

# Customer Satisfaction with Alpine Ski Areas: The Moderating Effects of Personal, Situational, and Product Factors

KURT MATZLER, JOHANN FÜLLER, BIRGIT RENZL, STEPHAN HERTING, AND SEBASTIAN SPÄTH

---

*In highly competitive markets, customer satisfaction is a key driver of performance, making its measurement and management crucial. Most studies on customer satisfaction take an aggregate standpoint and do not consider segment-specific differences in attribute importance. In this article, the authors report on customer satisfaction with alpine ski resorts. They hypothesize that personal, situational, and product factors moderate the relationship between attribute performance and overall satisfaction. The results show that these factors indeed influence the attribute–performance–satisfaction relationship. Theoretical and managerial implications of these findings are discussed.*

**Keywords:** *tourism management; customer satisfaction; moderator analysis; winter tourism*

---

Winter tourism is of great economic importance to eastern Alpine regions in Europe (Pechlaner and Tschurtschenthaler 2003). In Tyrol, for instance, the Alpine region's most intense tourist destination, winter tourism has steadily increased over the past two decades, reaching its peak with 24.7 million overnight stays in 2006, whereas total overnight stays in the summer season have fallen in the same period (from 19.4 million overnights stays in 1985, to 16.9 million in 2004; Landesstatistik Tirol, 2007). Winter sports in general and alpine skiing in particular are among the main travel motives of winter tourists in the Alps (e.g., Dolnicar and Leisch 2003; Franch, Martini, and Tommasini 2003; Matzler, Pechlaner, and Hattenberger 2004; Matzler and Siller 2004; Richards 1996; Weiermair and Fuchs 1999; Williams and Fidgeon 2000). However, alpine skiing has entered its mature phase (Pechlaner and Tschurtschenthaler 2003), and in some countries, the number of skiers has decreased (Williams and Fidgeon 2000). More and more winters with little snow and the rapid growth of long-distance travel (Pechlaner and Tschurtschenthaler 2003) increase competition between Alpine ski areas.

In this competitive market environment, destination success depends strongly on a thorough analysis of tourist motivation, customer satisfaction, and loyalty (Yoon and Uysal 2005). Indeed, there is an abundance of literature on measuring customer satisfaction with destinations (e.g., Kozak and Rimmington 2000), single tourism products (e.g., Sirakaya, Petrick, and Choi 2004), or hospitality services (e.g., Matzler and Pechlaner 2001). The rationale behind this research is the belief that customer satisfaction and loyalty are key drivers of financial performance. Indeed, a number of researchers have

been studying the processes by which delivering high-quality goods and services increases profitability through customer satisfaction and found that customer satisfaction is related to positive word of mouth, cross-selling or upgrading, repurchase intentions, and reduced price sensitivity (e.g., Baker and Crompton 2000; Reichheld and Sasser 1990; Rust, Zahorik, and Kleiningham 1995; Stahl, Matzler, and Hinterhuber 2003). Several cross-sectional studies have found that in highly competitive environments, satisfaction is strongly related to profitability (Anderson, Fornell, and Lehmann 1994) and shareholder value (Anderson, Fornell, and Mazvanchery 2004; Matzler et al. 2005b).

Thus, the measurement and management of customer satisfaction is crucial. Tourism managers need to identify the drivers of customer satisfaction, measure satisfaction levels, and derive the right strategies to increase satisfaction (Fuchs 2004). Many ski resorts monitor customer satisfaction regularly using on-mountain surveys (Perdue 2002). In this article, it is argued that satisfaction attribute importance may vary systematically on the basis of moderating variables, including personal characteristics of the consumer, situation-specific characteristics, and product-related characteristics. Attribute importance measures that do not consider such differences may lead tourism managers to erroneously conclude that some attributes are not relevant at all or that others are of central importance to the customer.

---

*The authors thank Michael Partel, CEO of Mountain Management, for providing the data for this study and Markus Wirtz, Albert-Ludwigs University of Freiburg, for his valuable comments on previous versions of this article. Kurt Matzler is a professor at the Department of Strategic Management, Marketing and Tourism, Innsbruck University School of Management and a partner of Innovative Management Partner, an international consulting firm with its headquarters in Innsbruck, Austria. Johann Füller is an assistant professor at the Department of Strategic Management, Marketing and Tourism, Innsbruck University School of Management, and CEO of the HYVE AG. Birgit Renzl is an associate professor at the Department of Strategic Management, Marketing and Tourism, Innsbruck University School of Management. Stephan Herting has a PhD in business administration from University of St. Gallen, Switzerland, and his current research interests are communities of practice and open source software development from an organizational perspective. Sebastian Späth has a PhD in business administration from the University of St. Gallen, Switzerland, and conducts research in the areas of network innovation and open business models as a lecturer and researcher at the ETH Zurich, Switzerland.*

*Journal of Travel Research*, Vol. XX, Month XXXX, xx-xx  
DOI: 10.1177/0047287507312401  
© 2008 Sage Publications

## THE SATISFACTION–PROFITABILITY LINK

In the attempt to increase financial performance through customer satisfaction, companies often use a logic described by Anderson and Mittal (2000) as the satisfaction–profit chain: an increase of (a) attribute performance should lead to (b) higher customer satisfaction, and higher satisfaction (c) increases customers' loyalty and loyalty (d) drives profitability. Although many studies have shown that satisfaction drives profitability (e.g., Anderson, Fornell, and Lehmann 1994; Anderson, Fornell, and Mazvancheryl 2004; Matzler et al. 2005b; Reichheld and Sasser 1990), the link between satisfaction, loyalty and financial outcomes is not as straightforward as many argue (Reinartz and Kumar 2000). Numerous moderating variables operate on the single links of this chain. First, not every loyal customer is a profitable customer (Stahl, Matzler, and Hinterhuber 2003; Zeithaml 2000). Second, higher satisfaction does not automatically imply higher loyalty. This link is moderated by variables such as switching costs (e.g., Burnham, Frels, and Mahajan, 2003), personal characteristics (e.g., Homburg and Giering 2001), situational characteristics (e.g., Evanschitzky and Wunderlich 2006), or relationship characteristics (e.g., Homburg, Giering, and Menon 2003). Finally, increasing attribute performance may not always lead to increasing overall customer satisfaction. Some attributes are more important than others and attribute importance differs between customers or market segments.

As has already been shown by Bryant and Cha (1996) using data from the American Customer Satisfaction Index, some customers can be harder to satisfy than others. For instance, they found that in general, female customers show markedly higher satisfaction than male customers do, older customers are more satisfied than younger ones are, and socioeconomic status is negatively related to satisfaction scores.

Whereas in recent literature, the loyalty–profitability link has received much attention (see, e.g., the literature on customer profitability or customer lifetime value, such as the special issue on “Managing Customers for Value,” of the *Journal of Service Research* 2006) and the satisfaction–loyalty link has been extensively researched, little attention has been paid to moderating effects on the attribute–performance–satisfaction relationship. Despite marketing's long implementation of segmentation as a means to address differing needs of customers or customer groups by tailoring offers to their expectations to increase satisfaction, surprisingly little research exists on individual differences in the customers' response to attribute performance and satisfaction.

This study focuses on this very first link of the satisfaction–profit chain. We aim to show theoretically and empirically that customers differ systematically with regard to their response to attribute performance and satisfaction. More specifically, we demonstrate that personal characteristics (gender and age), situation-specific factors (1-day visitors vs. repeat visitors), and product-related attributes (degree of difficulty of a slope) moderate the performance–satisfaction relationship. The contribution of this study is threefold. First, we develop a reliable and valid scale to measure satisfaction with ski areas. Second, we extensively review the literature on moderating variables on the attribute–performance–satisfaction relationship and on the satisfaction–loyalty–relationship and empirically test the moderating effect of four variables that are central to ski

area marketing. The results illuminate important links in the satisfaction–profitability relationship and help explain when and why high performance does not lead to higher profitability. Third, we direct the researchers' and (more importantly) the practitioners' attention to a number of variables that are responsible for the effectiveness of attribute performance increases on customers' responses. The approach and the results should help tourism marketers to better segment their markets, identify the satisfaction drivers of each segment, and better predict the response to offerings and marketing initiatives.

