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Propositions Addressing Perceptions of Reference Price for Public Recreation Services

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Abstract  The traditional economic model of supply and demand, which predicts that as price increases fewer consumers will decide to purchase, is incomplete because it ignores contextual and residual factors which influence consumers' perceptions. This paper suggests nine propositions which evolve from a review of the literature related to consumers' perceptions of reference price. The propositions are grouped under three headings: the roles of perception and reference price; the influence of information on reference price; and the role of equity in reference price perception. The propositions are intended to stimulate future research into understanding the role of reference prices in the context of public recreation services.

Keywords: Reference price, public recreation services, propositions.

Introduction

Increasing scarcity of financial resources has stimulated an unprecedented interest in pricing public services. Price frequently receives the greatest attention of all the variables of the marketing mix by managers, since raising or lowering price is often the most efficient and effective way to increase revenue in the short term (Monroe 1979). This is because alterations to other marketing mix variables (e.g., service, promotional strategy or channel of distribution) are usually more difficult to implement and rarely generate the short-term increase in revenue that is possible through price increases.

The traditional economic model of supply and demand, which predicts that as price increases fewer consumers will decide to purchase, is incomplete. Price does more than simply indicate the purchase cost to potential buyers (Monroe and Petroshius 1981). Consumers interpret and classify prices based on their knowledge and past experience. This classification process, in turn, assists consumers in evaluating price information and making purchase decisions. The process through which such information is received and accommodated is known as perception (Corso 1967). An individual's perceptions of price influence all purchase decisions. Scholars in consumer behavior contend that any discussion of price must, therefore, also consider consumer perceptions (Helgeson and Beatty 1986; Monroe 1984; Olsen 1980).

Reference price represents a perceptual approach to the study of consumers' re-

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sponses to price. Reference price is the price which a consumer expects to pay for a service (Nwokoye 1975). The notion of reference price is based upon adaptation level theory which suggests that an individual’s evaluation of a price is determined by an adaptation to those stimuli to which the individual is responding, as well as to background and psychological and physiological stimuli. The interplay of these stimuli creates an expected or reference price. The existence of this expected price influences the way in which consumers perceive a price change.

This paper reviews the literature which relates to the issue of price perception. Much of this literature is from the discipline of marketing since little work in this area has been reported in the recreation journals. Nine propositions are developed and they are discussed under three broad headings: (1) the role of perception and reference price; (2) the influence of information on price perceptions; and (3) the role of equity in price perceptions. The intent of the propositions is to suggest directions for the future study of price perception in the context of public recreation services. Each of the propositions is presented in an operational format that is conducive to empirical investigation. In each case, discussion of theory and empirical findings where they are available precedes presentation of the proposition, providing the conceptual and empirical justification for it.

The Role of Perception and Reference Price

The traditional supply and demand model which regards price as the only determinant in the purchase decision has been a major force in the marketing literature (Monroe and Petroshius 1981). This model suggests that as the price of a service increases fewer buyers are willing to purchase the service. Monroe and Petroshius (1981) report that studies which have tried to explain purchase behavior on the sole basis of price generally have been unsuccessful. The authors suggest that this failure may be due to the researchers’ exclusive focus on the price variable and their assumption that other contextual variables are either constant or irrelevant. Miles and Fedler (1986), for example, found that the price users were willing to pay to use hiking trails varied according to who received the funds. If the revenues went to the federal treasury there was little support for payment, but if they went directly to the park for maintenance there was substantial support. In this case, the contextual variable exerted considerable influence on the price variable. Clawson and Knetsch (1966) similarly indicated that a number of factors affecting the position and shape of a demand curve may change in a variety of ways, making it difficult to isolate the effect of any one factor such as price.

Models which recognize consumer perception as a critical intervening variable in the purchase decision are likely to be more realistic. Such models must consider both psychological and contextual variables as active ingredients in the decision making process (Monroe 1984). Contextual variables represent objective external stimuli, such as cost, location or time. Psychological variables relate to the manner in which an individual evaluates and stores these stimuli in memory.

