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Perceived Service Quality and Happiness Among Recreational Skiers: Associations With Demographic Characteristics

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Abstract This study examines the relationship between perceived service quality and happiness among individuals participating in recreational skiing and assesses whether these measures vary across demographic groups. A quantitative, cross-sectional correlational survey design was adopted, with a reported sample of 227 respondents. Information was collected using a demographic questionnaire, a 22-item perception-based service-quality instrument described as SERVQUAL, and a four-item measure described in the methodology as user satisfaction. The original manuscript also refers to the latter outcome as happiness; this inconsistency requires confirmation against the administered questionnaire. Descriptive statistics, independent-samples t-tests, one-way analysis of variance, and Pearson correlation analysis were reported. The overall mean scores were 4.21 (SD = 0.82) for perceived service quality and 4.19 (SD = 0.96) for the second outcome. The reported association between the two constructs was strongly positive ($r \approx 0.82$; $n = 227$). The manuscript reports differences associated with perceived income and educational attainment but not with gender, age, marital status, or employment sector. Some underlying group statistics conflict with these inferential results and require verification against the original statistical output. Within those limitations, the findings indicate that favorable assessments of ski-center services coincide with more positive self-reported experiences. They support further evaluation of how service provision relates to satisfaction and psychological well-being, without establishing a causal effect from these cross-sectional observations.

Index Terms Perceived service quality, happiness, recreational skiing, ski tourism, demographic characteristics, survey research

I. Introduction

Recreational activities offer opportunities for physical activity, social interaction, enjoyment, and engagement with natural environments. These opportunities may be especially important in winter sports, where a participant's experience is shaped jointly by the skiing activity and the quality of the services available at the destination. Recent research on resort skiing has examined how expectations and experience quality are associated with tourist satisfaction, emphasizing the importance of studying experiences in the specific setting in which they occur [1], [2]. Sports tourism research likewise shows that skiing combines an outdoor recreational experience with transportation, equipment, accommodation, safety provision, and other services that participants encounter throughout their visit [3]–[5].

Perceived service quality is a central component of this experience. Service-quality theory distinguishes customers' expectations from their perceptions of service performance. SERVQUAL is a multidimensional instrument designed to operationalize those differences [6], [7]. In sporting environments, service quality has been associated with customer satisfaction, psychological commitment, and intentions to continue participating or using a facility [8], [9]. Research conducted at the Ergan Mountain Ski Center in Türkiye specifically found an association between perceived service quality, visitor satisfaction, and recommendation intentions [10]. This setting-specific evidence highlights the relevance of looking beyond physical facilities alone to service reliability, responsiveness, information provision, and the overall visitor experience.

Happiness is broader than the evaluation of a particular service encounter. In subjective well-being research, happiness is generally understood in relation to positive affect, evaluations of life circumstances, and personal satisfaction [4], [11], [12]. The recreation literature has also connected leisure participation and satisfaction with more favorable assessments of life quality, while recognizing that these are related rather than interchangeable concepts [13], [14]. In particular, a recent study of ski tourism examined how service quality relates to leisure satisfaction and loyalty, suggesting that visitor evaluations depend on multiple dimensions of the experience [14]. Evidence from low-cost fitness centers similarly connects perceived service quality with value, satisfaction, and loyalty [8], [9], [15]. Nevertheless, service satisfaction, happiness, and psychological well-being are distinct constructs that should be measured and interpreted separately rather than assumed to be equivalent.

A remaining question concerns whether the association between service evaluations and individual experiences differs across demographic categories. The relevance of economic resources, accessibility, and expectations can vary by recreational context, including the characteristics of a ski destination. Research on ski-tourism service quality illustrates the importance of destination-specific service attributes [16], while studies of responses to tangible and intangible service factors suggest that users do not necessarily evaluate every service component in the same manner [17]. Participants' perceived income, education, employment, and other characteristics may therefore provide useful descriptive information, although such associations cannot by themselves establish the causes of satisfaction or happiness.