## MODERATING VARIABLES IN THE PERFORMANCE–SATISFACTION LINK

The question whether and why satisfaction drives profitability has been the subject of many studies. The empirical observation that high satisfaction does not guarantee high profits has led to numerous studies aiming to identify moderators of this relationship (see table 1). Most studies focused on the relationship between satisfaction and loyalty has identified two major groups of moderating variables: (a) personal characteristics (e.g., age, gender, income, and involvement) and (b) situational characteristics (e.g., relational characteristics, switching costs, attractiveness of alternative, critical incident recovery). The empirical findings are fairly univocal across products and services (see table 1).

Whereas there is abundant research into the determinants of satisfaction judgments on an aggregate perspective, relatively little research exists on moderating variables of the performance–satisfaction link (Wu et al. 2006). This is more than surprising, as some studies have shown that the salience or impact of the single determinants of satisfaction varies between customer groups (see table 1).

In theory and practice of customer satisfaction measurement, multiattribute models are widely used (Weiermair and Fuchs 1999). Customers are more likely to evaluate products and services at an attribute level rather than at an overall level. When customers are satisfied or dissatisfied with a product or service, they may refer to more specific attributes such as friendliness of employees, and so forth. Customers can be satisfied with one attribute and dissatisfied with another one. Therefore, an overall measure of satisfaction on an aggregate level cannot reflect these differences on the attribute level. Finally, attribute level and overall satisfaction seem to be qualitatively different constructs: “It may be that global measures capture other aspects of the use occasion,” and “global consumer satisfaction responses may mask more specific product issues” (Oliva, Oliver, and Bearden 1995, p. 128). Hence, attribute-based measures of satisfaction afford researchers and managers a higher level of specificity and diagnostic value (Mittal, Ross, and Baldasare 1998).

To assess the impact of single quality or satisfaction dimensions on overall customer satisfaction, customers' self-stated importance (e.g., rating scales, constant-sum method) or empirically derived importance (e.g., regression weights of the path satisfaction dimension → overall satisfaction) are used (e.g., Oliver 1997), resulting in strategy recommendations on which attributes the manager should focus to increase satisfaction by combining importance and performance of the attributes. The basic idea is to focus

**TABLE 1**  
**IMPORTANT STUDIES ON MODERATORS OF THE ANTECEDENTS OF**  
**SATISFACTION–SATISFACTION–LOYALTY RELATIONSHIP**

Authors	Sample	Moderating Variables
<b>Moderators of the satisfaction–loyalty/repurchase relationship</b>		
(Bloemer and Kasper 1995)	598 buyers of blank audio cassettes	Amount of elaboration (involvement and deliberation)
(Bolton 1998)	650 customers of cell phone providers	Length of experience
(Garbarino and Johnson 1999)	173 subscribers, 91 occasional subscribers, and 80 individual theater ticket buyers	Relational characteristics (low-relational customers vs. high-relational customers)
(Jones, Mothersbaugh, and Beatty 2000)	228 bank customers and 206 hairstylist or barber customers	Interpersonal relationships, switching costs, attractiveness of alternatives
(Bowman and Narayandas 2001)	1,715 customers of seven manufacturers of frequently purchased consumer goods	High loyalty, heavy user, type of contact (first asked retailer to solve a problem), type of contact (inquiry vs. complaint)
(Homburg and Giering 2001)	943 customers of a car manufacturer	Income, involvement, gender, age, variety seeking
(Mittal and Kamakura 2001)	100,040 automotive customers	Sex, education, age, children
(Homburg, Giering, and Menon 2003)	981 purchasing managers in the chemical, mechanical, and electrical industry	Trust, information exchange, joint working, supplier flexibility, age of the relationship
(Ranaweera, McDougall, and Bansal 2005)	Online customer behavior (conceptual model)	Technology readiness, flow, demographics, trust disposition, risk perceptions
(Seiders et al. 2005)	276 customers of an upscale specialty retail chain (women's apparel and furnishing)	Involvement, income, relationship age, relationship program participation, convenience, convenience × competition
(Evanschitzky and Wunderlich 2006)	888 customers of a Do-It-Yourself chain store	Personal characteristics: Age, income, and education Situational characteristics: Expertise, price orientation, critical incident recovery, loyalty card membership
<b>Moderators of the antecedents of satisfaction–satisfaction relationship</b>		
(Jedidi, Japgal, and DeSarbo 1997)	1,564 customers of a direct marketing firm	Three a posteriori identified segments vary in terms of the importance they attach to the various dimensions of satisfaction
(Krishnan 1999)	1,280 customers of financial services	Four segments that differed in terms of the impact of service delivery factors across segments (i.e., asset size, the proportion of these assets that are invested with the firm, and trading behavior)
(Kopalle and Lehman 2001)	Study 1: car tires (60 MBA students) Study 2: 200 buyers of car tires	Disconfirmation sensitivity and perfectionism influence the level of expectations
(Bowman and Narayandas 2001)	1,715 customers of seven manufacturers of frequently purchased consumer goods	High loyalty, heavy user, type of contact (first asked retailer to solve a problem), type of contact (inquiry vs. complaint)
(Kozak 2001)	1,872 British and German tourists visiting Mallorca and Turkey	Nationality
(Ranaweera, McDougall, and Bansal 2005)	Online customer behavior (conceptual model)	Technology readiness, flow, demographics, involvement
(Matzler et al. 2005a)	1,042 skiing tourists	Lifestyle
(Matzler, Renzl, and Rothenberger 2006)	1,555 hotel guests	Nationality
(Wu et al. 2006)	314 visitors of a trade show	Four segments, derived based on the differential weightings of underlying drivers

improvement efforts on attributes that are important to the customer and where performance is low. Most reported studies on customer satisfaction and its drivers are based on an aggregate market level instead on a segment level (Wu et al. 2006).

Such an aggregate market perspective, however, neglects individual differences in expectations, product evaluations, and responses to them. The dominant model in customer satisfaction research is the expectation and disconfirmation paradigm

(Oliver 1980), which also forms the theoretical foundation of SERVQUAL (Parasuraman, Berry, and Zeithaml 1991; Parasuraman, Zeithaml, and Berry 1985). It assumes that satisfaction is the outcome of a comparison between expectations and perceived performance of a product or service, whereby expectations are influenced by various factors such as needs, previous experience, and word-of-mouth or commercial communication. Hence, customers or market segments can differ

greatly in their expectations and attach different importance to the single satisfaction dimensions. Indeed, several studies found that the antecedents of satisfaction differ between single-market segments.

Using survey data of a sample of 1,564 customers of a direct marketing firm, Jedidi, Japgal, and DeSarbo (1997) identified segments that vary in terms of the importance they attach to the various dimensions of satisfaction. They also show that the aggregate analysis masks differences and can be misleading. Krishnan (1999) found that financial services customers differ in the importance they attach to different customer delivery factors (e.g., quality attributes of designing and delivering services) due to differences in asset size, the proportion of these assets that are invested with the firm, and trading behavior. Kopalle and Lehmann (2001) identified a segment of disconfirmation-sensitive customers, who are either more satisfied or dissatisfied if a service performs either better or worse than expected, and customers who are perfectionists and therefore harder to satisfy. As has been found by Bowman and Narayandas (2001), high loyalty, heavy use, and type of contact (e.g., first one to ask retailer to solve problem, inquiry vs. complaint) have an impact on the weight of perceived quality, disconfirmation, and perceived fairness as determinants of overall satisfaction with a manufacturer of frequently purchased consumer goods. Using a latent structure factor analytic approach, Wu et al. (2006) identified four segments based on the differential weightings of underlying drivers that attached different importance to the single drivers of satisfaction with a trade show.

