
Articles

Development of a Multi-Dimensional Scale for Measuring the Perceived Value of a Service

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The construct of perceived value has been identified as one of the most important measures for gaining competitive edge (Parasuraman, 1997), and has been argued to be the most important indicator of repurchase intentions (Parasuraman & Grewal, 2000). Thus, the measurement of perceived value may have far reaching implications for the recreation and tourism fields. The purpose of the current study was to develop a multidimensional scale for the measurement of perceived value of a service. A 25-item instrument was developed to measure the construct and its dimensions. Five dimensions were identified, and were found to have content validity by a panel of experts. The instrument was further found to be reliable, and have convergent, and discriminant validity.

KEYWORDS: *Perceived value, quality, price, SERV-PERVAL, confirmatory factor analysis*

Introduction

Recent research has revealed that few leisure providers integrate marketing techniques into programming efforts and that "leisure service agencies have long attempted to serve diverse and, at times, non-responsive populations" (Johnson Tew, Havitz & McCarville, 1999, p. 18). A marketing perspective would suggest leisure and tourism providers analyze the needs and desires of their participants, in order to develop the most appropriate delivery methods. In doing so, leisure/tourism programmers may benefit by attracting more responsive and possibly more loyal participants. Further, many leisure and tourism providers would benefit by obtaining a more consistent participant base as it has been shown that it is six times less expensive to plan marketing strategies for retaining consumers, than it is to attract new consumers (Rosenberg & Czepial, 1984).

In the field of marketing, the construct of perceived value has been identified as one of the most important measures for gaining competitive

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Author note: I would like to thank Dr's Sheila Backman, John Crompton, Stephen Groves, Deb Kerstetter, Duarte Morais, Bill Norman, A. Parasuraman, Ercan Sirakaya and Valerie Zeithaml for their assistance with the development of the scale.

edge (Parasuraman, 1997), and has been argued to be the most important indicator of repurchase intentions (Parasuraman & Grewal, 2000). Yet, in regards to leisure and tourism services, repurchase intentions and consumer loyalty are often predicted solely by measures of consumer satisfaction, and/or service quality (Petrick, 1999). Woodruff (1997) states, "if consumer satisfaction measurement is not backed up with in-depth learning about customer value and related problems that underlie their evaluations, it may not provide enough of the customer's voice to guide managers where to respond" (p. 139). Further, just because a consumer is "satisfied" with a product/service, does not necessarily mean the product/service is a good value. It is quite possible a consumer who is very satisfied with a product or service, may consider it a poor value if the costs for obtaining it are perceived to be too high. On the contrary, a moderately satisfied consumer may find a service to have good value, if they believe they receive good utility for the price paid.

Purpose of the Study

Since perceived value has been found to be an important indicator of repurchase intentions (Chang & Wildt, 1994; Jayanti & Ghosh, 1996; Petrick, 1999; Petrick, Backman, & Bixler, 1999; Woodruff, 1997) it is believed leisure/tourism providers could benefit from refined measures of the construct. Valid and reliable measures of perceived value would allow for comparison of value between leisure/tourism programs, and would allow individual leisure/tourism providers the ability to identify the dimensions of perceived value in which they perform well or poor. While recent multi-dimensional scales have been created for measuring the perceived value of tangible products (Kantamneni & Coulson, 1996; Sweeney, Soutar & Johnson, 1998), a multi-dimensional scale for the measurement of perceived value of intangible products (services) does not exist. Thus, the purpose of the current study is to develop a multidimensional scale for the measurement of perceived value of a service.

Conceptual Development of Perceived Value

Perceived value has been defined as "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given" (Zeithaml, 1988, p. 14). Within this definition, Zeithaml (1988) identified four diverse meanings of value: (1) value is low price, (2) value is whatever one wants in a product, (3) value is the quality that the consumer receives for the price paid, and (4) value is what the consumer gets for what they give. The majority of past research on perceived value has focused on the fourth definition (Bojanic, 1996; Zeithaml, 1985).

A fundamental base for the conceptualization of perceived value of a service was developed by Zeithaml (1988). Her research utilized focus groups and in-depth consumer interviews to explore the relationships between consumers' perceptions of price, quality and value. The focus groups were util-

ized to determine the salient attributes and variables related to perceived value, while the interviews were utilized to reveal the causal links among product attributes, quality and value. Open ended questions were then used to examine the information needed to make judgments about quality and value (i.e., advertising and packaging).