The present study accordingly examines perceived service quality and a second self-reported outcome, described as happiness in the results, among recreational skiers. It reports their overall scores and compares them by gender, age, perceived income, marital status, education, and employment sector. It also evaluates the strength and direction of the association between the two outcome measures. The study's contribution lies in bringing these measures together within a recreational skiing context and identifying questions for future research about service quality and visitor well-being. Because the survey is cross-sectional, any relationship observed should be interpreted as an association rather than proof that one variable determines the other.

II. Methodology

A. Research Design

The study used a quantitative, cross-sectional correlational survey design to examine perceived service quality and the self-reported outcome presented as happiness among recreational ski-center users. This design permits descriptions of the study sample, comparisons across participant categories, and analysis of associations between measured variables. It does not establish the temporal sequence or experimental conditions required to infer that improvements in service quality cause changes in happiness. Contemporary research on skiing destinations has examined related links between service quality, satisfaction, and behavioral intentions [10], [14]; the present study considers the reported relationship with a broader psychological outcome, subject to verification of the measurement instrument actually administered.

B. Population and Sample

The target population comprised individuals participating in recreational activities at ski centers. The reported study sample contained 227 individuals. The original study describes selection by simple random sampling; however, neither a sampling frame nor the random selection procedure is documented in the supplied manuscript. Accordingly, the representativeness of the sample and the sampling designation require confirmation. The data appear to describe respondents who were available to complete the research questionnaires rather than a demonstrably probability-based sample. Ethical approval was reported from the Karabük University Social and Human Sciences Ethics Committee under decision number 202604. The date, full identifier, and procedural details should be confirmed from the ethics approval document before publication.

C. Data Collection Tools

The demographic information form comprised six questions addressing gender, age, educational attainment, perceived income, employment sector, and marital status. Two self-report scale forms were administered to individuals receiving recreational sports services. The measurement instruments are described separately because they represent different aspects of the visitor experience and because their precise construct definitions affect the interpretation of the findings.

1) Perceived Service Quality Scale (SERVQUAL)

Perceived service quality was assessed using a 22-item, five-point Likert-type perception scale based on SERVQUAL, originally developed by Parasuraman, Zeithaml, and Berry [7]. The manuscript attributes a Turkish adaptation to Devabakan (2001), but it provides no complete source documenting the version and adaptation procedure; that attribution therefore requires confirmation. The original SERVQUAL framework includes expectation and perception components, whereas the instrument described here contains perception items only. Consequently, the reported score should be understood as a perception-based service-quality measure unless separate expectation ratings can be documented. The response choices ranged from 1 (strongly disagree) to 5 (strongly agree). A confirmatory factor analysis was reported with the following fit measures: $\chi^2/df = 3.88$, GFI = 0.86, CFI = 0.91, TLI = 0.90, IFI = 0.91, and RMSEA = 0.08. These indices are retained as reported, although their acceptability depends on the prespecified criteria, factor structure, and estimation method.

2) User Satisfaction and Happiness Measure

The manuscript describes a four-item, single-factor user satisfaction scale attributed to Özkeskin [18], administered on a five-point Likert response scale with no reverse scoring. The reported confirmatory factor analysis yielded $\chi^2/df = 3.821$, GFI = 0.90, CFI = 0.92, TLI = 0.90, IFI = 0.93, and RMSEA = 0.06. The item wording and the precise correspondence between this instrument and the outcome labeled Happiness elsewhere in the manuscript were not provided. A scale measuring satisfaction with a ski center cannot automatically be treated as a validated general happiness instrument. The authors should verify whether the four items assessed service satisfaction, happiness, or another construct, and should use the resulting construct label consistently in the abstract, tables, and interpretations.

D. Data Analysis

Descriptive statistics were used to summarize participant characteristics and the two scale scores. The original analysis ap-

plied independent-samples t-tests to two-group comparisons and one-way analyses of variance to variables with three or more groups. The authors also reported least significant difference (LSD) comparisons after omnibus tests and Pearson's product–moment correlation between the measured scores. Analyses were conducted in SPSS, although the software version was not specified. Cronbach's alpha coefficients were reported as 0.98 for perceived service quality and 0.97 for the second scale. Very high coefficients indicate strong internal consistency but do not, by themselves, establish construct validity or prove that the second scale measures happiness.

