Musical Fit and Willingness to Pay for Utilitarian Products among University Students

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ABSTRACT
This study investigated the impact of musical fit on consumers' purchase intentions regarding utilitarian products. Participants were shown pictures of products and asked to state the maximum they would be willing to pay for each item. Following that, participants were also shown pictures of two competing utilitarian products, one being a more 'upmarket' (e.g. Duracell batteries) version than the other (e.g. Eveready batteries), and they were asked to choose one of the two while being exposed to either Malay music, pop music, classical music or no music condition. Participants were not influenced to pay more for utilitarian products when being exposed to the different musical styles (and no music) condition. Participants also did not necessarily choose the more 'upmarket' product when exposed to different musical styles (and no music) condition. This suggests that musical fit may not influence purchase intentions for utilitarian products.

Keywords: Choice, consumers, music, preference

INTRODUCTION
Studies concerning the effects of musical genre, rhythm, tempo, and modality on consumer behaviour have become increasingly common in the consumer behaviour literature over the past 20 years. For example, in perhaps the most regularly cited study in the field, Milliman (1986) found that the fast tempo background music could significantly affect the pace of restaurant patrons (North and Hargreaves, 1996a). Research concerned specifically with the notion of musical fit in commercial contexts is a relatively recent phenomenon, however. Musical fit refers to the process by which customers associate a certain piece of music with particular products, leading to the selection of one product over the other, or with particular patterns of spending, leading to customers being prepared to spend less or more for the same products. At present, although the published research discusses musical fit as though it was a universal phenomenon, all the research has been carried out in the West; and although North, Hargreaves, and McKendrick (1999) investigated the effects of musical fit on the selection between competing alternative products, all the remaining research has focused on the impacts of the Western classical music on the amount that the customers are prepared to pay. Music is an intrinsically cultural object and research must account for this. Unfortunately, there is hardly any research on how music affects people living in an Asian culture. Among only a handful of studies that have been carried out in the Asian market are those concerning how Chinese brand attitudes are affected by the match between script associations and brand associations (Pan and Schmitt, 1996); the
attitudes of university students in Taipei towards classical music concerts; one study of general consumer behaviour (Chen and Hu, 2006); and the application of the Mehrabian-Russell model to two types of CD stores in Hong Kong (Tai and Fung, 1997). This paper investigates the effects of musical fit in Malaysia. Firstly, it considers the maximum amount that customers are prepared to pay for utilitarian products, and secondly, whether they select an ‘upmarket’ or ‘downmarket’ version of the selected utilitarian products.

There have been some studies which have compared consumer culture between Asian countries and the West. Many marketers assume that a similar marketing mix and strategy would be correct to take in all their markets. However, Wee (1999) argues that the truth is far more complex and concludes that each generation of teenagers has its own global culture shaped by the familiar Western themes and values brought via the mass media. In addition there is the national culture and shared historical experiences which can only heighten social and cultural complexity in understanding the consumer culture of teenagers in Asia. Hence we have Asian teens who are influenced by a complex mix of East Asian, Western, and their own cultures. Singhapakdi, Rawwas, Marta and Ahmed (1999) argue that marketers must take into account consumers’ culturally-based ethical values. It was noted that consumers from Malaysia and the USA have significant differences in their perceptions of marketing ethics situations, their attitudes toward business and salesperson and their personal moral philosophies. However, there is nothing comparing eastern and western cultures concerning the impact of music on consumer behaviour.

When considering the impacts of music on consumers, musical fit is perhaps the best approach to adopt in a Malaysian context since it explicitly recognizes the role of cultural factors in determining the impacts of a given piece of music. For example, it acknowledges explicitly that there are culture-based stereotypes of differing musical styles that influence consumers, and emphasizes that it is the individual’s response to the music, rather the properties of the music per se, that are crucial. This recognition of cultural factors is particularly relevant when investigating music in a culture such as Malaysia which contains three major ethnic groups, each with their own quite distinct musical heritage. Furthermore, unlike approaches such as the servicescape model, the notion of musical fit implicitly allows researchers to make very specific predictions about the impacts of a given piece of music in a given commercial setting. Nor, however, does the present work assume that musical fit is a perfect model. Rather, the approach adopted in this study was to question the generality of any effects of musical fit, and use the opportunities offered by a strongly multicultural society to test the possible limitations of the approach.