Results of her study showed that perceived quality leads to perceived value, which leads to purchase intentions. Both intrinsic (i.e., how the purchase makes you feel) and extrinsic attributes (i.e., reputation of the product/service), as well as price, were found to be positively related to perceived quality. Moderating variables of perceived value included perceived sacrifice (non-monetary price), extrinsic attributes and intrinsic attributes. Overall, Zeithaml reported quality, price (monetary and non-monetary), reputation of the product/service and how the product/service makes one feel (emotional response) were dimensions related to perceived value.

Similarly, the Profit of Impact Marketing Strategies (PIMS) study conceptualized value as the relationship between quality and price (Buzzell & Gale, 1987). They ascertained competitive success is obtained through "perceived relative value" of the total package of products and services that influence customer behavior. Relative value, is the value received from one product/service, in comparison to similar offerings. According to Bojanic (1996, p. 10): "the notion of relative perceived value results in three possible value positions: (1) offering comparable quality at a comparable price, (2) offering superior quality at a premium price, or (3) offering inferior quality at a discounted price." Perceived value may thus be altered if management changes what they are doing, a competitor changes what they are doing, or if consumer's desires or needs change.

More recently, Parasuraman and Grewal (2000) conceptualized perceived value as a dynamic construct consisting of four value types: acquisition value, transaction value, in-use value and redemption value. They define acquisition value as the benefits received for the monetary price given, and transaction value as the pleasure the consumer receives for getting a good deal. In-use value is the utility derived from utilization of the product/service, while redemption value is the residual benefit received at the time of trade-in or end of life (products) or termination (for services). Utilizing these definitions, the relevance of each of the four dimensions are different during varying times of the product/services life (i.e., acquisition and transaction value are most salient during purchase, while in-use value and redemption value are more pertinent after purchase).

Measurement Issues

While all of these theorized frameworks aid in the understanding of perceived value, they do not offer measures for collecting perceived value data. Perceived value is most commonly measured by using a self-reported, unidimensional measure asking respondents to rate the value they received for their purchase (Gale, 1994). The problem with a one-dimensional mea-

asures is that it assumes that consumers have a shared meaning of value. Zeithaml (1988) states, "quality and value are not well differentiated from each other and from similar constructs such as perceived worth and utility (p. 471)." Thus, it has been argued that one-dimensional measures of perceived value lack validity (Woodruff & Gardial, 1996). Another inherent problem is unidimensional measures result in the knowledge of how well one is rated for value, but give no specific direction on how to improve value.

It is believed that a formal measurement tool for the perceived value of a service, would allow comparisons similar to comparisons of service quality that are now available due to Parasuraman, Zeithaml and Berry's (1988) SERVQUAL scale and Cronin and Taylor's (1992) SERVPERF scale. With the use of reliable and valid multi-dimensional measures, leisure and tourism providers should be able to identify the dimensions in which they are succeeding and/or failing in regards to both their own past measures and those of their competition.

Current efforts to measure perceived value have shown it is difficult to quantify perceived value (Semon, 1998). Kantamneni and Coulson (1996) focused on the development of a multi-dimensional measure of perceived value of a product. They utilized undergraduate business students to identify potential measurable dimensions of a product's perceived value. Results identified the distinct factors of societal value, experiential value, functional value and market value. Societal value was termed to be the product's benefit/value to society. Experiential value was related to the senses: if the product feels, smells and looks good, while functional value was related to whether or not the product is reliable and safe. The final factor, market value, was the product's worth regarding price for value.

Another multi-dimensional scale for the measurement of perceived value of a product was presented by Sweeney, Soutar and Johnson (1998). Utilizing exploratory factor analysis of 29 items generated from a literature review, the factors of quality, emotional response, price and social emerged as dimensions of perceived value of a product. Quality referred to how well the product was made, and emotional response to how a product made the consumer feel. Price was operationalized as whether or not the money paid for the product was reasonable, and social as the impression that the purchase of the product had on others (Sweeney et al., 1998).