The manuscript assessed distributional shape using skewness and kurtosis. An unresolved transcription discrepancy exists in Table 1: the happiness kurtosis cell reads 535, whereas the narrative reports approximately 0.535. Moreover, the normality of individual scale scores does not, by itself, establish the distributional and variance assumptions of every subsequent group comparison. For accurate inferential reporting, the data, test statistics, degrees of freedom, variance checks, and exact p-values should be rechecked against the original software output before final acceptance. Group comparisons described below follow the values reported in the manuscript and are not presented as independently reproduced inferential results.

Table 1: Descriptive Statistics of the Study Scales

Scale	n	Mean	SD	Skewness	Kurtosis	Cronbach's α
Perceived Service Quality	227	4.21	.82	-1.113	1.308	.98
Happiness	227	4.19	.96	-1.117	535	.97

Note. The value 535 is transcribed exactly from the supplied table. The accompanying prose gives approximately 0.535; the original SPSS output must be checked.

Table 1 reports mean scores of 4.21 (SD = 0.82) for perceived service quality and 4.19 (SD = 0.96) for the outcome described as happiness. On the five-point response scale used in the study, these averages are relatively high. The negative skewness coefficients indicate concentrations toward the higher end of the scales, as would be expected when respondents generally give favorable ratings. Cronbach's alpha was 0.98 for service quality and 0.97 for the second scale, suggesting high internal consistency, although these coefficients do not establish the substantive meaning of the constructs.

The reported happiness kurtosis is inconsistent across the source: Table 1 gives 535, while the accompanying account gives approximately 0.535. Until the correct value is obtained from SPSS, a definitive statement that this variable meets a particular normality criterion would be premature. Similarly, the high reliability coefficients should be supplemented by examination of the item structure and the possible redundancy of items in the original questionnaire.

III. Results

Table 2 summarizes the demographic composition of the 227 respondents. The gender distribution was almost equal: 113 men (49.8%) and 114 women (50.2%). The largest age category was 36–45 years (90 respondents, 39.6%), followed by 25–35 years (72, 31.7%), 46 years and over (49, 21.6%), and 18–24 years (16, 7.0%). Of the respondents, 160 (70.5%) worked in the public sector and 67 (29.5%) in the private sector. The medium perceived-income group accounted for 167 respondents (73.6%), and the low- and high-income categories each contained 30 (13.2%). The demographic table also reports 166 single and 61 married respondents, and it identifies 144 bachelor's degree holders and 83 high school graduates. These counts describe the observed sample; they do not imply that its composition represents the wider population of recreational skiers.

Table 2: Frequency and Percentage Distributions of Demographic Variables

Variable	Group	n	Percentage (%)
Gender	Male	113	49.8
Gender	Female	114	50.2
Age	18–24 years	16	7.0
Age	25–35 years	72	31.7
Age	36–45 years	90	39.6
Age	46 years and over	49	21.6
Employment Status	Public	160	70.5
Employment Status	Private	67	29.5
Perceived Income	Low	30	13.2
Perceived Income	Medium	167	73.6
Perceived Income	High	30	13.2
Marital Status	Married	61	26.9
Marital Status	Single	166	73.1
Educational Status	High School	83	36.6
Educational Status	Bachelor's Degree	144	63.4
Total	All Respondents	227	100.0

Table 3: Independent-Samples t-Test Results Reported by Gender

Scale (Original Label)	Gender	n	Mean	SD	t	p	Cohen's d
Perceived Service Quality	Male	113	3.91	.86	-1.87	.06	-.51
Perceived Service Quality	Female	114	4.34	.82	–	–	–
Organizational Commitment	Male	113	3.95	.96	-1.356	.17	-.37
Organizational Commitment	Female	114	4.32	.99	–	–	–

Note. The source labels the second outcome "Organizational Commitment, although the research question addresses happiness. Test statistics are reproduced as reported; they conflict with the group means, standard deviations, and sample sizes, and require reanalysis.

Table 3 lists gender-stratified scores and the inferential statistics supplied with the original manuscript. The reported independent-samples tests were described as nonsignificant for both outcomes. However, the table labels the second outcome as organizational commitment, not happiness, and the original narrative gives male and female sample sizes that differ from the 113 and 114 shown in the table. Using the displayed group sizes, means, and standard deviations, the implied independent-samples test for perceived service quality would be substantially different from the reported $t = -1.87$. Consequently, the inference of no gender difference cannot be regarded as verified. The comparison requires the actual group-level SPSS output and confirmation of the scale whose means are being analyzed.

