
<td>Behavioural attributes</td>
<td>Shopping behaviour, consumer behaviour, communication behaviour, response to elements of the marketing mix, user status, practice situation, preferred places of purchase, frequency of purchase, purchase volume (value / size), brand/shopping venues loyalty</td>
<td>Possibility of the formation of homogeneous segments with respect to the relevant conduct Data can be accessed easily through enterprise resource planning (ERP) systems</td>
<td>Data are past related Can not explain the relevant behaviour</td>
</tr>
<tr>
<td>Psycho-graphical attributes</td>
<td>In addition to demographic variables, activities, interests, opinions, attitudes, values</td>
<td>Draws a more comprehensive picture of potential customers than a demographic/socioeconomic approach Helps to better understand marketing problems in practice</td>
<td>High costs High degree of complexity Can also not fully explain and predict relevant behaviour Validity varies from study to study Lack of theory</td>
</tr>
<tr>
<td>Benefit segmentation</td>
<td>&quot;Benefits&quot;, the customers strive after through the consumption of certain services</td>
<td>Leads the basis of segmentation back to the underlying reasons why consumers are attracted by certain products Forms segments by causal criteria</td>
<td>High effort Hard to collect</td>
</tr>
<tr>
<td>Psychological attributes</td>
<td>Motivations, attitudes, involvement, preferences, values, personality</td>
<td>Closely connected to preferences Creates strong background information</td>
<td>Controversial relation between personality and relevant behaviour</td>
</tr>
</tbody>
</table>

Table 1: Overview market segmentation approaches (Source: own, based on Dubois et al., 2007)
Decisive for the investigation of different customer segments is the choice of an appropriate segmentation criterion and segmentation variables (Baker, 1984).

Thus, demographic as well as socio-economic variables are limited in their ability to predict future purchase behaviour; they are often not useful for the identification of market segments (Stanton 1978, McCarthy 1978, Haley 1968, Frank, Massy and Boyd 1967). Psychographical variables, as a combination of demographic, socioeconomic and psychological variables should overcome these weaknesses (Hartmann, 1999). It is obvious, that by including psychological variables, the image of the consumer can be drawn much more comprehensively, but also the different lifestyle concepts cannot provide a complete explanation or a perfect prediction of consumer behaviour (Kramer, 1991).

When focussing on behavioural attributes as segmentation variables, the following critical question arises: Is it enough for the prediction of future behaviour to rely on data reflecting past behaviour (2005)? Presumably not, because on the one side such data offer the possibility to form homogeneous segments with regard to the relevant behaviour, but on the other side in most cases it remains unclear why consumers show specific patterns of behaviour (Dubois et al. 2007).

Haley (1968) and Wind (1973) suggest to segment markets on the basis of benefits, desired by identifiable groups of individuals whereby the benefit segmentation leads the basis of the segmentation back to the underlying reasons why consumers are feeling attracted to, by certain products (Hooley, et al., 2004). In addition, the fact that the benefits individuals strive for with the consumption of products/services are the main reasons for the existence of the “real” market segments. That’s why benefit segmentation can be seen as an approach that enables to build segments according to causal rather than descriptive criteria (Botschen et al. 1999).

Along with the psychological attributes, motives, attitudes, involvement, preferences and values may be counted, but also personality characteristics, in particular (Dubois et al. 2007). Opinions about the existence of clear relationships between personality traits and consumer behaviour do greatly differ. Some find rather weak correlations between consumer behaviour and personality (Myers 1967, Massy et al., 1968, Robertson and Myers 1969), while others find significant ones, such as the studies by Eysenck et al. (1960), Tucker and Painter (1961), Matzler et al. (2006), Ghani (2004) and Heinström (2004).

2.2 Personality

Personality or personality constructs are the research subject of empirical personality psychology and differential psychology, which view the individual as such, and focus on inter- and intra individual differences in the behaviour of people (Amelang and Ahrens, 1984). Within the personality psychology, there are several paradigms which perceive the construct “personality” in different ways (Asendorpf 2004).

