ABSTRACT

This paper analyses benefit transfer in the case of recreational parks using the choice experiment (CE) technique. The CE was employed because it allows different changes in recreational park attributes to be taken into account. The analyses were performed in terms of transferability of valuation function and willingness to pay (WTP) values. The results for the valuation function suggest that the estimated coefficients between the two sites are not transferable. However, the estimated WTP values can be transferred. The results suggest the suitability of using the CE approach in analysing benefit transfer if the objective is to transfer the WTP values rather than the valuation function.

INTRODUCTION

Market-based approaches to evaluate the provision of public goods and services have become increasingly popular over the last three decades. The economic measures of benefit have increasingly been used to inform policy evaluation and project appraisal particularly in the USA and Europe. An early example is the commitment given by the President of the USA, John F. Kennedy in 1964 where he approved the unit day value method for measuring the benefits of the USA, John F. Kennedy in 1964 where he approved the unit day value method for measuring the benefits of the USA, John F. Kennedy in 1964 where he approved the

The use of economic valuation has been extended to developing countries since the 1980s. Malaysia, for example, has incorporated the role of economic valuation into their national policy on the environment. This recognition has meant that an increasing number of studies valuing environmental goods have been undertaken. For example, studies valuing recreational parks in Malaysia have been done by Jamal and Shahariah (2004), Jamal (2000), Mustapha (1993), and Mohd. Shahwahid et al. (1998). The economic valuation study, however, are considered expensive and time-consuming (Harrison & Lesley, 1996). Because of these factors, researchers (e.g. Hanley et al., 2006; Jiang et al., 2005) envisage that the probability of new studies to be conducted at a new site by regulatory bodies is unlikely to happen. Therefore, efforts have been made to use the existing value of environmental benefits to be transferred to a prospective environmental site. The extrapolation of estimates from one or more sites to other similar sites is known in valuation literature as benefit transfer (Colombo et al., 2007; Garrod & Willis, 1999). In benefit transfer, the original site is sometimes referred to as the study site, while the destination site (where the value will be transferred to) is known as the policy site.

The objectives of this paper are twofold. First, to determine the attributes that the public preferred in recreational parks. Such application is considered rare in developing countries. Even though many valuation studies have been undertaken in Malaysia, none of these were applied in the context of benefit transfer analysis.

The rest of the paper is organized as follows. Section 2 reviews related literature. Section 3 discusses the methodology used in CE technique followed with the study design including the selection of attributes and generating choice cards. Section 4 presents the CE results, visitor’s willingness to pay (WTP) to visit parks in Kuala Lumpur and the MAP in Shah Alam and the transferability of estimates. Finally, Section 5 concludes.

LITERATURE REVIEW

In the early days of benefit transfer study, the technique of expert judgement (i.e. unit day value method and similar project method) has been used widely by the US Forest Service in the 1970s and 1980s for recreation valuation purposes (Garrod & Willis, 1999). However, its application was...
systematically undertaken in recreational demand study using the travel cost method (TCM). To date, a study of benefit transfer in terms of use and passive value has been done extensively by analysts in environmental valuation. To name a few, a study of benefit transfer on TCM has been undertaken by Bateman et al. (2007) in woodland recreation benefits. On the other hand, among the studies using the contingent valuation method (CVM) are the study of salt water anglers in Texas Gulf Coast by Downing & Ozuna (1996) and the recreational activity of bird watching by Kirchhoff et al. (1997). Meanwhile, Dumas et al. (2004) did a test of benefit transfer of water quality benefit using three different valuation techniques, namely the TCM method, hedonic price and contingent valuation.

Although benefit transfer has been applied extensively in these valuation techniques, majority of such analyses done in TCM or CVM do not take into account the possible variations in environmental goods (Morrison & Bennett, 2004). Furthermore, Morrison and Bergland (2006) argued that the benefit transfer of these techniques was not supported with the validity test. According to Garrod and Willis (1999), the application of benefit transfer in CVM is susceptible to biased results if the problems of ex ante–ex post such as (1) scale or quantity value; (2) sequential position of the good’s supply; (3) attributes’ differences; and (4) compositional effects exists in the study.