Table 4 presents reported mean scores for the four age categories. The original manuscript gives $F = 1.476$ and $p = .22$ for perceived service quality and $F = .970$ and $p = .40$ for the second outcome, and therefore describes both tests as nonsignificant. The means for service quality

range from 3.91 in the youngest group to 4.34 in the 25–35 age group; corresponding age-group scores are also displayed for the second outcome. Because the second scale is labeled organizational commitment in this table, its interpretation as happiness remains uncertain. The source's inferential statistics, effect-size entries, and scale labels should be verified together before an age-related conclusion is made.

Table 4: One-Way ANOVA Results Reported by Age

Scale (Original Label)	Age Group	n	Mean	SD	F	p	Reported Partial η^2
Perceived Service Quality	18–24 years	16	3.91	.86	1.476	.22	.01
Perceived Service Quality	25–35 years	72	4.34	.82	–	–	–
Perceived Service Quality	36–45 years	90	4.15	.84	–	–	–
Perceived Service Quality	46 years and over	49	4.22	.74	–	–	–
Organizational Commitment	18–24 years	16	3.95	.96	.970	.40	.01
Organizational Commitment	25–35 years	72	4.32	.99	–	–	–
Organizational Commitment	36–45 years	90	4.12	.92	–	–	–
Organizational Commitment	46 years and over	49	4.22	.90	–	–	–

Note. The source uses "Organizational Commitment for the second outcome. The labels and summary statistics must be checked against the study questionnaire and original analysis files.

Table 5 reports higher mean scores in successive perceived-income categories. For service quality, the reported averages rise from 3.76 (low income) to 4.23 (medium income) and 4.54 (high income). The corresponding means for the second outcome are 3.64, 4.22, and 4.59. The original ANOVA results are $F = 7.49$ and $F = 8.07$, respectively, with reported partial $\eta^2 = .06$ for each. The stated LSD comparisons identify differences between the lowest-income category and the two higher categories. These observations suggest an income-related gradient in the reported scores, but the exact p-values, post-hoc comparisons, and outcome labels should be checked against the raw data. Because income was self-reported and the study was cross-sectional, the findings describe associations and cannot establish that income changes the quality of services received or causes greater happiness.

Table 5: One-Way ANOVA Results Reported by Perceived Income

Scale	Perceived Income	n	Mean	SD	F	p	Partial η^2	Reported LSD Difference
Perceived Service Quality	Low (a)	30	3.76	.84	7.49	.00*	.06	a–b; a–c
Perceived Service Quality	Medium (b)	167	4.23	.81	–	–	–	–
Perceived Service Quality	High (c)	30	4.54	.66	–	–	–	–
Happiness	Low (a)	30	3.64	1.14	8.07	.00*	.06	a–b; a–c
Happiness	Medium (b)	167	4.22	.93	–	–	–	–
Happiness	High (c)	30	4.59	.67	–	–	–	–

Note. The source writes p = .00 for both tests; this is rounded output, not a literal probability of zero. Exact test statistics, p-values, and LSD comparisons require confirmation.

Table 6: Independent-Samples t-Test Results Reported by Marital Status

Scale	Marital Status	n	Mean	SD	t	p	Reported Effect Size
Perceived Service Quality	Single	61	4.23	.82	.25	.80	.03
Perceived Service Quality	Married	166	4.20	.82	–	–	–
Happiness	Single	61	4.23	.98	.39	.69	.05
Happiness	Married	166	4.18	.96	–	–	–

Note. The group counts in this table reverse the distribution in Table 2, which lists 166 single and 61 married respondents. The original records must be checked. The original effect-size heading was "Partial Eta Squared despite the two-group t-test context.

Table 6 reports small mean differences between marital-status categories: 4.23 versus 4.20 for service quality and 4.23 versus 4.18 for the second outcome. The original tests are given as $t = .25$, $p = .80$ and $t = .39$, $p = .69$, respectively. Both were described as nonsignificant. However, the marital-status group counts in this table are the reverse of those in the demographic table: the inferential table shows 61 single and 166 married respondents, whereas Table 2 shows 166 single and 61 married respondents. The substantive conclusion should therefore be regarded as provisional until the categories and corresponding analyses are reconciled.