While the aforementioned studies show promise for the measurement of perceived value of tangible products, there is need for a different scale to be developed for measuring the perceived value of a service. Past research (Jayanti & Ghosh, 1996; Petrick, 1999) has shown that scales developed for measuring a product's perceived value are difficult to use when measuring perceived value of a service. Further, the dimensions inherent in a service differ from those of a product. Lovelock (1983) argued that services differ from products in that they are intangible, perishable, variable and inseparable. Thus, multi-dimensional measures of a service must consider these properties.

Following the theoretical model conceptualized by Zeithaml (1988), current conceptual frameworks, and the properties of a service, multiple dimensions of perceived value of a service can be identified. Most researchers agree that perceived value is a comparison of what a consumer "receives," with what the consumer "gives" for the attainment of a product or service (Bojanic, 1996; Grewal, Monroe, & Krishnan, 1998; Jayanti & Ghosh, 1996; Oh, 1999; Parasuraman & Grewal, 2000; Woodruff & Gardial, 1996; Zeithaml, 1988).

Perceived price is what a consumer gives up or sacrifices in order to obtain a product (Zeithaml, 1988). While some consumers may know the exact price of the service purchased, others may only remember (encode) that their purchase was expensive or inexpensive in relation to past purchases. Still others may not encode a price at all.

Consumers also evaluate non-monetary costs in their determination of quality received for price paid. Non-monetary costs include such things as time, search costs, brand image and convenience. It is therefore a combination of both perceived monetary and non-monetary costs that equate to consumers' overall perceived sacrifice which, in turn, affects their perception of product or service value.

In regards to what a consumer "receives" past research has identified emotional response, or the joy received from purchase (Grewal et al., 1998, Parasuraman & Grewal, 2000; Sweeney et al., 1998; Zeithaml, 1988), and quality (Dodds, Monroe & Grewal, 1991; Swait & Sweeney, 2000) as dimensions of perceived value of a product/service. Further, the product/services reputation has been identified as an influence on consumer's perceived quality, and perceived value (Dodds et al., 1991; Zeithaml, 1988). Thus it could be argued that dimensions of what a consumer receives from the purchase of a service include: the emotional response to the service, quality received from the service, and the reputation of the service rendered. While the dimensions related to what is given, consist of monetary and non-monetary (behavioral) price.

Utilizing these dimensions, Figure 1 offers a hypothetical model of one of the roles that perceived value plays in the assessment of a service. It is suggested that the perceptions of service quality leads to the purchase and experience rendered by the service. This experience results in the perception of the value received from the service. It is further postulated that perceived value influences intention to reinvest in the service experience, and how positively or negatively individuals talk to others about their service experience. This process then effects future assessments of the quality of a service. While it has been postulated that perceived value changes during different stages of a purchase (Parasuraman & Grewal, 2000), the proposed scale will only measure perceived value after completing a purchase. Thus the role that perceived value plays in the decision-making processes of the current conceptualization can only occur after service has been rendered.