In a tourism context, studying 1,872 British and German tourists visiting Mallorca and Turkey, Kozak (2001) found that tourist perceptions of a destination vary according to the country of origin. Matzler et al. (2005a) showed that the importance of the attributes of a ski area varies between lifestyle segments, and in their study of the hotel industry, Matzler, Renzl, and Rothenberger (2006) found a moderating effect of nationality on the importance of service dimensions in price satisfaction and service satisfaction formation.

These findings highlight the importance of analyzing moderating factors in the relationship between satisfaction dimensions and overall customer satisfaction, as they can strongly influence the importance of the single determinants of satisfaction. Relatively little systematic research exists on moderating effects of the link between the antecedents of satisfaction and satisfaction in general and in the tourism industry in particular. Appropriate customer satisfaction management decisions can only be made if the drivers of satisfaction are known. As they differ among customer segments, it is crucial to know what determines the importance of the single satisfaction drivers. Drawing on literature on moderating effects of the satisfaction–loyalty link and on findings from previous studies on moderating effects in the relationship between the antecedents of satisfaction and overall customer satisfaction, we focus on three important types of such moderators that have specific relevance as market segmentation variables in destination marketing: (a) the role of personal characteristics (age, gender), (b) situation-specific characteristics (1-day visitors vs. repeat visitors), (c) and product(destination)-related factors (level of difficulty of a ski area).

### Age and Gender as Moderators

The role of gender and age as a determinant of consumer behavior has long been the focus of consumer research (e.g.,

Engel, Blackwell, and Miniard 1995). Theoretical foundations for gender differences in consumer behavior can be found in evolutionary psychology (Saad and Gill 2000) and in social role theory (Archer 1996). Evolutionary psychology argues that gender differences in consumption-related behavior can be traced back to ultimate psychological underpinnings (i.e., epigenetic rules, evolved psychological mechanisms, and inclusive fitness). Although applications in marketing and consumer behavior are relatively rare (Bagozzi and Natarajan 2000), the theory offers rich explanations for observable gender-related behavior in consumption situations (Saad and Gill 2000). Men and women, for instance, differ in their concern for physical attractiveness, striving for financial resources and risk-seeking, and response to sexual stimuli (Saad and Gill 2000). These fundamental differences are also expected to guide consumption-related behavior. Social role theory assumes that men and women are socialized to play different roles in society. There are two theories in social role theory that explain differences in consumption-related behavior. First, based on the historical division of labor among women and men, it is concluded that men are more assertive and instrumental and women more communal (nurturing and yielding) in their behavior and that these traits also influence consumption patterns. Empirical studies in marketing found that women's purchasing behavior is indeed more strongly influenced by their evaluation of personal interaction processes, with a higher involvement in purchasing activities (Slama and Tashlian 1985) and more attention paid to consulting services of the sales personnel (Gilbert and Warren 1995). In customer satisfaction research, some studies have found that satisfaction ratings vary on the basis of gender (e.g., Bryant and Cha 1996; Peterson and Wilson 1992). Using data from the American Customer Satisfaction Index (ACSI), Bryant and Cha (1996) found that women in general are more satisfied than men with all the product and service categories covered by the ACSI, which is attributed to their higher involvement and resulting shopping experience and competence. Mittal and Kamakura (2001) observed that women are more satisfied with their automobile than men are. Moreover, they also found that attribute importance differs based on consumer characteristics. Homburg and Giering (2001) found that gender also moderates the satisfaction–loyalty relationship. Hence, based on these theoretical arguments and empirical findings, it can be concluded that gender moderates the relationship between the single satisfaction factors and overall customer satisfaction.

Age can be expected to be another moderator variable. There are several theories that can be applied to explain age-related differences in the context of customer satisfaction and loyalty (Evanschitzky and Wunderlich 2006). First, customers' needs can change with age. Hence, older customers will consider other factors to be more important than younger customers will. Second, older customer may have more consumption experiences than younger customers and may have another comparison standard regarding product or service evaluation. Third, older customers process less information (Gilly and Zeithaml 1985) and rely more strongly on heuristic or schema-based forms of processing (Wilkes 1992). Several studies found that age is a moderator of the satisfaction–loyalty relationship (Evanschitzky and Wunderlich 2006; Homburg and Giering 2001). Bryant and Cha (1996) found that customer satisfaction ratings vary systematically on the basis of age, heightening sharply with older age. Hence, it can be expected that age plays a significant role

in the customer satisfaction formation and moderates the relationship between the satisfaction factors and overall customer satisfaction.

### Type of Visitor (1-Day vs. Repeat Visitors)

Studies on the relationship between satisfaction and loyalty have shown that relationship characteristics as situational variables have a moderating effect (Bolton 1998; Garbarino and Johnson 1999). In general, customers weigh new information or evaluation of satisfaction episodes less strongly when they have more experience (Bolton 1998). Garbarino and Johnson (1999) have shown that the importance of satisfaction, trust, and commitment as predictors of future intentions of theater visitors vary depending on the nature of the relationship (individual ticket buyers and occasional subscribers vs. consistent subscribers). Petrick (2004) found differences in the antecedents of repurchase intentions for first timers and repeaters of cruise-line passengers. Research on customer satisfaction also indicates that when consumption occurs in multiple episodes over time, attribute importance can shift (Mittal, Kumar, and Tsiros 1999). This is attributed to the fact that consumption goals can change during the consumption experience, or consumers can perceive performance variability over time. Perdue (2002) found that for most Colorado ski resorts, day visitors were largely locals, whereas overnight visitors often traveled great distances, resulting in different spending patterns. Therefore, in the context of ski areas, it can be expected that first-time or 1-day tourists have other priorities than repeat customers of the destination.

### Product-Related Moderators (Level of Difficulty of Ski Resort)

Finally, we argue that product-related factors can moderate the relationship between satisfaction dimensions and overall customer satisfaction. In the case of ski areas, some of the central characteristics are the landscape, the altitude, and the steepness of the mountainside. These characteristics directly influence the product characteristic in terms of slope difficulty. Some ski areas are characterized by either very steep or rather flat slopes. Slopes can also differ significantly in their length. As these characteristics require different skiing skills, we assume that “easy-level” ski areas attract other skiers than “difficult-level” ski areas. Indeed, previous studies have shown that destination choice appears to be linked to skill level and the need to develop and expand skiing skills and that advanced skiers select their ski area more on the basis of skiing-related factors (Richards 1996). Furthermore, visitors of difficult ski areas are likely to be experts and heavy users, as these ski areas require a certain level of skiing skill. The skill level could also be regarded as a personal factor. In this case, however, it is the level of difficulty of a ski resort that attracts skiers with different skill levels and therefore is regarded as a product factor. Previous studies have shown that user type (light vs. heavy users) influences the impact of certain characteristics of the offer (e.g., explanations, interaction, procedures) on overall satisfaction (Bowman and Narayandas 2001). Expert users have more knowledge of the product category and of alternative choice (Evanschitzky and Wunderlich 2006) and might therefore rely on and respond to other attributes than light users.

Thus, we expect attribute importance to vary according to the type of ski area in terms of level of difficulty.

In the following sections, we report a large-scale empirical study that measures satisfaction with Alpine ski areas and test the moderating effect of the factors.

## THE STUDY

To measure customer satisfaction with Alpine ski areas and to test the effects of the moderator variables, a 30-item questionnaire was developed to measure satisfaction on various aspects of the ski area (slopes, restaurants, ski lifts, employees, etc.). Questions used were developed in cooperation with tourism experts from the different regions and tested in workshops and interviews by different marketing scholars. The standardized questionnaire measured satisfaction with the single items on a scale from 1 (*very unsatisfied*) to 10 (*very satisfied*). Overall, customer satisfaction with the ski area was measured with a single item on the same 10-point scale. The self-administered questionnaire was distributed to skiers who agreed to participate in the study at the entrance of the ski lift. The completed questionnaire was collected at the exit of the ski lift by the employees. About 40% of the skiers fully completed the questionnaire. Due to the large mass and the data collection through the lift employees, who were also busy with assisting skiers, the exact return rate could not be assessed. Overall, satisfaction evaluations on 51 ski areas in Austria, Germany, Italy, and Switzerland were obtained. Many respondents omitted items where they lacked experience, such as items regarding ski schools and ski rental. Therefore, items excessively lacking variables were excluded. Overall 14,861 fully completed and usable questionnaires were available for data analysis. Table 2 reports the demographics of the sample.