Table 7 presents higher reported scores for high school graduates than for respondents holding bachelor's degrees. The service-quality mean is 4.48 for the former group and 4.05 for the latter, with a reported $t = 3.87$. For the outcome labeled happiness, the corresponding means are 4.41 and 4.06, with a reported $t = 2.65$. Although both comparisons were characterized as statistically significant, their source displays $p = .00$, a formatting practice that conceals the exact significance values. The reported effect sizes, 0.53 and 0.36, are discussed in the narrative as Cohen's d but were labeled partial eta squared in the original table. Educational differences are therefore potentially important descriptive findings, but precise statistical reporting and validation of the effect-size metric remain necessary.

Table 7: Independent-Samples t-Test Results Reported by Educational Attainment

Scale	Education	n	Mean	SD	t	p	Reported Effect Size
Perceived Service Quality	High School	83	4.48	.75	3.87	.00*	.53
Perceived Service Quality	Bachelor's Degree	144	4.05	.81	–	–	–
Happiness	High School	83	4.41	.98	2.65	.00*	.36
Happiness	Bachelor's Degree	144	4.06	.93	–	–	–

Note. The source writes p = .00 in both comparisons; the exact two-sided p-value for t = 2.65 with approximately 225 degrees of freedom would not round to .00 at two decimal places. The effect-size column was labeled "Partial Eta Squared in the supplied table, although values are discussed as Cohen's d.

Table 8 indicates that participants employed in the public sector had slightly higher reported mean scores than private-sector respondents: 4.24 versus 4.14 for service quality and 4.25 versus 4.05 for the second outcome. The supplied tests, $t = .84$ ($p = .40$) and $t = 1.44$ ($p = .15$), were described as nonsignificant. The displayed effect-size numbers are retained, but their interpretation requires confirmation because the original table uses a partial-eta-squared heading while the discussion treats the figures as standardized mean differences. In the absence of independently reproduced analyses, the evidence is insufficient to attribute the reported score variation to employment sector.

Table 8: Independent-Samples t-Test Results Reported by Employment Sector

Scale	Employment Sector	n	Mean	SD	t	p	Reported Effect Size
Perceived Service Quality	Public	160	4.24	.83	.84	.40	.12
Perceived Service Quality	Private	67	4.14	.77	–	–	–
Happiness	Public	160	4.25	.98	1.44	.15	.21
Happiness	Private	67	4.05	.91	–	–	–

Note. The original effect-size heading was "Partial Eta Squared although the narrative interprets the displayed values as standardized mean differences. The effect-size metric and SPSS test output should be confirmed.

Table 9 reports a strong positive relationship between perceived service quality and the second outcome, with off-diagonal Pearson coefficients of .821 and .822 and a sample size of 227. A Pearson correlation matrix must be symmetric,

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so the two values cannot both be exact results for the same variable pair. The most defensible summary at present is an approximate association of $r \approx .82$, pending verification of the original SPSS output. The displayed significance values of .000 should be reported as $p < .001$ if confirmed by the source analysis rather than as a probability of zero. Even a statistically reliable positive correlation would indicate covariation, not that service quality is a direct determinant of happiness or that satisfaction and general psychological well-being are interchangeable.

Table 9: Reported Correlation Between Perceived Service Quality and Happiness

Variable	Statistic	Perceived Service Quality	Happiness
Perceived Service Quality	Pearson r	1	.821**
Perceived Service Quality	p (two-sided)	–	.000
Perceived Service Quality	n	227	–
Happiness	Pearson r	.822**	1
Happiness	p (two-sided)	.000	–
Happiness	n	–	227

Note. The original row labels for r and p were transposed and have been corrected. The two off-diagonal coefficients (.821 and .822) are not identical, as a symmetric Pearson correlation matrix requires. Both values have been preserved for verification; ".000 means p below the software's displayed precision, not p = 0.