To date, research on musical fit has shown that consumers have the propensity to spend more when background music implied notions of affluence or wealth. For example (Areni and Kim, 1993; North and Hargreaves, 1998) showed that playing classical music in a wine cellar led to customers buying more expensive wine than when Top 40 music was used. Similarly, North, Hargreaves, and McKendrick (1999) found that musical fit could prime the selection of certain products: customers were more likely to buy French wine than German wine when French music was played from a supermarket display, whilst German wines were select when the display featured German music. Both these studies illustrated how music could prime consumers’ choices. In the former study, the authors argued that classical music ‘fitted’ a stereotype involving notions such as ‘expensive’ and ‘luxurious’, which was why consumers bought the more expensive wine when classical music was being played. In the latter study, music primed or activated consumers’ knowledge related to the products displayed. For example, German music primed knowledge associated with German wines and French music, French wines. Implicit to all these studies is the notion that music that fits the product raises the salience of product attributes, and it is this raised salience that facilitates
recall of the product. The practical, applied basis of this existing work (that has emphasized collection of data in the field and a focus on practical outcomes) means that a precise definition of ‘raised salience’ remains somewhat fuzzy. However, implicit to all the existing work is the well-known concept of spreading activation (Anderson, 1983; Collins and Loftus, 1975), in which priming of one cognitive concept (e.g. identification of the music as representative of ‘classical music’) primes all those concepts related to it (e.g. stereotypes of classical music as ‘upmarket’), which in turn primes the behaviour observed (e.g. spending).

In addition to North, Hargreaves and McKendrick (1999), several other studies investigating into the impacts of music on consumer behaviour point to the influence of musical fit in commercial contexts. For example, North, Hargreaves, MacKenzie and Law (2004) constructed adverts for a range of products which featured music that either did or did not reflect aspects of the products concerned. For example, the music for a sports drink is itself dynamic, quick-paced, and otherwise energetic. Such music is able to facilitate recall of the brands concerned. Similarly, North and Hargreaves (1998) argued that musical fit influenced the purchase intentions of participants in a cafeteria. Participants were prepared to pay more for the same food items when classical music was played compared to pop music, easy listening music, and a no music condition. In response to a questionnaire, customers stated that classical music expressed notions such as sophistication and luxury (Lammers, 2003; North, Shilcock and Hargeaves, 2003; Wilson, 2003). Similarly, Grewal, Baker, Levy and Voss (2003) found that classical music made a jewellery store seemed more luxurious.

As noted earlier, several consumer psychologists (e.g. MacInnis and Park, 1991) have argued that music that fits the advertised product influences subsequent purchase intentions because it primes superordinate knowledge structures which relate to relevant product information. It is interesting though that a similar argument can also be found commonly in the literature on the effects of rap and rock music on young people. Several researchers in the field of consumer psychology have drawn explicitly on cognitive priming theory (e.g. Berkowitz and Rogers, 1986) in arguing that exposing people to violent or sexist music videos should prime cognitions concerning related violent or sexist acts, such that the latter are subsequently regarded as more acceptable or are more likely to be displayed (Anderson, Carnagey and Eubanks, 2003; Hansen, 1989; Hansen and Hansen, 1988: 1990: 1991; Hansen and Krygowski, 1994; Johnson, Jackson and Gatto, 1995; Ward, Hansbrough and Walker, 2005). Although carried out independently, this research itself mirrors studies within experimental aesthetics carried out during the same period, indicating that liking for a given piece of music is influenced by the extent to which it activates related knowledge structures. Several studies have supported various manifestations of this approach; for example, Martindale’s preference for prototypes model (e.g. Hekkert and van Wieringen, 1990; Martindale and Moore, 1988; Martindale, Moore and Borkum, 1990). In short, studies within consumer psychology, media psychology, and experimental aesthetics suggest that music that fits a particular product or commercial behaviour is effectively a type of cognitive prime that activates superordinate knowledge and therefore raises the salience of certain aspects of consumers’ knowledge of the world.