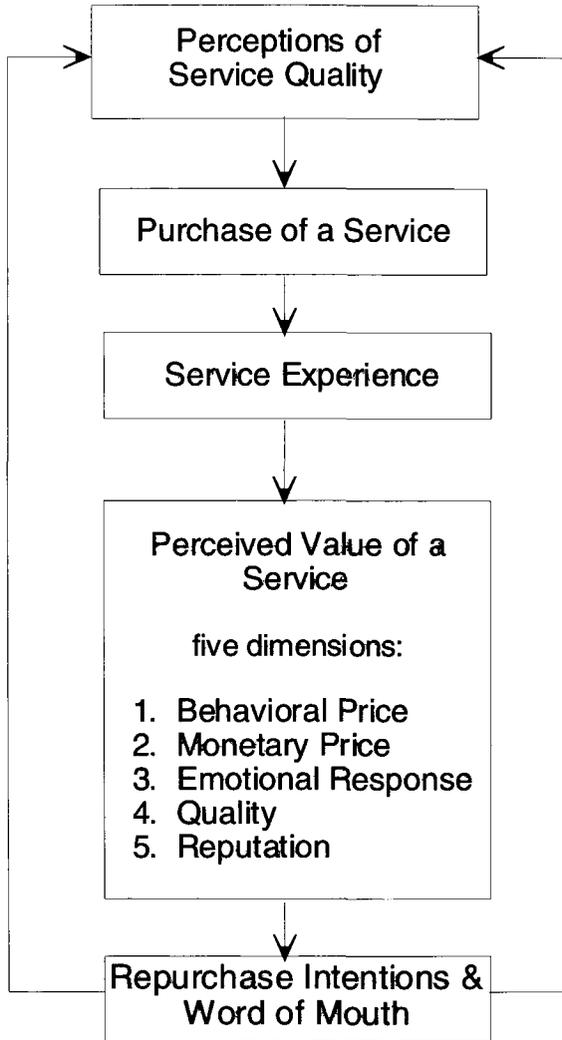


Figure 1. Post-experience Perceived Value in the Service Choice Process

Methods

Instrument Development

The operational definition of the construct of perceived value that was used to guide development of the scale was “the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given (Zeithaml, 1988, p. 14). Further, perceived value was a priori conceptualized as a multi-dimensional construct, including the dimensions

of quality, emotional response, monetary price, behavioral price, and reputation. Since reliability has consistently been found to be the most important dimension of quality for recreation and tourism managers (Asubonteng, McCleary & Swan, 1996; Backman & Veldkamp, 1995; Howat, Crilley & Milne, 1995; Knutson, Stevens and Patton, 1995; Ostrowski, O'Brien & Gordon, 1994), quality was defined as a consumer's judgment about a product or service's overall excellence or superiority (Zeithaml, 1988).

Emotional response was defined as a descriptive judgment regarding the pleasure that a product or service gives the purchaser (Sweeney et al., 1998). The definition utilized for monetary price was the price of a service as encoded by the consumer (Jacoby & Olson, 1977). Behavioral price was defined as the price (non-monetary) of obtaining a service, which included the time and effort, used to search for the service (Zeithaml, 1988). Finally, reputation was defined as the prestige or status of a product or service, as perceived by the purchaser, based on the image of the supplier (Dodds et al., 1991).

The initial pool of items was accumulated from various scales developed by others relating to the construct of perceived value. Fifty-two items were acquired from a review of both scientific and popular literature (Bojanic, 1996; Burton & Lichtenstein, 1988; Deighton, Romer, & McQueen, 1989; Dodds, 1996; Grewal et al., 1998; Kantamneni & Coulson, 1996; Lutz, 1986; Maddox, 1982; Oh, 1999; Petroschius & Monroe, 1987; Sweeney et al., 1998; Zeithaml, 1988).

Instrument Validation

In order to examine the scale's external validity and generalizability it was administered to samples on two different seven-day Caribbean cruises, on board the same vessel. To ensure that cruise passengers taking back-to-back cruises were not sampled twice, the two samples were taken three weeks apart. One questionnaire was distributed to each cabin on board the vessel that was accommodated by a paying cruiser on the second to the last evening of the cruise. A letter was included with the questionnaire explaining that only one member in the room was to complete it, and that it was to be returned to their cabin steward.

The scale was operationalized by asking participants to rate each item on a scale from 1, definitely false, to 5 definitely true for their cruise on board the vessel. The survey also included single-item measures of overall perceived value and overall satisfaction. Overall perceived value was measured by asking respondents to rate the value received for their money when purchasing their cruise. The single item, 10-point scale, was anchored by extremely poor value and extremely good value.

A total of 591 questionnaires were distributed during the first cruise, and 592 during the second. Of these 394 (66.7%) and 398 (67.2%) completed questionnaires were returned from the first and second sample respectively. Among passengers who participated, the average age was 51.6, the

median household income was \$75,000 to \$99,999, 58.7% were female and, on average, respondents had taken 8.1 cruises in their lifetime.

Results

Panel of Judges

Eight expert judges, from four different universities (all faculty members with Ph.D.'s and expertise in service marketing), were selected to refine and edit the initial 52 items for content validity. The judges were given the following operational definition of perceived value: the consumer's overall assessment of a product, or service's utility based on the perceptions of what is received and what is given (Zeithaml, 1985). They were also given operational definitions for the proposed dimensions of quality, emotional response, perceived monetary price, behavioral price and reputation.

Consistent with Zaichowsky (1985) and Lee and Crompton (1992), each of the judges were first asked to rate each of the 52 items as either clearly representative, somewhat representative or not representative of the perceived value construct. The judges were also asked to assign each of the items as either "clearly representative" or "somewhat representative" to one of the five proposed dimensions of perceived value. They were further asked to identify if any items were representative of more than one dimension.