IV. Discussion

The study addresses how perceived service quality relates to a positive self-reported outcome among users of recreational ski centers. Respondents generally rated both measures favorably, and the reported correlation was strong and positive ($r \approx .82$). In broad terms, this result is compatible with research suggesting that leisure experiences and service encounters are associated with positive subjective evaluations [2], [13]. It also corresponds to evidence from service-quality research showing relationships among perceived quality, satisfaction, and subsequent behavioral intentions [7], [19]. In a directly comparable setting, Şen and colleagues found that the perceived quality of services at a Turkish ski destination was associated with visitor satisfaction and recommendation intentions [10]. Kong and colleagues likewise investigated ski-tourism service quality in relation to leisure satisfaction and loyalty [14]. These studies provide contextual support for examining the association reported here, but none establishes that the outcome in the present dataset is a validated measure of global happiness.

The distinction between satisfaction and happiness is consequential. A visitor's assessment of lifts, facilities, personnel, communication, safety, or convenience may change rapidly across encounters, whereas psychological well-being generally refers to a broader assessment of the person's life and experiences. The methodology describes a four-item user satisfaction instrument, but the abstract and numerical results use the label happiness, and two demographic tables refer instead to organizational commitment. Before the study can support an unqualified conclusion about happiness, the exact questionnaire, item wording, factor structure, and construct scoring must be supplied. The reported strong internal consistency of the scales does not eliminate this validity concern. A future design could administer separate, validated measures of service satisfaction and subjective happiness to determine whether the two constructs are empirically distinguishable.

The patterns of reported group means provide additional questions for study. Respondents in higher perceived-income categories gave higher average scores for both measures. This descriptive gradient is consistent with the broader proposition that resources, access, expectations, and leisure opportunities may be related to how recreational services are assessed [20]. However, that proposition cannot be interpreted as a causal explanation of the present cross-sectional results, particularly because perceived rather than objectively measured income was used and no potentially confounding factors were controlled. Studies of recreation participation have long shown that economic and situational constraints can influence access to opportunities, but the mechanisms connecting those constraints with satisfaction at an individual ski center require separate testing.

The reported education comparison also suggests differences in respondents' evaluations, with high school graduates having higher mean scores than bachelor's degree holders. One possible interpretation is that participants with different educational backgrounds approach services with different expectations, but this explanation remains a hypothesis rather than a tested mechanism in the present study. Service research has emphasized the importance of both expectation structures and the tangible and intangible aspects of service experiences [6], [17]. The present dataset does not directly measure these interpretive pathways, so it cannot establish that education determines expectations or explains the score differences. Moreover, the educational p-values and effect-size labels require correction before detailed effect estimates are reported.

Gender, age, marital status, and employment sector were described as having no statistically significant association with the measured scores. These conclusions require greater caution than the source discussion originally allowed. The gender means, standard deviations, and sample sizes do not produce the displayed t statistic; the labels for the second outcome are inconsistent in the gender and age tables; and the marital-status group counts are reversed relative to the demographic distribution. Such discrepancies cannot be resolved merely by editing the language or rounding the reported values. The original statistical analysis files should be used to reproduce descriptive and inferential tests, document degrees of freedom, report exact p-values, and identify the effect-size metric for each comparison. Absence of a significant result would not, in any event, demonstrate that the true association must be zero.

Finally, the evidence should be interpreted with appropriate design limitations. The sample consists of 227 participants, but the stated random-sampling procedure is not documented with a sampling frame. The one-time survey also prevents assessment of changes in happiness or satisfaction before and after a service improvement. Common-method measurement,

shared response scales, and unmeasured characteristics may contribute to the high observed correlation. Furthermore, no results are provided for specific ski-center service dimensions, preventing the analysis from determining whether safety, reliability, responsiveness, equipment condition, or personal interaction was most strongly related to participants' ratings. Research on wellness tourism suggests that service quality, satisfaction, and quality of life may be linked through more complex pathways than a direct bivariate association [21]. A longitudinal or intervention-based study with validated outcomes, multiple destinations, and transparent sampling would allow those pathways to be examined more rigorously.