Although representing an apparently consistent set of findings, the existing consumer research on musical fit overlooks one obvious potential caveat. The majority of research on the phenomenon has investigated the ability of (classical) music to prime purchasing of more expensive alternative products. Only one study to date (North, Hargreaves and McKendrick, 1999) has shown that music may influence consumers’ preferences between similar products. This raises several interesting questions. First, can North, Hargreaves, and McKendrick’s (1999) findings concerning the effects of music on preferences for otherwise similar types of wine be replicated outside Western culture? Second
and more interestingly, would such an effect apply for all types of products? Based on the concept of heuristics, because utilitarian products are used more regularly, they are therefore more familiar to consumers, and consumers would be less likely to rely on external and bias cues in making their judgements. This means that it should be much easier for them to put a price on utilitarian products than on non-utilitarian products. This is because non-utilitarian products are dependent on the ‘experience’ consumers get from purchasing such products. As such, the present research represents a much stricter test of the musical fit hypothesis than has hitherto been attempted.

No research has so far investigated the possibility of corresponding effects in non-Western cultures. Previous research on musical fit has focused on the impacts of classical music on the sales of ‘upmarket’ products, and it is by no means clear that corresponding effects would be found in other cultures where classical music may not have the same meaning to customers as in the West. Accordingly, the present research aims to investigate if Western classical music would prime Malaysians to perceive associated products as expensive and luxurious and therefore influence the maximum amount that they would be willing to pay for them. Furthermore, the emphasis in the existing research on classical music means that the work has focused on the ‘upmarket’ products such as wine sales or restaurant meals. We know nothing about the impacts of musical fit on preferences between competing versions of utilitarian products (e.g. umbrella, dish wash, batteries). If music primes the salience of related products then participants should choose a luxurious version of a utilitarian product over a cheaper alternative when Western classical music is played.

The present study employed three different musical styles and a ‘no music’ control condition over a period of five weeks in a large study room in a Malaysian student dormitory. On each evening, either Western classical music, Western pop music, ethnic Malay music or no music was played. The participants were shown pictures of the products and asked to state the maximum amount that they were willing to pay for each item. Following this, the participants were also shown pictures of two competing utilitarian products, one being a more ‘upmarket’ (e.g. Duracell batteries) version than the other (e.g. Eveready batteries), and they were also asked to choose one of the two products. Western research leads us to expect that Western classical music will lead to participants being prepared to pay more for the products and to them selecting the more ‘upmarket’ of the two alternate products with which they are presented. However, Schlosser (1998) found that purchase intentions concerning social identity products (i.e. greeting cards, jewellery, perfume) were influenced more by store atmosphere than those of the utilitarian products (i.e. aspirin toothbrushes). In more specific, the perceptions of the social identity products were more positive when the store’s atmosphere conveyed notions of ‘prestige’ versus ‘discount’; while perceptions of utilitarian products remained unaffected. Following this, an alternate hypothesis is that the different types of music employed here might have no influence on the amount the customers are willing to spend on utilitarian products or on preferences for ‘upmarket’ versions of those products.

MATERIALS AND METHODS

Pilot Study
A pilot study was carried out to ensure that the music that was to be used in the main experiment was clearly identifiable as either ethnic Malay, Western classical or Western pop music by a sample of 20 participants drawn from the same general population as the sample used in the main experiment. Each participant in the pilot study was played three types of music and they were asked to state what genre of music was playing. All the participants were able to clearly distinguish between the three pieces of music as either ethnic Malay, Western classical or Western pop music, respectively. The participants were also asked to write down as many utilitarian items as they could think of. The 35 most frequently listed items were employed in the present research.
Participants
One hundred and twenty participants took part in the study, and they had been divided into four groups comprising of 30 participants each. Each group comprised 10 Malays (5 males, 5 females), 10 Chinese (5 males, 5 females), and 10 Indians (5 males, 5 females). All the participants aged between 18-24 years (Mean = 20.05, SD = 1.37). The participants were students from Universiti Putra Malaysia. Testing was conducted in groups of 5-10 in a quiet room on campus.

Design
The research used a within subjects design in which Malay, Indian and Chinese participants were played either ‘no music’, Classical music, pop music or Malay music. Equal numbers of participants from each of the ethnic groups were exposed to each of the four different music conditions.