The characteristic paradigm aims at describing the individual peculiarity of certain individuals or groups of people by the use of characteristics (Asendorpf 2004). Hence personality is understood as an “organized totality of all these characteristics” (Asendorpf 2004, 37). Personal attributes are about consistent patterns, as how individuals behave, how they feel and think. Since the formation of this paradigm different attribute approaches have developed which help to capture the personality of individuals. Besides Allport and Allport (1921), who was one of the founders of the characteristic paradigm also Cattel (1965) and Eysenck (1970) have decisively influenced the characteristic paradigm of the personality psychology.

A contemporary attribute approach is the five-factor model of personality. “Starting in the 1960s, but with increasing speed in the 1980s, 1990s and 2000s, many research works approached the idea that the most common characteristic approaches to personality can be captured by using five dimensions” (Friedmann and Schustack 2004, p. 346). Costa and McCrae (1992) in particular, are representatives of the five-factor model of personality, hence the personality is build with five key characteristics as
follows: neuroticism, extraversion, openness to experience, compatibility, conscientiousness (see Borkenau and Ostendorf, 1993b).

3. RESEARCH DESIGN

The study was conducted using two questionnaires. The first consisted of the NEO-five factors inventory (NEO-FFI) according to Costa and McCrae (1992) in the German translation of Borkenau and Ostendorf (1993a), and was used to collect the personality profiles of the probands. The second questionnaire has to be seen as a complement to the first one and was used, on the one hand, to collect demographic and socio-economic data and, on the other hand, to verify that the probands chosen fulfil the minimum criteria - amateur sponsorship and a minimum number of 50 snowboarding days a year. Thus, the construct personality was put in contrast to a relevant conduct, namely intense freestyle snowboarding.

The authors used the five-factor model of Costa and McCrae (1992). It is a psychological personality inventory. The original version of the measurement was the Neuroticism-Extroversion-Openness Inventory (NEO-I). This version measured only three of the Big Five personality traits. A cut-down version of NEO PI-R exists, called the NEO Five-Factor Inventory (NEO-FFI) with 60 items and designed to take 15 rather than 40 minutes to administer. The aim of the study is to investigate freestyle snowboarders' characteristics within the context of the so-called “Big Five” which can be assessed with the NEO-FFI test, a personality test which has been developed for both the segment of youngsters and adults and reveals peculiarities in the area of the following (Big) five categories: neuroticism, extraversion, openness for experiences, compatibility and conscientiousness (Srivastava 2008).

The NEO-FFI consists of 60 standardized items, which can be allocated to the various personality factors through a predetermined key evaluation. The 60 items consist of statements, which could be used to describe the person itself. To evaluate the statements a quintuplicate graduated verbal scale was available for the probands (SA - strong rejection; A - rejection; N - neutral; Z - agree; SZ - strongly agree) (Borkenau and Ostendorf, 1993a). 12 items are assigned to each personality factor. The evaluation of the answered questionnaires were done using the proposed template, that helped to apply scores from 0 - 4 to the marked answers. The sum of the points of individual personality factors was entered on the rear side of each questionnaire. In addition, the number of the answered items per personality factor was determined and entered in the questionnaires. Then, in a further step, the averages of the single personality factors were determined by forming the ratio of the sum values of the scores and the number of answered items per personality factor. The second questionnaire was used to identify demographic and socio-economic data and to ensure the minimum criteria. Moreover, also the attitude of the probands towards an involvement in the product development process was ascertained. Some questions determine whether the probands are already included in the product development process of their sponsors. Furthermore, it should be ascertained whether they generally can imagine an involvement in the product development process of tourism destinations, and if they do so, in what areas they see a need for improvement. Finally, the volunteers were offered the opportunity to comment on possible suggestions for improvement.

The study was carried out in the area of Innsbruck, Austria in the period from July to September 2007. The potential subjects were individually approached and asked to fill in the questionnaires.