A further methodological issue is whether all respondents interpreted the questions in comparable ways. Ski-center users may engage in the sport with different levels of experience, expectations of comfort, familiarity with equipment, or financial constraints. A first-time visitor might emphasize clarity of instructions and access to facilities, while an experienced skier might give greater weight to the condition of slopes or the reliability of lifts. These differences are plausible but were not directly measured or assessed in the manuscript. Consequently, the survey results should not be interpreted as establishing the relative contribution of individual service components or the expectations of distinct recreational subgroups. A future study could report item-level results, prespecified domains of perceived service quality, and measures of skiing frequency and prior experience, thereby supporting a more informative assessment of which service characteristics warrant attention.

It would also be useful to examine the temporal relationship between service use and the reported positive outcome. A questionnaire completed immediately after a satisfying visit might register transient enjoyment rather than general psychological well-being, whereas the same questionnaire completed some time later might capture a more reflective evaluation. Without information on when responses were collected in relation to skiing activity, one cannot determine the extent to which the scores reflect short-lived feelings, overall life satisfaction, or satisfaction with the venue. This distinction is particularly relevant for interpreting the magnitude of the association: two instruments completed in the same setting with similar response formats may share response tendencies even when they measure conceptually different constructs. Future research should report the questionnaire administration context, instructions, scale anchors, and scoring protocol, and should consider obtaining follow-up responses to distinguish immediate experience from lasting evaluations.

For reporting purposes, the original analysis should be reconstructed with a clear separation between descriptive and inferential results. Each group comparison should identify the actual number of participants contributing data, the scale being analyzed, the method used, the assumption checks, and the test degrees of freedom. Statistical significance should be expressed with precise p-values or a suitably specified threshold, accompanied by appropriately defined effect sizes and uncertainty intervals. The original correlation coefficients should also be reconciled, with the number of valid paired observations clearly stated. Publishing the analysis syntax and anonymized summary data where ethically permissible would make the findings more transparent and would help readers judge whether the reported patterns are robust. These steps would not necessarily alter the descriptive direction of the results, but they are essential before treating the strength and precision of the estimates as confirmed.

Finally, practical recommendations ought to distinguish actions that are generally justified by quality-management principles from interventions supported by the present dataset. Improving communication with visitors, maintaining reliable facilities, and making services accessible are reasonable management objectives, but the current analysis cannot quantify how much any one action would change individual happiness. Managers can use descriptive feedback as a basis for selecting areas for further evaluation and then measure the outcomes of documented service improvements. A design comparing participants before and after a change, ideally with a suitable comparison setting, would provide stronger evidence on whether service improvements are followed by changes in satisfaction or well-being. This type of follow-up would make the research more useful to ski-center operators while retaining a defensible distinction between observed associations and causal effects.

V. Conclusion

This study examines perceived service quality and a second self-reported evaluation among 227 individuals taking part in recreational skiing. The overall mean scores were relatively high, and the original analysis reported a strong positive correlation between the two measures ($r \approx .82$). Reported group comparisons also suggested differences associated with perceived income and educational attainment, while the remaining demographic comparisons were described as nonsignificant. Together, these observations provide a starting point for understanding how users assess ski-center services and their associated recreational experiences.

The conclusions must, however, remain conditional on verification of the source material. The second instrument is described as a user satisfaction scale in the methods, labeled happiness in much of the results, and termed organizational commitment in two tables. Several statistical entries are also inconsistent with other reported values, including the gender tests, marital-status counts, kurtosis, effect-size labels, and symmetry of the correlation matrix. These issues prevent an unqualified claim that higher service quality is a direct cause or determinant of participants' happiness. They should be reconciled using the administered questionnaire and original statistical files before journal publication.

For practitioners, the findings justify continued attention to the quality, accessibility, and consistency of ski-center service provision, while recognizing that the present observational evidence does not identify the effect of any specific intervention. For researchers, the next steps are to validate the measurement constructs, verify the calculations, document the sampling method, and compare results across destinations. Future re-

search should also distinguish satisfaction with the immediate recreational experience from broader psychological well-being and employ longitudinal or experimental designs where causal conclusions are required. These measures would make it possible to assess whether better service provision leads to lasting improvements in participant experience rather than merely coinciding with favorable evaluations.

Conflict of Interest

The author declares no conflict of interest relating to this manuscript.

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Data Availability

The data can be obtained from the author upon reasonable request.

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