Hence, the suitability of these techniques in applying benefit transfer has been questioned by Morrison et al. (2002). Instead of using TCM or CVM, the authors have favoured the use of CE technique. The application of benefit transfer in CE has been done in various issues including river ecology quality (e.g. Hanley et al., 2006; Morrison & Bennett, 2004), recreational activities (e.g. Morey et al., 2002), coastal land management (e.g. Jiang et al., 2005), wetland area (e.g. Morrison et al., 2002), and conservation development (e.g. Johnston, 2007).

According to Boyle and Bergstrom (1992), there are various considerations that must be taken into account when conducting benefit transfer, among them (1) the environmental goods at the study site must be identical to the environmental goods to be valued at the policy site; (2) the study site must exhibit the same population characteristics as the policy site; and (3) the impacts of environmental changes on consumer welfare at the study site must be identical to the impacts on consumer welfare at the policy site. These guidelines are necessary to avoid a problem of estimate discrepancies between study and policy sites. However, discrepancies of estimates between the study site and the policy site could arise from various sources, for instance, the different availability of substitute sites at the policy area, failure to account for the scale of environmental changes, natural characteristics, cultural attitudes and site usage (Bueren & Bennett, 2004; Hanley, Wright, & Alvarez-Farizo, 2006; Morrison & Bennett, 2004).

METHODOLOGY

Choice experiment (CE)

CE is one of the techniques in SP methods. Rather than asking respondents to rate (i.e. contingent ranking) or rank (i.e. contingent ranking) the alternatives, the technique requires respondents to choose the most alternative from a series of alternatives presented to them (Bateman et al., 2002). At least two underpinning theories in economics can be used to support CE: the theory of value (Lancaster, 1966) and random utility theory (McFadden, 1981). The theory of value explains that consumers’ utilities are actually based on the characteristics or attributes (or a combination of the attributes) of goods. Based on the explanation, we may say that the utility received from the consumption of goods is no longer subject to the goods per se but to the attributes possessed by the goods. The random utility theory explains that when consumers make a choice between alternatives, the choice is based on an assumption about the highest utility that they can receive from it (McFadden, 1981). In the technique, the utility of visitor $n$ gains from choosing a recreational park can be expressed as (1):

$$ U_n = V_n + e_n $$

Assuming a visitor choice based on random utility model (RUM) framework, the utility function can be decomposed into two components, namely deterministic and stochastic elements. Deterministic (i.e. $V_n$) is an element that can be observed by the analyst. On the other hand, stochastic (i.e. $e_n$) is an element that cannot be observed by the analyst including random terms. These random terms come from several sources. Ben-Akiva and Lerman (1985) listed five possible sources: (1) unobserved attributes; (2) unobserved taste variations; (3) measurement errors; (4) imperfect information; and (5) instrumental (or proxy) variables. Usually, the logit estimation model (i.e. multinomial logit [MNL]) is applied to estimate the CE data. This is because of the fact that the estimation in the model is easy to compute compared with other models such as multinomial probit (Train, 2003). In MNL, the probability of visitor $n$ choosing park $i$ can be shown as (2):

$$ P_{ni} = \frac{\exp(V_{ni})}{\sum_{j \neq i} \exp(V_{nj})} $$

Although the MNL model is considered popular in estimating CE data and has been applied in various studies such as Boxall and Adamowicz (2002) and Morrison et al. (2002), the model does not account for taste heterogeneity. In other words, the model is restricted to situations where the taste parameters are assumed constant across visitors. As a result, many studies (e.g. Araña & León, 2008; Landauer et al., 2012; Lindberg & Veisten, 2012; Masiero & Nicolau, 2012; Nicolau & Masiero, 2013) employed mixed logit model to capture taste heterogeneity. For example, Landauer et al. (2012) in their study to investigate skiing destinations under the conditions of climate change employed a latent class model. In terms of segmentation purpose, Masiero and Nicolau (2012) also applied the model in their study in Ticino, Switzerland.

Nicolau and Masiero (2013) used random parameter logit model to capture taste heterogeneity in their analysis on the
relationship between price sensitivity and expenditures of tourism activities. The model was also employed by the Lindberg and Veisten (2012) to investigate the effect of tourists’ type (whether local or non-local) on tourism facility development.

Even though the advantages of mixed logit model in analysing CE data are indisputable, its application however is not always the case particularly in benefit transfer study. This is because of the fact that to investigate the transferability of valuation function between study and policy sites, the valuation function employed in both sites must be identical. In this study, the application of mixed logit model was employed at first, but the CE data in the policy site do not fit well with the model. By taking into account this factor and the advantage of straightforward interpretation of the MNL results, the discussion presented in this paper is based on the MNL model.