In the first step of data analysis, an exploratory factor analysis (principal components and varimax rotation) was used to identify the underlying dimensions and to purify the satisfaction scales. The five factors extracted in this analysis explain 60.7% of the variance (6 iterations, Kaiser-Meyer-Olkin = .95, Bartlett's test of sphericity significance = .000; the five factors were quality and safety of slopes, restaurant and bar, variety of slopes and sport facilities, ski lifts, and employees).

Then a confirmatory factor analysis was computed and the scale was purified. Items with reliability below 0.4 were deleted, resulting in 19 items measuring the five factors. The causal relationship between the five satisfaction factors and overall satisfaction was measured using structural equation modeling with AMOS 5.0.

In the following sections, we begin by reporting the main effects of different dimensions of the ski area on overall customer satisfaction and then present the impact of the moderators.

### Main Effect Model

Figure 1 illustrates fit indices, standardized path coefficients, and explained variance. The fit indices show excellent model fit: The root mean squared error of approximation is .041 and therefore below the general accepted threshold of .05; the goodness-of-fit index is .975, the adjusted goodness-of-fit index is .965, the Tucker-Lewis index is .971, and the comparative fit index is .977. These indices all exceed the

**TABLE 2**  
**DEMOGRAPHICS OF THE SAMPLE**

Demographics	Percentage
Sex	
Male	59.2
Female	40.8
Age	
Up to 19 years	21.0
20 to 34 years	27.1
35 to 49 years	34.1
50 to 64 years	15.6
Over 65 years	2.2
Type of visit	
First time	30.5
Repeat visitor	69.5
Type of sport	
Alpine skiing	81.7
Snowboard	16.0
Other	2.3

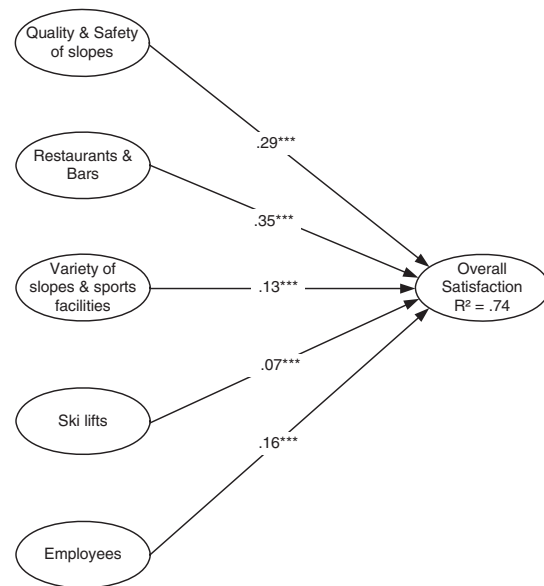
threshold of .90, indicating that the model fits the data reasonably well.

In the next stage, reliability and validity of the measures were tested calculating the composite reliability of the constructs, the average variance extracted (Fornell and Larcker 1981), and the Fornell–Larcker Ratio to test discriminant validity. The results are displayed in table 2, showing very good psychometric properties of the measures. Composite reliability, as a measure of internal consistency of the construct indicators, depicting the degree to which they indicate the common latent construct (Hair et al. 1998), exceeds or is close to the commonly used threshold of .70 for each construct. Average variance extracted, which measures the overall amount of variance in the indicators accounted for by the latent construct (Hair et al. 1998), is equal to or above .50 for each construct, indicating that the indicators are truly representative of the latent construct. Fornell and Larcker (1981) assert that average variance shared between a construct and its measures should be greater than the variance shared between the constructs and other constructs in the model (which is the case when the Fornell–Larcker Ratio is below 1). As can be seen from table 3, the ratio between the variance shared among the constructs in the model is lower than the average variance shared between a construct and its measures. During multigroup analysis, reliabilities of scales between groups have been checked. No significant differences have been identified.

After testing the main effects (figure 1), the moderator effects were estimated. Moderator effects can be evaluated using moderated regression analysis and multiple-group analysis, with multiple-group analysis considered to be a more appropriate method where relationships among latent constructs are concerned (Homburg and Giering 2001). For the moderator variables sex, type of visitor (1-day vs. repeat), and the degree of difficulty (easy or difficult), two subsamples were built; for the moderator age, three subsamples were built. The age groups were built as follows: 12-34 (young), 35-49 (middle), 50 and older (old).

Scanning the data showed that the distribution of the moderator variables in our online survey was not significantly different from the distribution of the skiers in the ski

**FIGURE 1**  
**DRIVERS OF CUSTOMER SATISFACTION:**  
**THE MAIN EFFECT MODEL**



Note:  $\chi^2 = 3,610.135$ ,  $DF = 137$ ,  $p = .000$   $\chi^2/DF = 26.351$ ,  $AGFI = .965$ ,  $GFI = .975$ ,  $CFI = .977$ ,  $TLI = .971$ ,  $RMSEA = .041$   
\*\*\* $p < .001$

resorts (derived from expert discussions, as exact data were not available). Furthermore, profiles of survey participants, drawn in the prize competition and who have been contacted, matched with their profile on the online questionnaire.

The degree of difficulty of the ski area was measured through the number of kilometers of slopes that are classified according to the officially available classification system of blue (easy level), red (intermediate level), and black (difficult level) slopes. For each ski area, we calculated the percentage of easy, intermediate, and difficult slopes. A ski area was classified as “difficult” when one of the following two conditions were met: First, when more than 20% of the kilometers of the slopes of a ski area were classified as difficult, or second, when more kilometers of the slopes were classified as difficult than as easy. Reliable information on the difficulty and lengths of slopes were not available for all ski areas and were therefore not all included in this analysis. Furthermore, due to our classification procedure, ski areas that were primarily determined as intermediate were not included. Thus, we arrived at  $N = 6,720$  for easy ski areas and  $N = 2,912$  for difficult ski areas.

### Test of Moderating Effects

The moderating effects of variables can be tested with the multiple group analysis of AMOS. Multiple group analysis compares subsamples (e.g., high vs. low values of the moderator variable age). Two models are created, one model assumes that the effect of the satisfaction dimension is equal across groups; the second model allows this parameter to vary across groups. Then, the null hypothesis is tested. If the more general model fits the data significantly

**TABLE 3**  
**PSYCHOMETRIC PROPERTIES OF THE SCALE**

Construct	Item	Indicator Loading	Composite Reliability	Average Variance Extracted	Fornell–Larcker Ratio
Quality and safety of slopes	1. Quality of slopes	0.75	0.78	0.54	0.78
	2. Conditions of snow	0.77			
	3. Safety of slopes	0.7			
Restaurant and bar	1. Seating capacity	0.68	0.83	0.56	0.78
	2. Atmosphere	0.72			
	3. Quality of food	0.85			
	4. Variety of food and drinks	0.73			
Variety of slopes and sport facilities	1. Permanent race slopes	0.71	0.84	0.5	0.86
	2. Entertainment in area	0.66			
	3. Additional sport facilities	0.74			
	4. Mogul slopes	0.69			
	5. Late-night activities (night skiing, etc.)	0.74			
Ski lifts	1. Waiting times at cash desk	0.68	0.67	0.5	0.79
	2. Waiting times at ski lift	0.87			
Employees	1. Appearance of employees	0.88	0.92	0.74	0.59
	2. Friendliness of employees	0.88			
	3. Competence of employees	0.79			
	4. Helpfulness	0.84			

better (using the  $\chi^2$  difference) than the restricted model that imposes equality constraints on the paths, the variable in question moderates the effect of the satisfaction dimension on overall satisfaction. More specifically, to test the effect of moderators, models that are different only with respect to the effect of one satisfaction dimension on overall satisfaction were compared (also see Homburg and Giering 2001). One model restricts this parameter to be equal across groups. The more general model allows this parameter to vary across groups. As these are nested models with the general model having one degree of freedom less than the restricted model, the  $\chi^2$  value will always be lower for the general model than for the restricted model. If  $\chi^2$  improves significantly when moving from the restricted to the more general model, the satisfaction dimension has a differential effect on overall satisfaction and can be seen as a moderator. Significance is assessed on the basis of the  $\chi^2$  difference between the models with the use of a  $\chi^2$  distribution with one degree of freedom.