4. RESULTS

4.1 Descriptive findings

A total of 50 usable questionnaires were taken. The average age of probands is 24.94 years, with the youngest snowboarder at age 17 and of the oldest 33 years old. Of the 50 respondents, are 42 males
and 8 females, with a relative value of 84% and 16%, respectively. The educational level of the participants is as follows: The largest group, with 44% are high school graduates, followed by people who visited a technical school (36%). Nevertheless, 16% of the respondents already have a university degree or technical college degree. The smallest group with 4% has compulsory education. To comply with the definition criteria of the target group observed, it was asked for the number of days during which the subjects are on the snowboard per year, as well as their sponsor status. 30% answered to be on the board about 76-100 days, 26% 51-75 days, 24% 101-125 days, over 8% 126-150 days or more than 150 days. Two of the surveyed people - so 4% - said they are only 26-50 days a year on the snowboard, which actually does not fulfill the required minimum criterion of 50 days. However, as both individuals have a sponsorship, and the sample size is smaller than expected, they are still considered. The sponsor status showed following picture: 26% have an amateur status (producer national), 22% an amateur status (producer international), 20% amateur status (sales/distributor) or professional status, respectively and 12% amateur status (shop sponsor).

### 4.2 Product development

When questioning “Are you involved in the product development process with your sponsor?” 66% of the subjects (absolute 33) answered yes and 34% (17) with no. For those (17 subjects), who are not involved in the product development process of their sponsor, the question about their general willingness to be involved in, was asked. 14 people (82.35%) said that they generally would be willing to be involved in the product development process of their sponsor while 3 persons (17.65%) had no interest in it.

Another question was, whether the probands could imagine to be involved in the product development process of tourism destinations, with the result that 90% of the subjects could imagine to do so, and 10% not. Furthermore, 90% of the subjects who could see themselves, being involved in the product development process of tourism destinations in a positive way, indicate in which areas they have ideas for improvements or new developments. Besides a set of predefined categories, there was also the possibility to indicate further imaginable domains, whereby multiple answers were allowed. The results are shown in figure 1.

![Figure 1: Areas where respondents want to be involved in product development processes](image)

As expected, the areas close to snowboarding are in high demand with the probands. 91.11% indicated that they see a need for improvement in fun parks, 84.44% for contests, and 62.22% for events. For the
categories that are not directly related to the snowboard sport about 35.56% of the people have ideas for improvements or new developments in the areas of “leisure activities of a destination” and “accommodation”. Followed by “pubs and nightclubs” (31.11%), “arrival possibility” (26.67%), “lift and transport facilities in the destination” (17.78%), “booking opportunities” (13.33 %), and finally “further destination development” (11.11%).

Finally, the subjects could openly formulate their possible ideas and suggestions for improvements. Of all the probands, in principle, who would be interested in being involved in the product development process of tourism destinations (90%), 25 (56%) expressed ideas and 20 (44%) left the question unanswered. In a second step of the evaluation the proposals were analyzed according to which categories they can be assigned to. Figure 2 shows as how many entries were made in which areas.

Most suggestions for improvements with a total of 21 responses were done in the area “fun parks”, followed by the category “contests” (17 nominations), and “events” (8 nominations). 1 to 4 ideas were assigned to the other areas. For the categories “arrival possibilities” and “booking opportunities” on the other hand, no nominations could be assigned to. The third step of the analysis focused on the content level of the individual proposals in the categories. Below the contents of the ideas are shown - arranged by categories.

**Fun parks:** In the category of “fun parks” the proposals for improvements are primarily about the construction, the type and arrangement of elements and obstacles. It is - apart from the mere increase of the parks - mainly asked for more creativity in terms of the obstacles, be it through the development of new elements, their better arrangement or the inclusion of natural conditions, such as rocks, hills or anything like that. What is to be understood under the demand for “better” fun parks can only be derived by the statements of the probands. So mainly well shaped, i.e. well-maintained parks are required, as underpinned in the call for trained park shapers. As for the size and quality of fun parks, one also refers to the USA, which are in a leading position in this area. Another important point seemed to be to create different levels of difficulties whereby here the necessary strict subdivision was pointed out. Within this context also probably fits the reference to the security aspect in park design.
Contests: In the realm of “contests”, seems to be dissatisfaction with the format of the competitions because they are the ones that are mainly addressed when it comes to improvements. Different and new contest formats are demanded but it is not mentioned how they shall look. Merely about the source of the improvements everybody agrees on: The snowboarders should be more involved when it comes to the development of new formats. There were also controversial views about the aspired level of the contests. On the one side, there were calls for raising the level and, on the other side, it was asked for more formats for rookies and youngsters. A tangible proposal to the city of Innsbruck was done in suggesting carrying out a rail contest in Innsbruck. The second central theme in the area “contest” were the assessment methods, the so-called “judging”, which has to be improved. Also here it should be noted that the judging should be carried out by the boarders personally.