**Study design**

This study was designed to provide a specific valuation function for both parks in Kuala Lumpur and the MAP in Shah Alam and to develop a generic benefit transfer model for recreational parks in the Klang Valley of Malaysia. In other words, this study is designed in such a way to investigate whether or not the estimates from parks in Kuala Lumpur can be transferred to the MAP. The MAP is chosen as policy site because of three criteria: (1) the location of the MAP is identical to Kuala Lumpur, as both are located in urban areas. Therefore, they are known as urban parks. (2) MAP is located nearer to capital city of Kuala Lumpur compared with other cities in Malaysia. The distance between Kuala Lumpur and Shah Alam is about 32 km. For the sake of data collection purposes, it is easier to collect data in Kuala Lumpur compare with other cities. (3) In terms of socio-demographic characteristics, the population in Shah Alam is similar to population in Kuala Lumpur, particularly in relation to people’s education levels.

As shown in Table 1, education levels in Shah Alam are more similar to those in Kuala Lumpur compare with other cities in Peninsular Malaysia, such as Kangar (located in the north of Peninsular Malaysia); Kuala Terengganu (in the north-east) and Seremban (in the south). For instance, 9% of the population of Kuala Lumpur and 11% of the population of Shah Alam attained tertiary level. However, in other cities, only 4% (Kangar and Kuala Terengganu) and 6% (Seremban) achieved tertiary level.

<table>
<thead>
<tr>
<th>Education level</th>
<th>Shah Alam</th>
<th>Kuala Lumpur</th>
<th>Kangar</th>
<th>Kuala Terengganu</th>
<th>Seremban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to SPM</td>
<td>76</td>
<td>79</td>
<td>89</td>
<td>89</td>
<td>86</td>
</tr>
<tr>
<td>Up to diploma</td>
<td>13</td>
<td>11</td>
<td>7</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Up to degree</td>
<td>11</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

*Source: Department of Statistics Malaysia (2005)*

attribute can be shown to belong to one of the following general attribute categories: (1) amenities; (2) recreational facilities; (3) informational attributes; (4) natural attractions; and (5) price attribute. Levels in these attributes are described according to the number of specific attributes available on it. For instance, attributes at the higher level comprises of more specific attributes compared with those with medium and basic levels. The attributes and their levels then were discussed with participants in focus group meetings.

Three focus group meetings were held for this purpose. The findings from the focus group meetings suggest using four three-level attributes (basic, medium, and higher) and a two-level attributes (basic and higher). The attributes with three levels include recreational facilities, informational attributes, activities related to nature appreciation, and package price while amenity is the attribute with two levels. The variables and the levels used for Kuala Lumpur and MAP were identical, except for the status quo package price. The status quo package price for MAP is RM3.00 while there is no charge for recreational parks in Kuala Lumpur. To assist respondents in answering the CE questions, these attributes were presented in a pictograph format as shown in Figure 1.

The experimental design in the study was developed in three stages. The first stage determined the number of choice tasks. With four three-level attributes and a two-level attribute, the results of the Statistical Analysis Software (SAS) programme indicate that the number of choice tasks (or runs) suited to the perfect balance and orthogonal elements is 18. The second stage involved creating an orthogonal main effect plan (OMEP). In this stage, software developed by Nguyen was used with the software accessible at http://designcomputing.net/gendex/noa/. The OMEP generated in Nguyen is said to have a nearly orthogonal array (Kuhfeld, 2004). The last stage involved pairing the alternatives where a fold-over technique was applied as suggested by Louviere et al. (2008). Subsequently, the generated choice tasks were examined using software developed by Burgess (2007). It is worth noting here that the study only considers main effects.