In the first step of the moderator analysis, an overall  $\chi^2$  difference test for each of the moderator variables was conducted. Two models—one that imposes equality constraints on all five satisfaction dimensions across the subgroups and a general model that allows all of these parameters to vary freely across the subgroups—were compared. The results are shown in table 4, the null hypothesis that assumes that the moderator variable does not have any effect on the relationship between the satisfaction dimensions and overall customer satisfaction can be rejected, as the  $\Delta\chi^2$  for all parameters set equal across subgroups is significant (with the exception of the subgroups “Young–Old” and “Middle–Old”). In the case of age as a moderator, it was found that a simultaneous comparison of the three age groups yielded a significant  $\chi^2$  difference, indicating that age is a moderator. A pairwise comparison of the three subgroups, however, has shown that only in the subgroup “Young versus middle” a significant difference was found. Table 4 also details the  $\chi^2$  difference for each single satisfaction dimension.

Gender plays a moderating role in two satisfaction dimensions. As table 3 shows, all satisfaction dimensions have a significant impact on overall satisfaction. However, data show that for men, quality and safety of slopes is more important ( $\Delta\chi^2 = 6.272^{**}$ ) than for women; in contrast, women pay more attention to restaurants and bars than men do.

Age does not have a very strong moderating effect on the relationship between the single satisfaction dimensions and overall satisfaction. Data show that for the youngest age group (12–34), quality and safety of slopes is not important; however, it becomes more important for older people ( $\Delta\chi^2 = 9.127^{**}$ ). There is also a small tendency ( $\Delta\chi^2 = 4.828, p = .08$ ) for younger skiers to attach more weight to restaurants and bars. In the pairwise comparison, it was also found that the relative importance of employees and waiting times at ski lifts increase when the youngest and the middle age group are compared. No significant differences are found between the middle and oldest age group regarding this satisfaction dimension.

Repeat visitors seem to pay more attention to the variety of slopes ( $\Delta\chi^2 = 4.168^*$ ) and less attention to restaurants and bars ( $\Delta\chi^2 = 3.793^*$ ) than 1-day visitors.

Of all the moderators included in this study, the degree of difficulty of the ski area plays the most important role ( $\Delta\chi^2$  for all parameters set equal across subgroups,  $\Delta DF = 5: 39.275^{***}$ ).

The difficulty of the ski area influences the impact of a variety of slopes and alternative sports facilities, ski lifts, and employees on overall customer satisfaction. It seems that ski areas of different degrees of difficulty attract skiers that differ in the relative importance of satisfaction dimensions. For skiers in ski areas that are classified as difficult, the variety of slopes and alternative sports facilities is more important than for skiers in areas with easy slopes ( $\Delta\chi^2 = 4.040^*$ ). Waiting times at ski lifts becomes an insignificant predictor of overall satisfaction, and the role of employees diminishes in difficult ski areas. It seems that skiers of difficult areas are more interested in sport itself than in other dimensions of the offer (see figure 2).

**TABLE 4**  
**RESULTS OF MULTIPLE-GROUP ANALYSIS**

Gender		
Male Regression Coefficient ( <i>t</i> -Value)	Female Regression Coefficient ( <i>t</i> -Value)	Chi-Square Difference ( $\Delta$ DF = 1)
Slopes = .283 ( <i>t</i> = 15.924***)	.217 ( <i>t</i> = 10.877***)	$\Delta\chi^2 = 6.272^{**}$
Restaurant and bar = .334 ( <i>t</i> = 17.706***)	.387 ( <i>t</i> = 17.848***)	$\Delta\chi^2 = 3.538^*$
Variety = .098 ( <i>t</i> = 7.795***)	.070 ( <i>t</i> = 4.839***)	$\Delta\chi^2 = 2.187$
Ski lifts = .063 ( <i>t</i> = 4.392***)	.050 ( <i>t</i> = 2.989***)	$\Delta\chi^2 = 0.332$
Employees = .109 ( <i>t</i> = 9.120***)	.133 ( <i>t</i> = 9.736***)	$\Delta\chi^2 = 1.684$

Note:  $\Delta\chi^2$  for all parameters set equal across subgroups ( $\Delta$ DF = 5): 17.523\*\*  
\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

## Age

Young Regression Coefficient ( <i>t</i> -Value)	Middle Regression Coefficient ( <i>t</i> -Value)	Old Regression Coefficient ( <i>t</i> -Value)	Chi-Square Difference ( $\Delta$ DF = 2)
Slopes = .176 ( <i>t</i> = 5.400***)	.286 ( <i>t</i> = 18.161***)	.271 ( <i>t</i> = 7.691***)	$\Delta\chi^2 = 9.127^{**}$
Restaurant and bar = .411 ( <i>t</i> = 10.386***)	.323 ( <i>t</i> = 19.826***)	.363 ( <i>t</i> = 10.985***)	$\Delta\chi^2 = 4.828^\dagger$
Variety = .077 ( <i>t</i> = 3.099**)	.083 ( <i>t</i> = 7.364***)	.072 ( <i>t</i> = 3.307***)	$\Delta\chi^2 = 0.239$
Ski lifts = .035 ( <i>t</i> = 1.525)	.083 ( <i>t</i> = 5.879***)	.075 ( <i>t</i> = 2.456**)	$\Delta\chi^2 = 3.231$
Employees = .117 ( <i>t</i> = 5.215***)	.132 ( <i>t</i> = 12.412***)	.114 ( <i>t</i> = 5.037***)	$\Delta\chi^2 = 0.706$

Note:  $\Delta\chi^2$  for all parameters set equal across subgroups ( $\Delta$ DF = 10): 37.663\*\*\*  
\*\**p* < .01. \*\*\**p* < .001.  $^\dagger p$  < .10.

## Age

Young Regression Coefficient ( <i>t</i> -Value)	Old Regression Coefficient ( <i>t</i> -Value)	Chi-Square Difference ( $\Delta$ DF = 1)
Slope = .256 ( <i>t</i> = 13.358***)	.270 ( <i>t</i> = 7.676***)	$\Delta\chi^2 = 0.118$
Restaurant and bar = .368 ( <i>t</i> = 16.551***)	.367 ( <i>t</i> = 10.934***)	$\Delta\chi^2 = .000$
Variety = .098 ( <i>t</i> = 6.752***)	.073 ( <i>t</i> = 3.320***)	$\Delta\chi^2 = 0.962$
Ski lifts = .030 ( <i>t</i> = 1.868 $^\dagger$ )	.077 ( <i>t</i> = 2.452**)	$\Delta\chi^2 = 1.785$
Employees = .112 ( <i>t</i> = 8.362***)	.115 ( <i>t</i> = 5.018***)	$\Delta\chi^2 = 0.013$

Note:  $\Delta\chi^2$  for all parameters set equal across subgroups ( $\Delta$ DF = 5): 5.059  
\*\**p* < .01. \*\*\**p* < .001.  $^\dagger p$  < .10.

## Age

Young Regression Coefficient ( <i>t</i> -Value)	Middle Regression Coefficient ( <i>t</i> -Value)	Chi-Square Difference ( $\Delta$ DF = 1)
Slope = .256 ( <i>t</i> = 13.358***)	.266 ( <i>t</i> = 12.463***)	$\Delta\chi^2 = 0.135$
Restaurant and bar = .364 ( <i>t</i> = 16.634***)	.317 ( <i>t</i> = 14.985***)	$\Delta\chi^2 = 2.397$
Variety = .097 ( <i>t</i> = 6.753***)	.078 ( <i>t</i> = 5.431***)	$\Delta\chi^2 = 0.859$
Ski lifts = .030 ( <i>t</i> = 1.941 $^*$ )	.104 ( <i>t</i> = 5.883***)	$\Delta\chi^2 = 10.232^{***}$
Employees = .111 ( <i>t</i> = 8.364***)	.148 ( <i>t</i> = 10.495***)	$\Delta\chi^2 = 3.687^*$

Note:  $\Delta\chi^2$  for all parameters set equal across subgroups ( $\Delta$ DF = 5): 28.512\*\*\*  
\**p* < .05. \*\*\**p* < .001.

