

An Empirical Investigation of the Influence of Cost Information on Willingness to Pay for Public Aerobics Classes

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INTRODUCTION

Public recreation administrators have responded to increasing political and economic pressures by instituting a variety of pricing strategies (Howard and Selin, 1987; Becker, Berrier and Barker, 1985). For the first time, the pricing of public leisure services is widely considered an acceptable means of gathering needed resources.

Response of potential users to new pricing policies is not well understood, however. Generally, it has been determined that nonusers support the implementation of user fees for many publicly provided leisure opportunities (Economic Research Associates, 1976). Though users would rather not pay fees, use patterns may not be altered even when higher price levels are instituted (Bamford, Manning, Forcier and Koeneman, 1988; Leuschner, Cook, Roggenbuck and Odenvald, 1987).

Also, different levels of price tolerance levels exist for different public recreation services (Howard and Selin, 1987). Information has been used to influence reaction to price levels. Miles and Fedler (1986), for example, found that information regarding the eventual recipient of fees influenced levels of willingness to pay (WTP) in that consumers were willing to pay more when fees were returned to the park at which they were collected. Presumably, these consumers felt they were likely to benefit from payment of fees that were used to maintain or improve programmes they were currently enjoying. Information which outlined agency costs was found to influence reaction to prices. Cost of service provision information influenced attitudes toward price levels (Reiling, Criner and Oltmanns, 1988) and price expectations (McCarville and Crompton, 1987).

Such information also may influence levels of WTP. Thaler (1985) suggests that WTP levels reflect an assessment of both the outcome of the purchase (acquisition utility) as well as the merit associated with the purchase (transaction utility). Such merit "depends on the price [to be] paid compared to some reference point" (Thaler, 1985, p. 205). Cost of service information may provide this reference point to the consumer. High cost information may suggest that correspondingly high fees may be appropriate and resulting levels of WTP may rise accordingly.

Reference points may be most influential under conditions of uncertainty (Markovsky, 1988) and when the respondents' lack the requisite ability or motivation to assess a given price level (Brown and Slovic, 1988). As a result, current users who are familiar with a service and its costs may respond differently to cost information than those who are unfamiliar with (and perhaps uninterested in) the service.

This study reports the results of two experiments that considered the influence of cost of service provision information on WTP for an aerobics programme offered through a public sector leisure agency. Both users and nonusers were included in these experiments. It was hypothesized that the reference point offered by cost information could be effective in influencing WTP levels. It was further hypothesized that the reference point would be more influential when offered to nonusers.

METHOD

As part of a larger study, 146 adult subjects were used in two separate experiments. The first experiment randomly assigned 69 current users of public aerobics classes to one of two treatment groups. The first group (n = 32) was provided with information regarding a hypothetical aerobics class. This message established the context in which price could be considered but offered no actual price-related information. The second treatment group (n=37) received the same hypothetical programme information but this message was supplemented with cost of service

provision (\$50.00) information. The process through which such information is organized and interpreted may be influenced by motivation (Helgeson and Beatty, 1985) so subjects' levels of involvement and current levels of participation in aerobics classes were gathered.

The second experiment randomly assigned 77 nonusers of public aerobics classes to the same treatment groups listed above. The first treatment group (n = 38) received only programme information. As before, this message established a shared context in which WTP could be considered but offered no price-related information. The second group (n = 39) was provided with the "programme + cost" information.

The subjects who took part in the second experiment were university students who reported little or no participation in publicly provided aerobics classes over the past year. It was hypothesized that such inexperienced subjects would be more susceptible to the influence of the reference point suggested by the cost of service provision information.

RESULTS

Experiment 1:

All subjects in the user group revealed high levels of involvement in aerobics activity and all had participated in a publicly offered aerobics class within the last week. The "programme information only" group revealed a mean WTP of \$35.53. The mean of the "programme + cost information" group was \$36.00. These responses, differing by approximately 1 percent, were considered too similar to warrant statistical comparisons.

Experiment 2:

These subjects revealed less involvement in aerobics programmes than did the users reported in the first study. The group that received the "programme information only" message revealed a mean WTP of \$27.71. The subjects who received the "programme + cost" information reported a mean WTP level of \$34.51. T-test comparisons suggested that the group exposed to the cost information was significantly different from that of the group which received only programme information ($t = 2.04$; $p < .05$).

DISCUSSION

The results of these experiments are of both practical and theoretical interest. In practical terms, users were guided by experience in establishing WTP levels. The WTP levels users reported were consistent with the prices charged by the aerobics programme in which they were registered (Current pricing options enabled participants to pay between \$32.00 and \$36.00 for a similar aerobics programme). Participants may have used existing prices or the price last paid as a reference point when establishing WTP levels. This could account for the failure of the cost related treatment message to alter WTP. The users ignored the treatment message, trusting rather, their own experience and knowledge.

Administrators must consider existing price levels before altering pricing strategies. Notions of what constitutes a fair or appropriate price may be based upon the price now being charged. This reference point may become more potent over time so longstanding prices may be more influential than more transient price levels.

Nonusers' WTP levels were amenable to change. The treatment message elevated WTP over 23 percent. This suggests that new participants may be open to cues which suggest appropriate price levels. The effectiveness of this treatment message was limited however. Group members were unwilling to pay at levels the cost information suggested might be appropriate.

From a more theoretical perspective, this research supports a growing body of literature which suggests that the measure of WTP is relative; one which is subject to influence by potentially

transient conditions from both without and within the individual. As Slovic and Lichtenstein (1983) suggest, preferences expressed through such measures may be "neither absolute, stable, consistent or precise" (p. 599). As a result, tolerance levels (as expressed through WTP) not only differ from programme to programme (Howard and Selin, 1987), but may vary for the same person toward the same programme.

Subjects may be either unable or unwilling to offer valuations such as WTP which represent actual value or benefit. Individuals:

are required daily to make a variety of decisions involving some degree of uncertainty, but their limited cognitive capacity precludes exact computation on every occasion ...[so] individuals select and develop rules and heuristics which are manageable within the constraints of 'bounded rationality' and which (they believe) correspond well enough with their underlying tastes and preferences (Loomes, 1988, pp. 19-20).

Such heuristic strategies may rely upon cues within the environment surrounding the purchase setting and cost of service provision information provides such cues.

This study found that WTP levels could be altered to a significant degree. It may be that reported WTP levels are representative of a range of values that the individual finds equally acceptable (Loomes, 1988). Environmental cues, such as high cost information, may encourage the selection of values within the upper ranges of the range. This process seems to have occurred among the nonuser group.

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