The results from the Burgess’s software analysis, with two options in each choice task show that the design is 100% efficient, with the main effects uncorrelated. This is the D-efficient, with the D-error sufficiently low (Rose & Bliemer, 2006). The status quo option was also included in the alternatives, where the option represents the current situation in the study area. This is important to ensure that the CE follows the argument in welfare economic theory (Bateman et al., 2002). By combining the status quo along with the two options, the total number of alternatives used in the study is three. This is known as a choice card. Asking respondents to answer all 18 choice cards may be too much of burden for them. The number of choice cards, therefore, was reduced to six. Based on the pilot survey responses, this number was seen as manageable for the respondents. This study used a rotating approach to select the six choice cards.
RESULTS AND DISCUSSIONS

A series of face to face interview was conducted in the survey, and it was completed in four weeks, commencing in early 2009. The total number of usable respondents in Kuala Lumpur and MAP were 188 and 169 providing a total of 1128 and 1014 number of observations, respectively. The choice data was coded with dummy coding, and the MNL model was estimated using the maximum likelihood (ML) procedure as shown in (3).

where $y_{ni}$ takes the value of 1 if the visitor $n$ chooses parks $i$ and zero otherwise. The specification of the valuation function and their variables are shown in the succeeding texts in (4) and Table 2, respectively.

$\text{Amen} + \beta_1 \text{Fac1} + \beta_2 \text{Fac2} + \beta_3 \text{Info1} + \beta_4 \text{Info2} + \beta_5 \text{Att1} + \beta_6 \text{Att2} + \beta_7 \text{Pri}$

The results of the MNL are shown in Table 3. The results show that the coefficient for Amen, Fac1, Fac2, Info at both levels, and Price are significant at least at the 10% level and have the a priori expected sign. The significant of price coefficient is essential to avoid a meaningless interpretation of WTP. Although the results of this study are limited to

Figure 1. Attribute card. This figure is available in color online at wileyonlinelibrary.com/journal/jtr
the main effects, typically, these account for around 85–90% of utility (Willis, 2009). It is noteworthy that the coefficient values for the higher level were greater than the coefficient value for lower level. This indicates that the marginal utility received by respondents for higher levels of an attribute are greater than the utility received at the lower level. This follows the axioms of choice: non-satiation, where the utility received by a consumer increases if the commodity used by the consumer increases.

The attribute of natural attractions (NAtt) is significant at the 1% level in Kuala Lumpur. It suggests that the respondents in Kuala Lumpur appreciate natural attractions. This result is expected as living in an urban area such as in Kuala Lumpur, the opportunities to participate in activities such as ‘hands-on training on planting’ are limited. The attribute, however, is not significant in MAP. Even though the location of MAP is also in an urban area and educates visitors through ‘hands-on training’, the result is in contrast with those found in Kuala Lumpur. This possibly indicates that the natural attraction elements are expected to be provided at MAP and people are not willing to pay for that service.

Overall, the explanatory variable in both models is satisfactory. The explanatory power for model in Kuala Lumpur, however, is higher than model in MAP with adjusted r-squared of 21 and 17%, respectively. In addition, the null hypothesis that the coefficients are jointly equal to zero can be rejected for both models.

Table 4 shows the implicit price for each attribute in Kuala Lumpur and MAP for the MNL model. The implicit price for each attribute was calculated as the ratio of coefficients for the attribute (or level) with the parameter of cost using the Wald procedure (delta method). For instance, the implicit price of Fac2 in MAP can be calculated by dividing the coefficient of Fac2, 1.32, with the coefficient of price, 0.04. The implicit price measures the respondents’ WTP for that particular attribute. For example, the implicit price for attribute Fac2 in MAP means that the respondents in Shah Alam are willing to pay an extra RM30.52 to obtain an improvement to the attribute at the MAP from the basic to the higher level. The respondents in Kuala Lumpur, however, are willing to pay an extra RM19.41 for similar improvement. Overall, the respondents in Shah Alam are willing to pay more compared with respondents in Kuala Lumpur.

Transferability of valuation function
The transferability of valuation function test investigates whether or not the coefficients in the Kuala Lumpur valuation function can be transferred to the similar function of MAP in Shah Alam. The transferability (i.e. \( H_0: \beta_{KL} = \beta_{MAP} \)) can be tested with a likelihood ratio (LR) test as proposed by Swait and Louviere (1993), Hanley et al. (2006), however, applied the LR test analogous to the so-called ‘Chow test for structural break’ as (5):

\[
LR = -2(LL_p - (LL_{KL} + LL_{MAP})) \tag{5}
\]

where \( LL \) refers to log likelihood value; the subscript \( p \) is for the pool data; and the subscript KL and MAP represent the likelihood value for data in Kuala Lumpur and MAP, respectively. The test hypothesis can be shown in (6):

\[
H_0 : \beta_{KL} = \beta_{MAP} \quad H_1 : \beta_{KL} \neq \beta_{MAP} \tag{6}
\]

where \( \beta \) refers to the estimated coefficients. The test statistic for the transfer is 63.27, and the critical value at the 5% level with eight degrees of freedom is 15.08. Because the statistic value exceeds the critical value, the result suggests that the estimated function of the recreational parks in KL cannot be rejected for both models.