## Age

Middle Regression Coefficient ( <i>t</i> -Value)	Old Regression Coefficient ( <i>t</i> -Value)	Chi-Square Difference ( $\Delta$ DF = 1)
Slope = .266 ( <i>t</i> = 12.410***)	.269 ( <i>t</i> = 7.649***)	$\Delta\chi^2 = 0.006$
Restaurant and bar = .308 ( <i>t</i> = 14.995***)	.353 ( <i>t</i> = 10.978***)	$\Delta\chi^2 = 1.399$
Variety = .078 ( <i>t</i> = 5.370***)	.072 ( <i>t</i> = 3.292***)	$\Delta\chi^2 = 0.061$
Ski lifts = .107 ( <i>t</i> = 5.845***)	.075 ( <i>t</i> = 2.447**)	$\Delta\chi^2 = 0.766$
Employees = .146 ( <i>t</i> = 10.414***)	.113 ( <i>t</i> = 5.023***)	$\Delta\chi^2 = 1.523$

Note:  $\Delta\chi^2$  for all parameters set equal across subgroups ( $\Delta$ DF = 5): 4.819  
\*\**p* < .01. \*\*\**p* < .001.



**TABLE 4 (continued)**

1-Day Visitors Versus Repeat Visitors		
1-Day Visitors Regression Coefficient (t-Value)	Repeat Visitors Regression Coefficient (t-Value)	Chi-Square Difference ( $\Delta DF = 1$ )
Slopes = .223 ( $t = 7.670^{***}$ )	.253 ( $t = 7.104^{***}$ )	$\Delta\chi^2 = 0.447$
Restaurant and bar = .409 ( $t = 11.722^{***}$ )	.318 ( $t = 10.055^{***}$ )	$\Delta\chi^2 = 3.793^*$
Variety = .051 ( $t = 2.122^*$ )	.118 ( $t = 5.297^{***}$ )	$\Delta\chi^2 = 4.168^*$
Ski lifts = .105 ( $t = 3.927^{***}$ )	.073 ( $t = 2.415^*$ )	$\Delta\chi^2 = 0.625$
Employees = .128 ( $t = 5.459^{***}$ )	.101 ( $t = 5.432^{***}$ )	$\Delta\chi^2 = 0.798$

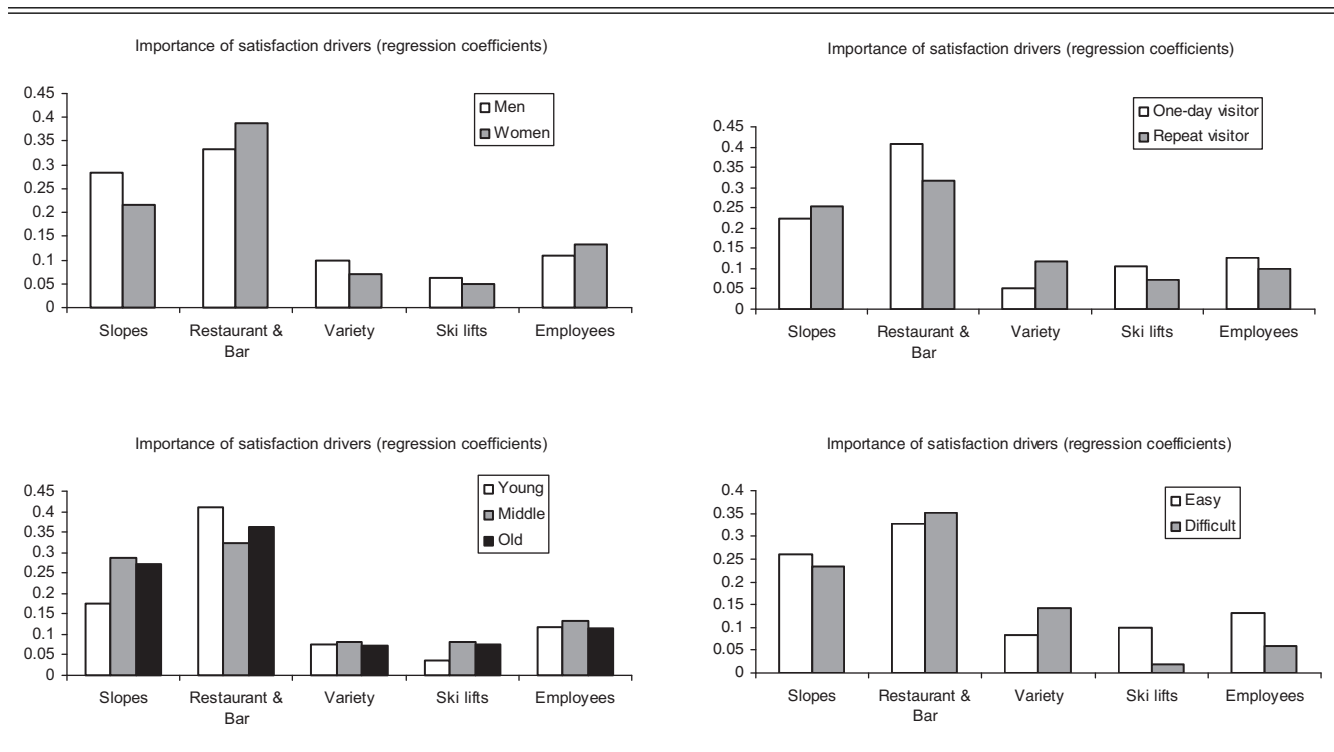
Note:  $\Delta\chi^2$  for all parameters set equal across subgroups ( $\Delta DF = 5$ ): 9.684\*  
 $^*p < .05$ .  $^{***}p < .001$ .

**Easy-Difficult**

Easy Regression Coefficient (t-Value)	Difficult Regression Coefficient (t-Value)	Chi-Square Difference ( $\Delta DF = 1$ )
Slopes = .260 ( $t = 13.335^{***}$ )	.233 ( $t = 6.549^{***}$ )	$\Delta\chi^2 = 0.433$
Restaurant and bar = .328 ( $t = 16.067^{***}$ )	.353 ( $t = 10.444^{***}$ )	$\Delta\chi^2 = 0.409$
Variety = .084 ( $t = 5.870^{***}$ )	.141 ( $t = 5.688^{***}$ )	$\Delta\chi^2 = 4.040^*$
Ski lifts = .098 ( $t = 5.842^{***}$ )	.019 ( $t = .700$ )	$\Delta\chi^2 = 6.231^{**}$
Employees = .131 ( $t = 10.181^{***}$ )	.060 ( $t = 2.752^{**}$ )	$\Delta\chi^2 = 8.033^{***}$

Note:  $\Delta\chi^2$  for all parameters set equal across subgroups ( $\Delta DF = 5$ ): 39.275\*\*\*  
 $^*p < .05$ .  $^{**}p < .01$ .  $^{***}p < .001$ .

**FIGURE 2**  
**IMPORTANCE OF SATISFACTION DRIVERS ACROSS CUSTOMER GROUPS**



**CONCLUSION**

The transition from a pure transaction-focused marketing to relationship marketing (Grönroos 1990) in the past few years is based on the assumption that it is advantageous

to build profitable long-term relationships with customers (Bruhn 2003). Many companies have started initiatives to increase quality and satisfaction, hoping that the resulting customer loyalty will translate into profits. The link between quality (attribute performance), satisfaction, loyalty, and profitability is not as straightforward as many believe. This

study addresses the first link of this chain, addressing the question: Under which conditions is the impact of the satisfaction dimensions on overall satisfaction stronger or weaker? This is an important question from a theoretical as well as a practical viewpoint, as it has largely been ignored in previous research. Most reported studies on drivers of customer satisfaction take an aggregate standpoint, ignoring segment-specific differences.