Adaptation level theory is representative of such an integrated approach to the purchase decision. Adaptation level is defined as a weighted geometric mean of all stimuli influencing the consumer from without and within. This definition has been successfully used to experimentally determine values of adaptation levels of time intervals, lifted weights, sound intensities, and tactile density (Helson 1964). Monroe and Della Bitta (1984) suggest that the theory is also applicable to evaluating consumer perception of
price. In this context, adaptation level theory suggests that consumers respond to the combined influence of three classes of stimuli: focal, contextual, and residual (Helson 1964). Helson's contextual and focal stimuli generally correspond to the contextual variables discussed by Monroe, and his residual stimuli approximate Monroe's psychological variables. Adaptation level contextual variables represent the influence of background cues; residual variables represent the relative influence of previous purchase experiences; focal variables represent those elements that occupy the immediate attention of the consumer. For example, in the context of a public swimming pool, contextual variables might include knowledge that the pool is operated through tax dollars. Residual variables resulting from past experiences at this and perhaps other public pools might be recalled. The resultant expectation may be for relatively few amenities and low prices. The price being charged for admission to the pool would represent a focal stimulus. Table 1 suggests variables which may engender a given reference price within the public swimming pool scenario.

Adaptation level theory has been used with encouraging results in a variety of market research settings (Monroe and Della Bitta 1984; Berkowitz and Walton 1980; Nwokoye 1975). Research based upon adaptation level theory indicates that buyers are not perfect information processors (Monroe 1984), for if they were, buyers would respond only to the objective information provided about the services. Buyers would establish priorities for a given purchase and shop until they had made a purchase which satisfied these priorities. For example, a prospective fitness class participant might establish priorities in terms of program price, location, and availability during a convenient time period. However, the eventual decision is not likely to be based totally on an objective assessment of how well each class opportunity meets these criteria. It may be influenced by individual perceptions and interpretations of the information provided. Thus, higher priced programs may be perceived as being of higher quality, or friendlier staff members may be perceived as being more capable.

Contextual and residual variables might influence consumers' perceptions and subsequent evaluation of the focal variable, price. Consumers are likely to evaluate such variables from the perspective of their own individualized perceptions. These perceptions, in turn, are likely to alter the manner in which consumers absorb objective information presented to them (Obermiller and Wheatley 1983; Monroe 1984). Prices are likely to elicit different responses from consumers because of a variety of situational and individual difference factors. Consumers who are inexperienced in using professional services, for example, do not hold accurate reference prices as a result of limited exposure to the services and incomplete price information (Zeithaml and Graham 1983). Thus, reference prices which new or infrequent consumers use as a standard against which to eval-

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Classes of Stimuli in Public Pool Scenario</th>
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<tr>
<td><strong>Expectation</strong></td>
<td><strong>Category</strong></td>
</tr>
<tr>
<td><strong>FINANCIAL</strong></td>
<td>Knowledge of public support</td>
</tr>
<tr>
<td><strong>SERVICE QUALITY</strong></td>
<td>Knowledge of other recreation facilities</td>
</tr>
<tr>
<td><strong>SAFETY</strong></td>
<td>Perceived need for supervision</td>
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</table>
uate new prices may or may not reflect the actual prices charged. Such reference prices might represent aggregate values from a variety of sources or simply represent an arbitrary best guess on the part of the consumer (Monroe and Petroshius 1981).

In most purchasing situations buyers choose from an array of alternative brands and prices (Monroe, Della Bitta, and Downey 1977). The array of prices confronting the buyer constitutes a price structure. Price stimuli, provided by Monroe et al. (1977), were perceived as being higher by subjects who previously had been exposed to low prices. Zeithaml and Graham (1983) suggest that the absence of price information for professional services may inhibit the formation of a stable price structure in many cases. As a result, reference prices in some contexts may be comparatively weak and lack the influence which has been hypothesized to exist when dealing with more tangible products (Monroe 1984). However, in the context of public recreation where little direct competition exists to many of the service offerings and prices have tended to remain constant over long time periods, reference prices may be stable and well defined.

The absence of pricing information may not be as prevalent in public recreation services as it is in the area of professional services to which Zeithaml and Graham primarily referred. Many individuals participate in recreation on a regular basis. Daily swims at the community pool, weekly exercise classes, or monthly concerts are all examples of public recreation programs that may engender definitive reference prices in the minds of consumers. As a result of the regular use of public recreation programs consumers may be able to form definite price structures for such programs.

The implications of the dynamic presence of individual contextual and residual variables must be viewed as important by the recreation administrator. Consumers do not evaluate prices objectively in a vacuum. Rather, prices are compared with existing reference prices for that service and with prices offered by other suppliers of that service. Howard and Crompton (1980) suggest that the initial price charged for any new program acts as a critical residual cue in establishing a reference price in the mind of the consumer. There is a region of indifference around the reference price and changes in price within this region are not likely to produce a negative or positive evaluation on the part of the consumer (Emery 1970). Consequently, price increases or price discounts that remain within this region of indifference are unlikely to be perceived by a consumer as being meaningfully different from the old price.