Table 4. Calculated implicit price

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Kuala Lumpur</th>
<th>MAP, Shah Alam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amen</td>
<td>6.20*** (1.03)</td>
<td>12.50*** (2.01)</td>
</tr>
<tr>
<td>Fac1-basic to medium</td>
<td>12.58*** (1.34)</td>
<td>22.52*** (2.79)</td>
</tr>
<tr>
<td>Fac2-basic to higher</td>
<td>19.41*** (1.38)</td>
<td>30.52*** (3.09)</td>
</tr>
<tr>
<td>Info1-basic to medium</td>
<td>2.42*** (1.21)</td>
<td>6.51*** (2.80)</td>
</tr>
<tr>
<td>Info2-basic to higher</td>
<td>2.81* (1.63)</td>
<td>7.71*** (2.26)</td>
</tr>
<tr>
<td>NAtt1-basic to medium</td>
<td>4.02*** (1.28)</td>
<td>1.93 (2.38)</td>
</tr>
<tr>
<td>NAtt2-basic to higher</td>
<td>4.21*** (1.33)</td>
<td>3.12 (2.49)</td>
</tr>
</tbody>
</table>

Std errors are in parenthesis.
***Significant at 1% **Significant at 5% *Significant at 10%
be transferred to the policy site, the MAP in Shah Alam; otherwise, it could lead to inaccurate results. Even though the hypothesis of transferability in valuation function was rejected, it does not necessarily indicate that the hypothesis of transferability in implicit prices will also be rejected (Colombo et al., 2007; Morrison et al., 2002). For example, the study undertaken by Morrison et al. (2002) found that six out of the eight implicit price hypotheses were not rejected although the equality of the estimated coefficients was rejected. The transferability of implicit prices is therefore investigated and presented in the next section.

Transferability of implicit price

To investigate transferability of implicit prices, the study used the Krinsky and Robb (1986) bootstrapping simulation of 1000 draws technique. The authors demonstrated that the values (i.e. elasticities) calculated from bootstrapping simulation method produce a precise distribution compared with a linear approximation approach. This is because the calculated implicit prices are non-linear functions of the estimated coefficients; therefore, linear approximation is unlikely to provide accurate estimates of the standard deviations (Foster & Mourato, 2002). Based on their findings, the mean and standard deviations derived from the bootstrapping simulation of 1000 draws were better than results from a linear approximation. Thus, the confidence intervals generated from the mean and standard deviations in simulation are more reliable than linear approximations.

The method used for the calculation of standard deviations is important in this transferability because the permissibility of transferability will be decided in terms of its confidence interval rather than the point estimate value. This is based on the fact that the implicit prices and their standard deviations are used to calculate the confidence interval.1 These confidence intervals can then be used to test the transferability of implicit prices.

The hypothesis to be tested is whether the implicit prices in KL are statistically different from the implicit prices in MAP and is shown in (7):

\[ H_0 : IP_{KL} = IP_{MAP} \]
\[ H_1 : IP_{KL} \neq IP_{MAP} \]  

where IP refers to implicit prices and all the subscripts are as previously explained. The results for a 99% confidence interval of implicit prices are shown in Table 5. The decision as to whether the implicit prices are transferable between the study and policy site is subject to the value of ‘implicit price confidence interval’. For example, if the confidence interval for the Kuala Lumpur implicit price overlaps with the confidence interval of the MAP implicit price, then it suggests that the implicit price in KL is statistically similar to the implicit price in MAP. If the confidence intervals for the Kuala Lumpur and MAP implicit prices do not overlap, then the implicit prices are considered statistically different.