This study intended to develop a scale to measure customer satisfaction with ski areas and to test the moderating effects of personal characteristics, situation-specific factors, and product (destination)-related factors. Previous studies have largely neglected the effects of moderators on the relationship between single satisfaction dimensions and overall customer satisfaction. Using multiple-group analysis, significant differences were found across the analyzed subgroups. Age, gender, 1-day-visitors versus repeat visitors, and the respective ski area's level of difficulty are found to be moderators. Whereas age and gender only have limited influence, the situation-specific factor (1-day-visitor vs. repeat visitors) and the product-related factor have a stronger impact, indicating that they are better able to predict customer satisfaction and to segment markets.

The findings of this study are of both theoretical and practical importance. From a theoretical point of view, they provide an improved understanding of the role of person-related, situation-specific, and product-related factors in this process. Instead of viewing the satisfaction-profit chain as a black box, we illuminate the first link of this chain by examining the effect of satisfaction with the single satisfaction dimension on overall satisfaction. The results help explain why increased quality and performance does not automatically lead to higher profits, as such effects vary between segments.

From a practical point of view, these findings are important, as they show that importance weights can vary systematically based on the influence of different moderator effects. Hence, it is crucial to take these differences into account to derive the right measures to increase customer satisfaction. An undifferentiated assessment of satisfaction drivers may mask the true importance of the single satisfaction dimensions and may mislead managers trying to set the right priorities. These findings are in line with previous studies on segment-specific differences in perceived customer value (e.g., Kashyap and Bojanic 2000).

To attract and satisfy male skiers, for example, the quality of slopes would need to be improved and advertised, whereas to attract and satisfy female skiers, the focus would need to be on restaurants and bars. For young skiers, slopes are less important, whereas restaurants and bars are the main drivers of satisfaction. Repeat visitors differ from 1-day visitors in regards to the importance of restaurants and bars and the variety of slopes. Finally, skilled skiers pay less attention to employees and the ski lifts than to the variety of slopes.

Hence, such moderator analyses help managers to translate customer feedback into managerial actions to improve overall satisfaction. As many companies measure customer satisfaction in a regular and systematic way, data to assess the impact of satisfaction drivers on a segment level rather than on an aggregate level is available, and using multiple-group analyses, such differences can be explored.

Finally, from a methodological point of view, this study shows how multiple group analysis can be used to test moderator effects. Most previous studies aimed at testing the role

of moderating variables have used moderated regression analysis. However, when the relationship between latent constructs is tested, multiple-group causal modeling is a more appropriate approach, as it allows the simultaneous estimation of measurement parameter and of structural relationships (Homburg, Giering, and Menon 2003).

As the survey presented in this study was conducted concurrently in all ski resorts and over a period of more than 3 months, we assume that the weather and snow conditions were quite similar in all resorts. Apart from that, some specific environmental conditions in certain ski areas may, in fact, have had an effect on satisfaction ratings. As a limitation, those specific dimensions could not be identified.

## REFERENCES

- Anderson, E. W., C. Fornell, and D. R. Lehmann (1994). "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden." *Journal of Marketing* (July), 53–66.
- Anderson, E. W., C. Fornell, and Sanal K. Mazvancheryl (2004). "Customer Satisfaction and Shareholder Value." *Journal of Marketing*, 68 (4): 172–85.
- Anderson, E. W., and V. Mittal (2000). "Strengthening the Satisfaction-Profit Chain." *Journal of Service Research*, 3 (2): 107–20.
- Archer, J. (1996). "Sex differences in social behavior: Are social role and evolutionary explanations compatible?" *American Psychologist*, 51: 909–17.
- Bagozzi, Richard P., and R. Natarajan (2000). "The year 2000: Looking forward." *Psychology & Marketing*, 17: 1–11.
- Baker, Dwayne A., and John L. Crompton (2000). "Quality, satisfaction and behavioral intentions." *Annals of Tourism Research*, 27 (3): 785–804.
- Bloemer, Jose M. M., and Hans D. P. Kasper (1995). "The Complex relationship Between Consumer Satisfaction and Brand Loyalty." *Journal of Economic Psychology*, 16 (2): 311–29.
- Bolton, Ruth N. (1998). "A dynamic model of the customer's relationship with a continuous service provider: The role of satisfaction." *Marketing Science*, 1: 45–65.
- Bowman, Douglas, and Das Narayandas (2001). "Managing customer-initiated contacts with manufacturers: The impact on share of category requirements and word-to-mouth behavior." *Journal of Marketing Research*, 38 (August), 281–97.
- Bruhn, Manfred (2003). *Relationship Marketing*. Harlow, UK: Prentice Hall.
- Bryant, Everitt Barbara, and Jaesung Cha (1996). "Crossing the Threshold." *Marketing Research*, 8 (4): 20–28.
- Burnham, Thomas A., Judy K. Frels, and Vijay Mahajan (2003). "Consumer switching costs: a typology, antecedents, and consequences." *Journal of the Academy of Marketing Science*, 31 (2): 109–26.
- Dolnicar, S., and Friedrich Leisch (2003). "Winter tourist segments in Austria: Identifying stable vacation styles using bagged clustering techniques." *Journal of Travel Research*, 41 (3): 281–92.
- Engel, James F., Roger D. Blackwell, and Paul W. Miniard (1995). *Consumer Behavior*. 8th ed. Forth Worth, TX: Dryden.
- Evanschitzky, Heiner, and Maren Wunderlich (2006). "An examination of moderator effects in the four-stage loyalty model." *Journal of Service Research*, 8 (4): 330–45.
- Fornell, C., and David F. Larcker (1981). "Evaluating structural equation models with unobservable variables and measurement error." *Journal of Marketing Research*, 18 (February), 39–50.
- Franch, Mariangela, Umberto Martini, and Daniela Tommasini (2003). "Mass-Ski tourism and environmental exploitation in the Dolomites: Some considerations regarding the tourist development model." In *International Scientific Conference on Sustainable Tourism Development and the Environment*, edited by E. Christou and M. Sigala. Chios Island, Greece.
- Fuchs, Matthias (2004). "Destination Benchmarking—An Indicator's potential for Exploring Guest Satisfaction." *Journal of Travel Research*, 58 (3): 1–25.
- Garbarino, Ellen, and Mark S. Johnson (1999). "The different roles of satisfaction, trust, and commitment in customer relationships." *Journal of Marketing*, 63 (April), 70–87.
- Gilbert, F. W., and W. E. Warren (1995). "Psychographic constructs and demographic segments." *Psychology & Marketing*, 12: 223–237.
- Gilly, M. C., and V. A. Zeithaml (1985). "The elderly consumer and adoption of technologies." *Journal of Consumer Research*, 12: 353–57.
- Grönroos, C. (1990). "Relationship approach to marketing in service contexts. The marketing and organizational behavior interface." *Journal of Business Research*, 20 (1): 3–11.
- Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham, and William C. Black (1998). *Multivariate Data Analysis*. 5th ed. Upper Saddle River, NJ: Prentice Hall.