Events: Concerning events, formats were demanded, that offer more than mere snowboarding. Thus, combinations with other sports, team competitions between different sports or a combination of sports, art and music were suggested. There are also calls for a city event as well as a big snowboard event, comparable to the Air & Style. In addition, improved access for spectators was demanded, a shift of events onto the mountains, which probably stands in contrast to city events, as well as the avoidance of alibi events.

Leisure activities of the destination: in this area, an expansion of offers, for example, ‘Standing waves’ or ‘multifunctional theme worlds for snowboarders’ were suggested as well as a greater orientation of offers towards younger target groups.

Pubs and nightclubs: Proposals in this area were related to the improvement of the music choice, game offers and seat allocation.

The naming of the other categories is not discussed here, as they are only single naming to a maximum of three.

4.3 Further statistical analysis

An average comparison between the sample of this study and a reference population was carried out to determine whether the personality profiles of the sponsored freestyle snowboarders significantly differ from those of the reference population. To test this, the mean values of all five scales in the sample of this study are compared with the reference sample of Borkenau and Ostendorf (in preparation). The latter is evaluated with the help of the T-tests for independent random samples. The results of the tests can be seen in Tables 2 and 3, depending on the results of the variance test (Table 2). The result of the T-test depends on whether there is a variance homogeneity between the two comparative samplings on the base of which they have to be tested first (Table 2).

<table>
<thead>
<tr>
<th></th>
<th>variance 1</th>
<th>variance 2</th>
<th>F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>neuroticism</td>
<td>0.2601</td>
<td>0.4900</td>
<td>1.8839</td>
<td>0.00574*</td>
</tr>
<tr>
<td>extraversion</td>
<td>0.1296</td>
<td>0.3136</td>
<td>2.4198</td>
<td>0.00019*</td>
</tr>
<tr>
<td>openness to experience</td>
<td>0.2601</td>
<td>0.2916</td>
<td>1.1211</td>
<td>0.62657</td>
</tr>
<tr>
<td>compatibility</td>
<td>0.1225</td>
<td>0.2209</td>
<td>1.8033</td>
<td>0.00977*</td>
</tr>
<tr>
<td>conscientiousness</td>
<td>0.1681</td>
<td>0.3481</td>
<td>2.0708</td>
<td>0.00169*</td>
</tr>
</tbody>
</table>

Table 2: variance test of the ‘big five’

The result shows that for four of the five scales (neuroticism, extraversion, tolerability, conscientiousness) exists no homogeneous variance. Only for the scale “openness to experience”
homogeneity of variance can be expected. Consequently, the results of the T-tests for the scale “openness to experience” must be read from Table 3, the results for the other four scales must be read from Table 4.

<table>
<thead>
<tr>
<th></th>
<th>mean 1</th>
<th>mean 2</th>
<th>T-calc</th>
<th>p</th>
<th>Cohen-d</th>
<th>eta sq</th>
</tr>
</thead>
<tbody>
<tr>
<td>neuroticism</td>
<td>1.21</td>
<td>1.83</td>
<td>6.2557</td>
<td>0.00000*</td>
<td>0.887</td>
<td>0.003</td>
</tr>
<tr>
<td>extraversion</td>
<td>2.72</td>
<td>2.37</td>
<td>4.4154</td>
<td>0.00001*</td>
<td>0.626</td>
<td>0.002</td>
</tr>
<tr>
<td>openness to experience</td>
<td>2.53</td>
<td>2.68</td>
<td>1.9605</td>
<td>0.04997*</td>
<td>0.278</td>
<td>0.000</td>
</tr>
<tr>
<td>compatibility</td>
<td>2.72</td>
<td>2.52</td>
<td>3.0054</td>
<td>0.00266*</td>
<td>0.426</td>
<td>0.001</td>
</tr>
<tr>
<td>conscientiousness</td>
<td>2.79</td>
<td>2.57</td>
<td>2.6339</td>
<td>0.00845*</td>
<td>0.373</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Table 3: T-Test under the assumption of homogeneous variance

Concerning the mean value for “openness to experience”, the differences between the two samples are significant (p <= 0.05).