Adaptation level theory suggests that the introduction of a user price, or an increase in existing price, may have to contend with a perception that the new fee or increase is greater than it actually is. One reason for this is that, historically, public recreation programs have been subsidized through general tax funds so they could be offered either free of charge or at a nominal price. Any increase in such prices may be viewed as unreasonable as a result of comparing them with traditional pricing levels.

Proposition I suggests several research questions. For example, does consumer acceptance lead to increased willingness and/or intent to purchase? How might such acceptance be operationalized? How great must be the relative differences between reference price and actual price before the latter proves unacceptable? Does this difference vary across services?

**PROPOSITION I:** The acceptance of an increased price for a public leisure service is likely to be influenced by the existing reference price for that service.

A reference price may not be consistent across similar services offered by the public
and private sectors. A taxpayer may hold strong beliefs about the role of services provided by the public sector, but such beliefs may not extend to the private sector. For example, it is doubtful that there are expectations of subsidized delivery within the private sector so notions of support through taxation are likely to be unique to the public sector. It is proposed that a consumer will differentiate between public and private sector suppliers when arriving at a reference price.

Proposition II suggests that sector bias may exist when consumers compare private and public sector services. Is there an expectation of lower prices when a given service is delivered by the public sector than when it is offered by the private sector? If so, how much lower? Are such expectations accompanied by an expectation of lower quality service?

**PROPOSITION II:** Consumers expect prices charged by public sector agencies to be different from those charged by private sector suppliers for a similar service.

### The Influence of Information on Reference Price

Several studies have demonstrated the influence of information on consumers' perceptions. Petty and Cacioppo (1981) reported that strong, compelling, favorable arguments may cause a consumer to rehearse the argument internally and may result in a more positive attitude. Nwokoye (1975) also notes that judgements of price can be changed by presenting other prices which facilitate comparisons.

Traditional information dissemination strategies in recreation have revolved almost exclusively around providing factual information on program, time, price, and location. Given the relative importance of reference price in consumers' perceptions of actual price, consideration may usefully be given to providing consumers with related price information which is intended to change the contextual or residual contexts against which they evaluate a price. Public recreation agencies typically have not implemented such a strategy in the past.

New information is constantly being absorbed and, as a result, existing values, beliefs, and behavior are being revised (Ajzen and Fishbein 1980). Research has suggested the dynamic nature of the way in which consumers process price information (Zeithaml and Graham 1983). Reference prices should not be considered as fixed entities resistant to change. The concept of adaptation level recognizes the influence of a flow of incoming stimuli.

Assimilation-contrast effects, discussed by Monroe (1981), support this notion of incoming information influencing an individual's reference points or adaptation levels. The assimilation-contrast effect suggests that new price information may be assimilated into a consumers' prevailing price range and influence subsequent evaluations of that price. If the new price is far removed from the current price range, however, the contrast may be too great and the price will either be perceived as belonging to another product/price category or be perceived as being unreasonable. In that case, the new price information would have no influence on the evaluation of existing price levels.

Obermiller and Wheatley (1985) report that subjects were receptive to new information and changed their existing beliefs, attitudes, and behaviors in a consistent manner. Robertson (1976) also argues that preconceived beliefs may be dislodged by new information. Krietler and Krietler (1976) indicate that belief clusters form a cognitive orienta-
tion which is amenable to change and that persuasion, discussion, and communication of information are useful for precipitating this change. Petty and Cacioppo (1981) suggest the provision of relevant information may influence or alter attitudes and beliefs. Such information acts as a mild attack on existing attitudes (Keisler 1971) and creates new terms of reference or persuasion cues. Factors inherent in the message may produce dissonance in the mind of the consumer. For example, taxpayers who conceptually support total subsidization of a public leisure service may question this support when informed of the actual cost which such an approach entails.

The cost to an individual is also likely to influence that individual’s perceptions of price. Residents may be more or less supportive of a given price if they are made aware of the cost and level of subsidy involved in delivering the service. When provided with information which indicates the level of tax support, residents may reevaluate their existing perceptions. Such information may shift a prevailing reference price.

Proposition III suggests that information that positively influences existing price or benefit structures enhances acceptance of price changes. The nature and intent of such information could be altered experimentally to determine optimal conditions for creating such acceptance. For example, is comparative information more effective in influencing reference price than information on the cost to the agency of providing a service? What comparisons with what type of competition or what type of products and services are most effective? Which benefits are most likely to influence reference price?