Following the same criteria utilized by Lee and Crompton (1992), a series of rules were established in order to determine whether or not each item was to be discarded. An item was also discarded if less than five of the eight-member panel assigned it to the same dimension. This process resulted in 25 of the 52 items being eliminated.

The judges were further asked to: a) edit and improve the items to improve their clarity, readability and content, b) identify any items which they believed may be objectionable to respondents and c) offer any suggestions they felt might improve the study. This process resulted in the slight rewording of one item, and the removal of two others. The items removed were due to the judges' belief that the items were too similar to others in the scale. In both cases, the item with the weakest rating by the panel of judges was removed.

The resultant scale consisted of 25 items. Of these items, four were assigned to the dimension of "quality", six to "perceived monetary price", and five each to "emotional response", "behavioral price" and "reputation".

Pretest of Instrument

To examine dimensionality and internal reliability of the scale items, a convenience sample of 344 undergraduate students was used. Students were selected from two undergraduate tourism classes, and three undergraduate marketing classes. All students who attended the class periods on the date the questionnaire was administered were asked to complete a questionnaire. To enable a majority of the students to be familiar with the service context,

respondents were asked to rate each of the 25 items as they related to lunch at a well-known fast food restaurant.

Respondents were further asked the last time that they had experienced a lunch at the restaurant. Only respondents who had been to the restaurant within the last month were included in the study. Of the respondents included in the study ($n = 278$), approximately one half (51%) were female. Respondents had visited the restaurant 3.6 times on average in the last month.

In order to validate the a-priori assignment of the 25 items to their respective dimensions (as assigned by the expert panel), confirmatory factor analysis (CFA) was employed. The analyses were conducted with the use of the SAS System's proc calis procedures and followed guidelines suggested by Hatcher (1996). Fit indices were chosen following recommendations by Hu and Bentler (1998). Fit indices included in the current investigation are the Bentler (1989) comparative fit index, or CFI, Bentler and Bonett, (1980) normed fit index, or NFI, and Joreskog and Sorbum (1981) root-mean-square residual, or RMSR.

Both the CFI and NFI may range in value from 1.0 to 0.0. According to Bentler (1989), a fit index of 0.0 is associated with a "null" model (one specifying that all items are uncorrelated), while a fit index of 1.0 represents a "saturated" model (a model with zero degrees of freedom that perfectly reproduces the original covariance matrix). Values greater than 0.9 indicate a good fit of the data, while values higher than 0.95 indicate an excellent fit of the data (Hu & Bentler, 1998). Conversely, An RMSR of less than .10 suggests a good fit of the data (Joreskog & Sorbum, 1981)

Results of the model (CFA) are reported in Table 1. Since both the CFI and NFI are greater than 0.90, and the RMSR is less than .10, results suggest that the model is a good fit of the data. This finding further suggests, that each item is uniquely related to the factor to which it was assigned. A review of the resultant Wald and Lagrange tests did not suggest any conceptually sound changes to the model. Therefore, the proposed model was tentatively accepted, pending further tests to examine its reliability and validity.

The resultant standardized path coefficients are displayed in Table 2. The t -tests investigating the null hypothesis that each of the coefficients are equal to zero were all significant ($p < 0.01$), suggesting that all paths were assisting in the prediction of their assigned factors. These results provided

TABLE 1
Goodness of Fit Indices: Perceived Value Factors Confirmatory Factor Analyses

Model	<i>N</i>	Chi-squared	df	<i>p</i>	CFI	NFI	RMSR
Pretest	278	512.65	265	<0.01	0.932	0.933	.056
Cruise 1	394	1055.51	265	<0.01	0.916	0.905	.037
Cruise 2	398	1091.35	265	<0.01	0.908	0.901	.032

TABLE 2
Standardized Path Coefficients of Cfa's Predicting Factors of Perceived Value