- Homburg, Chr., and Annette Giering (2001). "Personal characteristics as moderators of the relationship between customer satisfaction and loyalty—An empirical analysis." *Psychology & Marketing*, 18 (1): 43–66.
- Homburg, Chr., Annette Giering, and Ajay Menon (2003). "Relational characteristics as moderators of the satisfaction-loyalty link: Finding in a business-to-business context." *Journal of Business-to-Business Marketing*, 10 (3): 35–62.
- Jedidi, Kamel, Harsharanjeet S. Jaggal, and W. S. DeSarbo (1997). "Finite-mixture structural equation models for response-based segmentation and unobserved heterogeneity." *Marketing Science*, 16 (1): 39–59.
- Jones, Michael A., David L. Mothersbaugh, and Sharon E. Beatty (2000). "Switching barriers and repurchase intentions in services." *Journal of Retailing*, 76 (2): 259–74.
- Kashyap, Rajiv and David C. Bojanic (2000). "A structural analysis of value, quality, and price perceptions of business and leisure travelers." *Journal of Travel Research*, 39 (1): 45–51.
- Kopalle, Praveen K., and Donald R. Lehmann (2001). "Strategic management of expectations: The role of disconfirmation sensitivity and perfectionism." *Journal of Marketing Research*, 28 (August): 386–94.
- Kozak, M. (2001). "Comparative assessment of tourist satisfaction with destinations across two nationalities." *Tourism Management*, 22: 391–401.
- Kozak, M., and M. Rimmington (2000). "Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination." *Journal of Travel Research*, 39: 260–69.
- Krishnan, M. S. (1999). "Customer satisfaction for financial services: The role of products, services, and information technology." *Management Science*, 45 (9): 1194–209.
- Landesstatistik Tirol (2007). *Tourismus in Tirol* [Tourism in Tirol]. Retrieved August 1, 2007, from <http://www.tirol.gv.at/themen/zahlen-und-fakten/statistik/tourismus/>
- Matzler, Kurt, Gerald Hattenberger, Harald Pechlaner, and Dagmar Abfalter (2005a). "Lifestyle segmentation, vacation types and guest satisfaction: The case of Alpine skiing tourism." In *Cauthe 2004: Creating Tourism Knowledge. A Selection of Papers from Cauthe 2004*, edited by Ch. Cooper, Ch. Arcodia, and D. Solnet. Southport, Australia: Griffith University, Sustainable Tourism Cooperative Research Center, pp. 121–30.
- Matzler, Kurt, Hans H. Hinterhuber, Christian Daxer, and Maximilian Huber (2005b). "The relationship between customer satisfaction and shareholder value." *Total Quality Management and Business Excellence*, 16 (5): 1–10.
- Matzler, Kurt, and Harald Pechlaner (2001). "Guest Satisfaction Barometer and Benchmarking: Experiences from Austria." *Journal of Quality Assurance in Hospitality and Tourism*, 2 (3/4): 25–47.
- Matzler, Kurt, Harald Pechlaner, and Gerald Hattenberger (2004). *Lifestyle-typologies and market segmentation: The case of Alpine skiing tourism*. Bolzano, Italy: European Academy.
- Matzler, Kurt, Birgit Renzl, and Sandra Rothenberger (2006). "Measuring the relative importance of service dimensions in the formation of price satisfaction and service satisfaction: A case study in the hotel industry." *Scandinavian Journal of Hospitality and Tourism*, 6 (3): 179–96.
- Matzler, Kurt, and Hubert Siller (2004). "Linking travel motivations with perceptions of destinations: The case of youth travelers in Alpine summer and winter tourism." *Tourism Review*, 58 (4): 6–11.
- Mittal, V., and Wanger A. Kamakura (2001). "Satisfaction, repurchase intent, and repurchase behavior: Investigating the moderating effect of customer characteristics." *Journal of Marketing Research*, 28 (February): 131–42.
- Mittal, Vikas, Pankaj Kumar, and Michael Tsiros (1999). "Attribute-level performance, satisfaction, and behavioral intentions over time: A consumption-system approach." *Journal of Marketing*, 63 (April): 88–101.
- Mittal, V., W. T. Ross, and P. M. Baldasare (1998). "The Asymmetric Impact of Negative and Positive Attribute-Level Performance on Overall Satisfaction and Repurchase Intentions." *Journal of Marketing*, 62 (January): 33–47.
- Oliva, Terence A., Richard L. Oliver, and William O. Bearden (1995). "The Relationship Among Consumer Satisfaction, Involvement, and Product Performance." *Behavioral Science*, 40 (April), 104–32.
- Oliver, R. L. (1980). "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions." *Journal of Marketing Research*, 17: 460–69.
- (1997). *Satisfaction—A Behavioral Perspective on the Customer*. New York: McGraw-Hill.
- Parasuraman, A., L. L. Berry, and V. A. Zeithaml (1991). "Refinement and Reassessment of the SERVQUAL Scale." *Journal of Retailing*, 67 (4): 420–50.
- Parasuraman, A., V. A. Zeithaml, and L. L. Berry (1985). "A Conceptual Model of Service Quality and its Implications for Future Research." *Journal of Marketing*, 49 (Fall): 41–50.
- Pechlaner, Harald, and P. Tschurtschenthaler (2003). "Tourism policy, tourism organisations and change management in Alpine regions and destinations: A European Perspective." *Current Issues in Tourism*, 6 (6): 508–39.
- Perdue, Richard R. (2002). "Perishability, yield management, and cross-product elasticity: A case study of deep discount season passes in the Colorado ski industry." *Journal of Travel Research*, 41 (August), 15–22.
- Peterson, Robert A., and William R. Wilson (1992). "Measuring Customer Satisfaction: Fact and Artifact." *Journal of the Academy of Marketing Science*, 20 (1): 61–71.
- Petrick, James (2004). "First timers' and repeaters' perceived value." *Journal of Travel Research*, 43 (1): 29–38.
- Ranaweera, Chatura, Gordon McDougall, and Harvir Bansal (2005). "A model of online customer behavior during the initial transaction: Moderating effects of customer characteristics." *Marketing Theory*, 5 (1): 51–74.
- Reichheld, F. F., and W. E. Sasser (1990). "Zero Defections: Quality Comes to Services." *Harvard Business Review*, 68 (4): 105–11.
- Reinartz, Werner J., and V. Kumar (2000). "On the profitability of long-life customers in a noncontractual setting: An empirical investigation and implications for marketing." *Journal of Marketing*, 64 (December): 17–35.
- Richards, Greg (1996). "Skilled consumption and UK ski holidays." *Tourism Management*, 17 (1): 25–34.
- Rust, R., A. Zahorik, and T. Kleiningham (1995). "Return on Quality (ROQ): Making Service Quality Financially Accountable." *Journal of Marketing*, 59 (April): 58–70.
- Saad, Gad, and Tribat Gill (2000). "Applications of evolutionary psychology in marketing." *Psychology & Marketing*, 17 (12): 1005–34.
- Seiders, Kathleen, Glenn B. Voss, Dhruv Grewal, and Andrea L. Godfrey (2005). "Do satisfied customers buy more? Examining moderating influences in a retailing context." *Journal of Marketing*, 69 (October): 26–43.
- Sirakaya, Ercan, James Petrick, and Hwan-Suk Choi (2004). "The role of mood on tourism product evaluations." *Annals of Tourism Research*, 31 (3), 517–39.
- Slama, M. E., and A. Tashlian (1985). "Selected socioeconomic and demographic characteristics associated with purchasing involvement." *Journal of Marketing*, 49: 72–82.
- Stahl, Heinz K., Kurt Matzler, and Hans H. Hinterhuber (2003). "Linking Customer Lifetime Value with Shareholder Value." *Industrial Marketing Management*, 32 (4): 267–79.
- Weiermair, K., and Matthias Fuchs (1999). "Measuring tourist judgment on service quality." *Annals of Tourism Research*, 26 (4): 1004–21.
- Wilkes, Robert (1992). "A structural modeling approach to the measurement and meaning of cognitive age." *Journal of Consumer Research*, 19: 292–301.
- Williams, Peter, and Paul R. Fidgeon (2000). "Addressing participation constraint: A case study of potential skiers." *Tourism Management*, 21: 379–93.
- Wu, Jianan, W. S. DeSarbo, Pu-Ju Chen, and Yao-Yi Fu (2006). "A latent structure factor analytic approach for customer satisfaction measurement." *Marketing Letters*, 17: 221–38.
- Yoon, Yooshik, and Muzaffer Uysal (2005). "An examination of the effects of motivation and satisfaction on destination loyalty: A structural model." *Tourism Management*, 26: 45–56.
- Zeithaml, V. A. (2000). "Service Quality, Profitability, and the Economic Worth of Customers: What We Know and What We Need to Learn." *Journal of the Academy of Marketing Science*, 28 (1): 67–85.