Table 5. 99% confidence intervals of implicit prices

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Kuala Lumpur</th>
<th>MAP, Shah Alam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amen-basic to higher</td>
<td>6.20*** (3.59, 8.81)</td>
<td>12.50*** (7.15, 17.84)</td>
</tr>
<tr>
<td>Fac1-basic to medium</td>
<td>12.58*** (9.12, 16.04)</td>
<td>22.52*** (15.08, 29.95)</td>
</tr>
<tr>
<td>Fac2-basic to higher</td>
<td>19.40*** (16.00, 22.80)</td>
<td>30.52*** (22.59, 38.45)</td>
</tr>
<tr>
<td>Info1-basic to medium</td>
<td>2.42** (-0.72, 5.57)</td>
<td>6.51** (-0.68, 13.70)</td>
</tr>
<tr>
<td>Info2-basic to higher</td>
<td>2.81* (-1.40, 7.02)</td>
<td>7.71*** (1.99, 13.42)</td>
</tr>
<tr>
<td>NAt1-basic to medium</td>
<td>4.02*** (0.67, 7.37)</td>
<td>1.93 (-4.35, 8.22)</td>
</tr>
<tr>
<td>NAtt2-basic to higher</td>
<td>4.21*** (0.73, 7.69)</td>
<td>3.12 (-3.47, 9.71)</td>
</tr>
</tbody>
</table>

99% of confidence interval are in parenthesis.

***Significant at 1%. **Significant at 5%. *Significant at 10%.

Figure 2. Line graph of implicit price. This figure is available in color online at wileyonlinelibrary.com/journal/jtr

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1The 95% confidence interval (CI) was calculated based on the formula, 

\[ CI = IP \pm Z \frac{sd}{\sqrt{n}} \] where IP refers to implicit price, Z is equal to 2.58, sd is a standard deviation and n is sample size. The value of Z in a two tail of 95% CI is 1.96 because \( P(Z > 2.58) = 0.025 \).
price in MAP. Therefore, it can be transferred to MAP. A line graph is drawn as in Figure 2 to illustrate the 99% confidence intervals in implicit prices. The line graph results show that all the implicit prices calculated at the valuation function in Kuala Lumpur can be transferred to MAP except the implicit price for natural attraction attribute.

Such results suggest that the estimates in KL could be transferred to other similar sites provided that the socio-economic characteristics of the sites are similar. The implication drawn from the study indicates that these transferability implicit prices inform park managers about benefits that could be generated if such attributes are provided. Hence, proposal for the required public funding of parks can be justified, and this can inform decisions concerning the appropriate levels of funding for recreational and other facilities. These pieces of information are important for the park managers to justify their decision on how funding can be optimally invested. To summarize, by having such benefit transfer study, the costs to measure the estimates at policy sites not only can be reduced but it can also be known in a short period of time.

In addition, the results of implicit prices in the study provide some hints on how much money visitors are willing to pay for attributes at parks. This entrance fees actually can be calculated by summation up the implicit prices. As an illustration of this entrance fee, refer to Table 4. If parks in KL provide all the attributes at medium level, the calculated implicit prices suggested that the entrance fee that visitors are willing to pay is RM25.22. Because these implicit prices can be transferred, the entrance fee at policy site can be determined by referring to the attributes provided at the site. For example, if attributes provided at policy site are similar to the attributes provided at parks in KL, the entrance fee of RM25.22 is suggested. Hence, it is suggested that the entrance fee at policy site be reviewed in the light of this results at the study site.

CONCLUSION

This paper analysed benefit transfer in recreational parks using the SP CE technique. CE is employed among other valuation methods as the technique allows different changes in recreational park attributes to be taken into account. In addition, the estimated value of a good or service in CE approach can be based on the value of its component attributes rather than the good itself. Hence, in the case of recreational parks, it is interesting to investigate whether or not estimates of value for a park can be transferred to other parks that may possess similar attributes.

In general, the results of the study show that respondents in Kuala Lumpur have the highest preference for recreational facilities followed by visitor amenities, natural attractions and information. On the other hand, for the MAP in Shah Alam, the order of preference is recreational facilities, followed by visitor amenities and information. Two types of transferability test were carried out to investigate the transferability of estimates between recreational parks in Kuala Lumpur and the MAP in Shah Alam, the transferability of valuation function and the transferability of implicit prices. The results show no evidence of transferability of estimated coefficients between these two sites. However, in terms of transferability in implicit prices, most of the Kuala Lumpur implicit prices are transferable to MAP in Shah Alam. The results reinforce the findings that the application of benefit transfer is suitable to be applied in CE if the objective is to transfer implicit price values rather than the demand coefficients.

The results have several policy implications. First, the transferability implicit prices could be used to justify the appropriate level of funding for parks and other recreational facilities. Second, the implicit prices determined could be used for pricing at policy sites that have similar attributes to parks in Kuala Lumpur.

REFERENCES