PROPOSITION III: Acceptance of a price increase would be enhanced by informing those affected by it of (1) the prices charged by other suppliers for a similar service; (2) the justification for raising the price including the cost of delivering the service and the level of subsidy involved, and (3) the projected benefits emerging from the price increase.

Proposition III suggests that meaningful information relating to both comparative prices charged by other suppliers and the level of tax support given to a specific service may be helpful in changing existing reference prices for public leisure services. Should such a strategy be considered, Monroe (1984) suggests that resulting changes to a subject’s frame of reference may be sensitive to the order in which the information is presented. Monroe and Petroshius (1981) also report that the sequence of presentation of different types of information can produce systematic changes in the level of reference price.

Proposition IV builds upon the research questions identified by Proposition III. If combinations of different kinds of information are effective in influencing acceptance of price levels, it is appropriate to investigate the relative impact of the order in which such information is provided. The sequence with which information is provided could be altered and optimal combinations determined.

PROPOSITION IV: The order in which comparative price and/or cost information is introduced to consumers may influence eventual beliefs, attitudes, and expectations toward the price charged for that service.

Perceived inequity on the part of “nonconsumers” should be a concern in pricing decisions. The benefits of pricing to those who are required to provide support through taxes should be considered. Results from a national probability sample survey conducted
for the Heritage Conservation and Recreation Service by Economic Research Associates (1976) support this notion. The greatest support for user fees was displayed by elderly, poor, and rural residents. The report indicated that these residents were most likely to be low or nonusers of public recreation programs. These nonusers perceived little personal benefit from the provision of public recreation programs. They tended, therefore, to support fee structures which ensured that users bore a greater part of the financial burden of such services.

Proposition V suggests (1) that nonconsuming taxpayers may perceive insufficient benefit structures provided through park and recreation services and (2) that they prefer shifting the financial burden for providing these services to consumers. Can park and recreation services offer benefits to nonconsumers? Under what conditions might they consider such services as worthy of support?

PROPOSITION V: “Nonconsuming” taxpayers, when given the choice, will favor higher user fees and lower levels of tax support for park and recreation services.

There has been little discussion of, or empirical research reported on, perception of price in the field of recreation. There is a general reluctance on the part of decision makers to implement fee structures because they fear adverse public opinion (Harris and Driver 1987; Crompton and Lamb 1986; MacKintosh 1983). “Attempts by federal agencies [with outdoor recreation responsibilities] to obtain wider authority to implement fee programs have been remarkably unsuccessful. A frequent argument against such legislation has been that the public opposes higher fees” (Driver 1984:45).

Some research supports this assumption. For example, Manning and Baker (1981) reported a case in which users overwhelmingly favored the use of city taxes to support public parks and recreation programming, whereas they generally opposed the imposition of fees and charges to help pay costs traditionally supported by tax dollars. Stankey and Baden (1977) also suggest that there seems to be a strong cultural notion supporting the provision of opportunities to experience nature free of charge.

Recent research indicates, however, that consumers may well favor fees if some added benefit is to be realized through the payment of such fees. Shelby et al. (1982) found that most wilderness users were willing to accept prices where none had been charged previously, in an attempt to limit use and reduce crowding. Driver (1984) suggests that there is likely to be little opposition to an entry fee at a public recreation area if the fee is perceived as helping cover the cost of the service being provided. Miles and Fedler (1986) found that public park users were more willing to pay higher amounts when the local park or forest unit retained the fee, than when it was directed into the general treasury. Driver (1984) observes that consumers often support fees if they are used to develop and maintain the recreational services which they use. In situations where fees are directly expended on the resource at which they are collected, communication efforts to inform users of the ultimate disposition and use of those funds may create a meaningful facilitative framework for those paying the fees. In adaptation level terms, this action changes the contextual variables and, thus, changes the context in which a price adjustment is evaluated. Some jurisdictions have, for example, created enterprise funds which are governmental accounting funds into which go all expense and revenue transactions associated with a service. Enterprise funds not only provide tangible evidence that consumer fees are being used to benefit the service from which they are derived, but also offer flexibility and additional resources to the recreation administrator.
Proposition VI suggests that when fees are perceived to be an investment yielding a return in increased personal benefits through improved resources, they are more likely to be acceptable to the consumer. A myriad of variables may influence this process, however. For example, does time elapsed between fee invested and accrued benefits influence willingness to pay the initial price? What role does degree of commitment or intensity of usage play in this process? Does the nature of this personal cost/benefit analysis differ across services?