Apart from the ‘no music’ condition, participants heard music in each condition while they completed the questionnaire. These music conditions employed a CD representing one of three musical styles, namely ethnic Malay music, Western classical music, and Western pop music. The Western classical music was taken from *101 Classics – Classical Highlights from the Great Composers Vol.1*. The tracks used from this CD were Bach’s *Brandenberg Concerto No. 3 in G major*, Handel’s *Concerto Grosso No.6, 2nd movement in F major*, and Bach’s *Jesu, Joy of Man’s Desiring*. The Western pop music was taken from *1*. The tracks used from this CD were U2’s *Beautiful Day*, Sheryl Crow’s *Everyday is a Winding Road*, and Vanessa Carlton’s *A Thousand Miles*. The ethnic Malay music was taken from the CD *Muzik Tarian Malaysia*. The specific tracks used were *Puteri Ledang*, *Serampang Pantai* and *Bunga Bunga Di Taman*. These pieces of music were selected as they were clearly identifiable as either Western classical, Western pop or ethnic Malaysian music. The music (or no music) was played through a portable CD player with speakers positioned at the back of the room at a comfortable background volume level.

The products used in this questionnaire were bought from a local hypermarket. The pictures were then taken with a Casio digital camera. Once the pictures of all the products were taken, an Adobe version of the questionnaire was designed.

Procedure
The study was carried out between 8.30 p.m. and 10.30 p.m. over a period of five weeks in July and August. The room chosen was a huge study room at one of the dormitories in Universiti Putra Malaysia, and this time of day was chosen because most students would be back at their dormitories. The participants were recruited via posters asking people to volunteer for a research in which they would complete a questionnaire in return for Five Ringgit. The participants were required to answer all the questions in the questionnaire and they were given unlimited time (of approximately 20 minutes) to complete it while music (or no music) were being played at a comfortable background volume level. The questionnaire had four introduction questions. Question 1 asked the participants about how often they went shopping for household items, and for this, they were given three options, once a week, once a fortnight or once a month. Question 2 asked the participants about the type of store they normally shopped at for household items. They were also given four options, namely hypermarket, supermarket, local shop, and other. Question 3 asked the participants to indicate the amount they spent the last time they went shopping for household items and to give an estimate to the nearest 10 Ringgit. Following this, the questionnaire was then divided into two sections. Section 1 of the questionnaire consisted of 18 utilitarian household products with accompanying pictures (for example, cooking oil, a photo frame, and an umbrella) asking the participants to state the highest price they would be willing to pay for each item to the nearest Ringgit. Section 2 of the questionnaire had accompanying pictures comprising of 17 other utilitarian products asking them to choose either an ‘upmarket’ version of a utilitarian product or
RESULTS AND DISCUSSION

The questionnaire items gave rise to a Cronbach alpha of 0.723. A MANOVA was carried out to investigate the differences between the three musical genres and no music in the maximum amount that the participants would be willing to pay for the utilitarian products listed in the question. The result of this question, however, was not significant (F (57, 297) = .95, p = 0.579). Univariate tests indicated that two of the items were associated with significant differences between the conditions. These were the Ikea wastepaper basket (F (3, 115) = 3.07, p = .031) and the High Sierra knapsack (F (3, 115) = 3.43, p = .019), which gave rise to higher values when the Western classical music was played. The results for the wastepaper basket and knapsack are arguably better attributed to a type 1 error, a false positive based on the number of products tested. A chi square test of independence was also carried out to investigate any association between the frequency with which the participants selected the upmarket or less upmarket alternatives and the type of music (or no music) playing in the background. Similarly, the result gathered for this item was also not significant, and the frequencies are shown in Table 1.

The results of this experiment provide a clear evidence that different musical styles (and no music) did not influence the highest price participants would be willing to pay for utilitarian products. The results also indicate that musical fit might not influence the participants to choose the more ‘upmarket’ version of these products. As these results are non significant, it is of course impossible to state their cause with confidence. However, one particular possibility seems to be a strong candidate. The utilitarian products shown in this questionnaire were everyday items. As noted earlier, Schlosser (1998) found that