Factors/Items	Pretest (n = 278)	Cruise 1 (n = 394)	Cruise 2 (n = 398)
<i>Quality</i>			
is outstanding quality	.45	.83	.89
is very reliable	.76	.87	.84
is very dependable	.87	.90	.87
is very consistent	.68	.89	.88
<i>Emotional Response</i>			
makes me feel good	.76	.89	.85
gives me pleasure	.80	.90	.89
gives me a sense of joy	.86	.93	.91
makes me feel delighted	.94	.92	.95
gives me happiness	.87	.91	.88
<i>Monetary Price</i>			
is a good buy	.68	.79	.81
is worth the money	.71	.82	.88
is fairly priced	.80	.90	.89
is reasonably priced	.88	.92	.89
is economical	.85	.84	.77
appears to be a good bargain	.70	.83	.83
<i>Behavioral Price</i>			
is easy to buy	.82	.87	.81
required little energy to purchase	.82	.89	.85
is easy to shop for	.77	.87	.86
required little effort to buy	.88	.96	.95
is easily bought	.88	.95	.94
<i>Reputation</i>			
has good reputation	.74	.90	.81
is well respected	.82	.89	.88
is well thought of	.74	.87	.84
has status	.59	.78	.75
is reputable	.71	.91	.86

All paths significant at $p < 0.01$ level.

evidence supporting the convergent validity of the indicators (Anderson & Gerbing, 1988).

Table 3 displays the composite reliability scores for each of the five factors. Composite reliability is analogous to coefficient alpha (Cronbach), and reflects the internal consistency of the indicators measuring each CFA factor (Fornell & Larcker, 1981). Results show that all five factors have composite reliability scores greater than 0.70. Utilizing the criteria set for the current analysis, this suggests that each of the factors are reliably measuring their respective constructs.

TABLE 3
Composite Reliability Scores of Perceived Value Factors

Factor	Number of Items	Pretest Reliability	Cruise 1 Reliability	Cruise 2 Reliability
Quality	4	.79	.93	.92
Emotional Response	5	.93	.96	.95
Monetary Price	6	.90	.94	.94
Behavioral Price	5	.92	.96	.95
Reputation	5	.85	.94	.92

Combined, these findings support the reliability and internal validity of the hypothesized model (Hatcher, 1996). Since the model was found to be a good fit of the data and all paths were found to be significant ($p < 0.05$), it is suggested that the proposed scale effectively measured the pretest subjects' perceived value. Thus, the scale was tentatively accepted, pending further examination and given the name SERV-PERVAL scale.

Instrument Validation

In order to further test the reliability of the 25 item SERV-PERVAL scale, separate confirmatory factor analyses (CFA) were conducted on the two samples of cruisers. The analyses were conducted utilizing the procedures described previously. Results of the two CFA's are reported in Table 1. Since the CFI and NFI fit indices for both samples are greater than 0.90 and the RMSR scores are less than .10, results suggest that both models are good fits of the data. This finding also suggests, that each item is uniquely related to the factor to which it was assigned. Further, review of the resultant Wald and Lagrange tests did not suggest any conceptually sound changes. Therefore, the models were tentatively accepted, pending further tests to examine their reliability and validity.

The resultant standardized path coefficients are displayed in Table 2. The t -tests investigating the null hypothesis that each of the coefficients were equal to zero were all significant ($p < 0.01$), suggesting that all paths are assisting in the prediction of their assigned factors. These results provide evidence supporting the convergent validity of the indicators (Anderson and Gerbing, 1988).

Table 3 displays the composite reliability scores for each of the five factors for both samples. Results show that all five factors from both samples have reliability scores greater than 0.90. Utilizing the criteria set for the current analysis, this suggests that all of the factors are reliably measuring their respective constructs for both data sets.

Combined, these findings support the reliability and validity of the hypothesized models (Hatcher, 1996). Since the model was found to be a good fit of the data and all paths were found to be significant ($p < 0.05$), it is

suggested that the proposed scale effectively measured the proposed factors of perceived value for both samples.

To further validate the scale, the perceived value factors were tested for criterion validity (sometimes called predictive validity). According to Babbie (2001), criterion validity is demonstrated if scores from the developed scale show expected relationships with one or more external variables that provide direct measure of the construct measured. It would be expected that each of the five factors would be positively related to an overall measure of perceived value. Thus, Pearson's correlations were employed to examine the relationships between each of the factors of perceived value, and overall perceived value. All five factors correlated positively and significantly ($p < .01$) to overall perceived value for both samples (Table 4).

To further examine criterion validity, multiple regression with overall perceived value as the dependent variable, and the factors of perceived value as independent variables was employed. It would be expected that the five factors would explain a majority of the variance in perceived value. The regression analysis predicting perceived value was significant ($F_{5,638} = 220.68, p < .001$) and explained 63.5% of the variance in the model. Therefore results suggest that the proposed five factors of perceived value are related to the construct of perceived value (have criterion validity).