PROPOSITION VI: Consumers are more likely to support user fees when such fees are used to maintain and improve the resource at which they are collected.

Wicks and Crompton (1986) found that public park administrators consistently underestimated the willingness of visitors to pay fees and charges. Public officials often cited public pressure as a primary reason for maintaining low prices. In many cases, however, the general public considered a proposed price to be appropriate in the public recreation setting. As one author suggests, if a facility is private or operated through a trust or foundation, it may charge what it likes with little public scrutiny. If the facility is operated by a local authority, however, the author contends that the public will be much more critical of any measures that might lead to an increase in existing fees (Evans 1983). Evidence seems to be accumulating, however, that most participants are willing to pay higher user fees for many public recreation services (Manning et al. 1984).

Proposition VII suggests that a marketing orientation may be appropriate in the future study of pricing in the public sector. Are public decision makers establishing policy based upon the known needs and values of their clientele? What criteria are used to make allocation and pricing decisions? Are these criteria important and weighted consistently by both decision makers and members of the community?

PROPOSITION VII: Both nonconsuming taxpayers and consumers are more likely than administrators and elected officials to support fees for a variety of public recreation and park services.

The Role of Equity in Reference Price Perception

People have different models of equity against which they evaluate what is fair or equitable (Wicks and Crompton 1986). These models are likely to change according to environmental conditions (Homans 1961). Wicks (1986) in his study of equity models in Austin, Texas, reports that residents tended to support compensatory pricing and subsidization of recreation services for children and senior citizens, but not for other population segments.

Crompton and Lamb (1986) offer an approach to pricing which is intended to be consistent with consumers' models of equity. They suggest that those who benefit from a service should pay for that service. They argue that it is unreasonable to expect users to absorb all the costs of a service which has spillover benefits for the entire community. This view of pricing is unique to the public sector. In the pricing of public services, general societal benefits are considered as well as the benefits which accrue to specific participants. Thus, price increases for programs which benefit a majority in a community
may be considered differently from those that benefit only a small segment of the population.

Proposition VIII recognizes that different notions of equity exist within a community. Such notions are likely to have a substantial impact on what different groups within a community consider to be fair and appropriate. Thus it is essential that public decision makers have an understanding of these equity models. Future research may be directed at operationalizing variables that measure community expectation toward prices of different public recreation services. Does the community support public subsidization in certain service categories but not others? For which services are user fees most likely to be supported?

PROPOSITION VIII: Residents will expect the proportion of a program’s costs covered by revenues generated from fees to vary according to type of recreation program.

A variety of market segments exist within a community. The traditional undifferentiated approach to the delivery of governmental programs has created an inappropriate sense of “public homogeneity” among public decision makers. Given the different models of equity, contextual backgrounds, and residual information which residents are likely to possess, it is unlikely that there will be consensus among residents in a community on price decisions.

Proposition IX relates to price elasticity across consumer groups. Do different groups vary in their elasticity toward prices for the same public services? This proposition is impacted by the findings emerging from researching all the previous propositions. Investigation of elasticity across groups rather than across services will offer insights into the responsiveness of different market segments to price increases.

PROPOSITION IX: Different groups of residents will support different price structures for any selected recreation service.

Concluding Comments

Pricing has been referred to as an almost alchemical process requiring the application of both art and science (Funkhouser 1984). Most attention has been devoted to the classic economic theory of pricing, and relatively few writers or researchers have considered consumer perception as a central issue in pricing decisions for public recreation services. Consumer perceptions, beliefs, and attitudes must be considered in any pricing decision. Adaptation level theory, in the context of public recreation, suggests that consumers frequently have reference price structures which will influence the manner in which they evaluate price decisions. Should the existing reference price range be exceeded, dissatisfaction is likely to result.

Neither the relative strength, nor the organic/dynamic potential of reference price in the context of recreation are known. This paper offers nine propositions which suggest potential relationships between reference price and individual perception, relevant information, and societal equity norms. Each proposition is derived from a review of existing literature, but none are supported directly by empirical investigation. These propositions are offered as a framework for discussion and to give direction to future research of pricing in the public sector.
References


Perceptions of Reference Price


Wicks, Bruce. 1986. *An empirical investigation of equitable distribution concepts in publicly provided recreation and park services in Austin, Texas*. Ph.D. diss., Texas A&M University, College Station.