<table>
<thead>
<tr>
<th></th>
<th>mean 1</th>
<th>mean 2</th>
<th>T-calc</th>
<th>p</th>
<th>Cohen-d</th>
<th>eta sq</th>
</tr>
</thead>
<tbody>
<tr>
<td>neuroticism</td>
<td>1.21</td>
<td>1.83</td>
<td>8.5619</td>
<td>0.00000*</td>
<td>18.659</td>
<td>0.596</td>
</tr>
<tr>
<td>extraversion</td>
<td>2.72</td>
<td>2.37</td>
<td>6.8394</td>
<td>0.00000*</td>
<td>14.872</td>
<td>0.483</td>
</tr>
<tr>
<td>openness to experience</td>
<td>2.53</td>
<td>2.68</td>
<td>2.0748</td>
<td>0.04323*</td>
<td>4.536</td>
<td>0.080</td>
</tr>
<tr>
<td>compatibility</td>
<td>2.72</td>
<td>2.52</td>
<td>4.0252</td>
<td>0.00019*</td>
<td>8.775</td>
<td>0.246</td>
</tr>
<tr>
<td>conscientiousness</td>
<td>2.79</td>
<td>2.57</td>
<td>3.7776</td>
<td>0.00042*</td>
<td>8.226</td>
<td>0.222</td>
</tr>
</tbody>
</table>

Table 4: T-Test of heterogeneous variances

The same holds true for the other four scales, even with regard to their mean values the two samples diverge significantly.

It can be said that the random sample of this study (sponsored freestyle snowboarders) with reference to the personality profiles in all five characteristic values, significantly differs from those of the reference population of Borkenau and Ostendorf (in print). Consequently, one can note that the selected target group regarding their personality profiles is outwardly heterogeneous. Moreover, with the T-Test, also a homogeneity of the volunteers regarding their personality profiles is noted, as the observed differences are of systematic nature and do not occur randomly. If some probands had higher values, others lower values and another part of the participants the same high values on the five scales in relation to the reference population, the differences would not have occurred systematically but coincidentally. Moreover, the homogeneity can be documented descriptively by comparing the standard deviations of both samples. In comparing the standard deviations (s) of all five scales of both samples (see Table 5 and 6), it can be stated that the standard deviations of all five scales in the sample of this study are lower than those of the reference population. Consequently each of the mean values of the probands differs less strongly from the mean value of the whole sample than those of the reference population. Thus it is fair to say that the participants of this study have inwards relatively homogeneous and outwards heterogeneous personality profiles, whereby can be stated, that the stereotype “freestyle snowboarder” does exist.
### Table 5: Mean values of NEO-FFI scales and standard deviation (Source: Borkenau and Ostendorf, in print.)

<table>
<thead>
<tr>
<th>Scala</th>
<th>Total (N=11724)</th>
<th>male (N=4219)</th>
<th>female (N=7505)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>s</td>
<td>a</td>
</tr>
<tr>
<td>neuroticism</td>
<td>1.83</td>
<td>0.70</td>
<td>.87</td>
</tr>
<tr>
<td>extraversion</td>
<td>2.37</td>
<td>0.56</td>
<td>.81</td>
</tr>
<tr>
<td>openness to experience</td>
<td>2.68</td>
<td>0.54</td>
<td>.75</td>
</tr>
<tr>
<td>compatibility</td>
<td>2.52</td>
<td>0.47</td>
<td>.72</td>
</tr>
<tr>
<td>conscientiousness</td>
<td>2.57</td>
<td>0.59</td>
<td>.84</td>
</tr>
</tbody>
</table>