Further validation of the scale was completed by testing the factors of perceived value for discriminant validity. Discriminant validity can be examined by comparing the inter-correlations of the constructs to the square root of the average variance extracted (Fornell & Larcker, 1981). Table 5 reveals that the square root of the average variance for each of the factors is greater than any of the inter-correlations of the constructs. This finding suggests that the factors of perceived value have discriminant validity.

Summary and Conclusions

Results demonstrated a valid and reliable five dimensional scale for measuring perceived value. With the use of a panel of experts, the scale was

TABLE 4
Bivariate Correlations Between Factors of Perceived Value and Overall Perceived Value

Factor	Cruise 1 Sample	Cruise 2 Sample
Quality	.77	.71
Emotional Response	.71	.70
Monetary Price	.76	.72
Behavioral Price	.46	.41
Reputation	.64	.54

All correlations significant at the $p < 0.01$ level.

TABLE 5
Discriminant Validity Analysis of Combined Cruise Samples

	1	2	3	4	5
1. Quality	.87				
2. Emotional Response	.79	.91			
3. Monetary Price	.77	.72	.85		
4. Behavioral Price	.56	.52	.56	.91	
5. Reputation	.78	.68	.66	.56	.87

The bold diagonal elements are the square root of the variance shared between the constructs and their measures (average variance extracted). Off diagonal elements are the correlations between constructs. For discriminant validity, the diagonal elements should be larger than any other corresponding row or column entry.

judged to have content validity. The scale consisted of five interrelated, but unique dimensions: quality, emotional response, monetary price, behavioral price and reputation.

Utilizing CFA on the data from a pretest, and two separate samples, the generated items were found to saliently load uniquely on their predicted factors. Further, all of the resultant standardized path coefficients were found to significantly ($p < .01$) assist in the prediction of their assigned factors. This finding provided evidence of the convergent validity of the proposed indicators (Anderson and Gerbing, 1988).

In order to confirm the reliability of the five factors, composite reliability scores for each of the factors were computed. All reliability scores for the three samples were deemed acceptable, suggesting that each of the factors were reliably measuring their respective constructs. Criterion validity was investigated by examining the correlations between perceived value and each of the factors. It was found that perceived value was positively and significantly ($p < .01$) related to each of the five factors. Finally, discriminant validity was investigated by comparing the inter-correlations of the constructs to the square root of the average variance for each of the factors. It was revealed that discriminant validity was found for each of the factors of perceived value.

While the current methods were thorough, the study was limited to a specific context. More research is necessary to determine how generalizable the scale is across service sectors. Also, future research should examine interrelationships between each of the factors. While the identified dimensions are unique, the causal paths between each dimension would assist in theoretical development of the construct of perceived value. It is believed that this knowledge would assist leisure and/or tourism management in better understanding the role each of the dimensions play in consumers' decision making processes. It is also recommended that future research examine the redundancy of items in the scale. Redundant items could thus be removed

to make the scale more succinct, and less taxing on respondents. Further, it is possible that potential dimensions of perceived value were not identified in the final instrument and the items included were not exhaustive of the five dimensions identified. Thus, it is suggested that future research examine the potential addition of both different factors and different items.

As suggested by Havitz (2000), marketing literature, while seldom utilized in leisure research, is consistent with many of the important "perspectives within the leisure literature" (p. 47). It is thus postulated that the adaptation of tools in the field of marketing, for the fields of recreation and tourism may have far reaching benefits for leisure and tourism providers.

Since there are currently no multidimensional measures of perceived value of a service, and evaluations of perceived value of a service have been found to differ from evaluations of products (Jayanti & Ghosh, 1996; Petrick 1999), it is believed that the current conceptualization is important to leisure and tourism providers. Further, it has been suggested that current perceived value measures are difficult to quantify (Semon, 1998), though perceived value has been recognized as one of the most salient determinants of purchase intentions and repeat visitation (Chang & Wildt, 1994; Bolton & Drew, 1991; Jayanti & Ghosh, 1996; Petrick, 1999). Thus it is hoped that, similar to the Parasuraman et al. (1988), the scale offered here will facilitate comparison of value within, and across services.

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