### Table 6: Mean values and standard deviation of NEO-FFI, scales (Freestyle-Snowboarder)

<table>
<thead>
<tr>
<th>Scales</th>
<th>Total (N=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td>neuroticism</td>
<td>1.21</td>
</tr>
<tr>
<td>extraversion</td>
<td>2.72</td>
</tr>
<tr>
<td>openness to experience</td>
<td>2.53</td>
</tr>
<tr>
<td>compatibility</td>
<td>2.72</td>
</tr>
<tr>
<td>conscientiousness</td>
<td>2.79</td>
</tr>
</tbody>
</table>

5. IMPLICATIONS

5.1 Personality and market segmentation

As the results have shown, it could be proven that the selected target group has a particular personality profile, relatively homogeneous inwards and heterogeneous outwards. Outwards heterogeneous in the

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1 The mean values and values of the standard deviation of the original table by Borkenau and Ostendorf (in print), were, after consultation with Dr. Fritz Ostendorf, converted in the manner that they were divided by 12 (average number of answered items per scale). The conversion was done in order to improve the comparability of both records, as the data from this study were presented in the "old" form (divided by 12).
sense, that it is significantly different from a reference population. Consequently, one goal being pursued with the segmentation of markets is, at least, partially fulfilled: the formation of an inwards homogeneous and outwards heterogeneous segment. Partially because it can be stated that the probands in relation to a relevant behaviour (intense freestyle snowboarding), and their personality profile are homogeneous. Regarding the expectations of benefits of the participants this can not be claimed on the basis of this study. Additional studies would be needed, using a tool that measures the expected benefits associated with the acquisition of certain products or services. Therefore, the authors refer to the briefly mentioned Benefit Segmentation and its instruments (Haley 1968, Wind 1973, Dubois et al., 2007). Nevertheless, this study can be interpreted as a first step that could be pursued through further investigations by the target group.

5.2 Implications of the case study for the tourism product development

Another aim of this work was to draw conclusions about possible implications for the tourism product development. The results showed that the probands’ willingness is very high to be involved in the product development process of a sponsor. This also can be said for the willingness to be involved in the product development process of destinations because a total of 90% of the participants said that they could imagine disclosing their ideas. Besides, a need for improvement was seen in the areas which are directly connected with the sport, namely parks, contests and events. The result of the evaluation of the open question provided a similar picture. The allocation of credits to the categories puts fun parks in the first place, followed by contests and events. Statements such as “no alibi parks”, or demands, to look about the fun parks of the United States suggest that this is an area with an enormous need for action at the individual destinations. Moreover, there are potential “heavy users” available for these parks, who would like to offer their help in working out new concepts. The present study has clearly proven the existing willingness of the people. It is up to the destination management to use this potential. If destinations are seriously interested in the target group of freestyle snowboarders than it is suggested to respond to their need in a much better way. The existing offer obviously seems to have major deficiencies, starting with accommodation facilities, which are not aimed at the needs of the youth, existing or lack of leisure facilities and finally the fun parks themselves. As already mentioned, there seems to be an enormous need for improvement in this area. If a destination decides to offer a fun park, the target group surveyed should definitely be involved in the design of such a place. Moreover, it is not enough to create a fun park, the continuous care is an absolute must, as the safety of the snowboarders is directly linked to it. One can assume that the less experienced snowboarders, for example, tourists who are only on the board for two weeks a year, depend much more on well-kept parks than the surveyed target group of this study.

This study can not show a connection between the involvement in the product development process and the personality traits of the probands. No such connections could be verified, as no causal connection can be drawn between the positive willingness to be involved in the product development process and the present personality profile. For this, people lacking the kind of willingness would have to be specifically called upon, to compare their personality profile to a group of people who is predominantly willing to do so.

Finally, it has to be indicated that the conclusions and interpretations of the results of this study have only very limited validity based on the very small sample size. It is critical to state that due to this analysis – with reservations to the before mentioned restrictions – it can be shown, that a market segment could be depicted which exists for a practitioner anyway without the need of a large scale argumentation like this work. It is recommended to repeat the personality investigation of the target group in the winter to question more probands because at that time more sponsored freestyle-snowboarders can be addressed. Imaginable is a survey of the whole sponsored, German-speaking freestyle scene throughout the Alpine region to generate representative results for this market segment. The aforementioned enhancement of the investigation instruments by a tool that allows to collect the benefit expectations of the probands is also recommended.
6. REFERENCES