<table>
<thead>
<tr>
<th>“Upmarket” utilitarian products</th>
<th>Classical</th>
<th>Ethnic</th>
<th>Pop</th>
<th>Silence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2L plastic container made in Germany</td>
<td>14</td>
<td>8</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>1 kg Jasmine brown rice</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>3 kg Trojan Detergent powder</td>
<td>20</td>
<td>27</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>4 AA Duracell batteries</td>
<td>7</td>
<td>11</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>10 packets of Royal Gold handkerchief tissue</td>
<td>16</td>
<td>15</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>20 rolls of Scott toilet roll</td>
<td>19</td>
<td>18</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>240 gms organic noodle</td>
<td>22</td>
<td>24</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>250 gms Darlie fluoride toothpaste</td>
<td>28</td>
<td>27</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>400 gms Axion dishwash paste</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>440 sheets A4 Double A multipurpose paper</td>
<td>22</td>
<td>25</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>660 ml Spritzer mineral water</td>
<td>16</td>
<td>20</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>1000 ml Sunlight dishwashing liquid</td>
<td>24</td>
<td>23</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>A4 hard cover ring file</td>
<td>23</td>
<td>26</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Scott tissue paper</td>
<td>21</td>
<td>19</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Nokia 7390</td>
<td>20</td>
<td>22</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Ballpoint Parker pen</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Silver cutleries</td>
<td>28</td>
<td>28</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>
purchase intentions concerning social identity products (i.e. greeting cards, jewellery, perfume) were influenced more by store atmosphere than by the intentions concerning utilitarian products (i.e. aspirin, toothbrushes). Following this, different musical styles would have no bearing on the maximum price the participants would be willing to pay in the present research, since the items themselves were not social identity products.

This explanation cannot be ruled out. However, it is important to note that balanced against it is the finding by North and Hargreaves (1998) that classical music played in a cafeteria increased the amount that the customers were prepared to pay for rather mundane items of food and drink, such as chocolate bars or cans of pop. In this case, classical music was found to have influenced the participants even though the products were arguably utilitarian and not clearly associated with the music. This then raises another possibility, namely that the effects of classical music identified in the Western studies do not apply to the non-Western participants. This may be due to the fact that they regard classical music as ‘Western’ rather than ‘upmarket’, and so the music does not encourage them to pay more or favour the more expensive of the two alternative products.

**CONCLUSIONS**

The implication here is that musical fit might not have any effect on utilitarian products. Hence, retailers in hypermarkets, supermarkets or local shops perhaps need not concern themselves with ensuring that the music they play fits with most of the products that they sell, and should instead focus on only the more luxurious products that they also stock. Secondly, this study illustrates that musical fit did not operate when the participants were already regular users of or had other pre-existing preferences for one particular product over the other. Rather, the effect was apparently limited to those cases where the participants had no criteria to otherwise select between the products in question. This is consistent with the recognition heuristic which states that a known alternative will be selected over an unknown one. Thirdly, because Malaysians do not necessarily have a unifying culture as they are still tied up to their own ‘small’ culture. As a result, they may not find a ‘personal relevance’ or significance when the ethnic Malay music was being played. For this reason, the researchers have also conducted another study concerning this issue, which is currently under review.

The most obvious limitation is that the samples consisted mainly of students from a particular cultural group(s), and as such, they cannot be considered as a truly representative of the populations elsewhere in the world. The introduction in this research noted that it was not clear that research from the West could be generalised to consumers elsewhere, and a similar criticism could be made of the research reported here, i.e. the one which was carried out exclusively in Malaysia. Music that primes certain knowledge and beliefs among Malaysian students may not have similar effects among other groups of people. Further studies should be conducted with different groups living in different areas, and it seems that there is at least a possibility that different music genres may be needed to produce the same effects among them as identified in the present study. The sample in this study used university students and because university students are assumed to have limited financial resources, this could have had an impact on the maximum amount that they would be willing to pay for utilitarian products. Further research may investigate if the Malaysian student population represents the general population in terms of consumer behaviour.

Future research may also investigate a range of personality traits that could have mediated the effects identified here. For example, those scoring higher on innovativeness or sensation-seeking may be more willing to try products and therefore be prepared to pay more to try a product, whereas those scoring higher on the need for cognition may be prepared to pay more for ‘intellectual’ products, and those scoring higher on self-esteem may be willing to pay more for products related to their self-identity,
and so on. Investigation of such possibilities is beyond the scope of the present research, but they may be interesting hypotheses for future work in this area.

REFERENCES


APPENDIX 1

List of items in Section 1 of Questionnaire
1. 1.5L Tupperware water bottle
2. 2kg Naturel cooking oil with omega 3 & 6
3. 5” x 7” photo frame
4. 100% cotton black shirt
5. 500ml liquid soap
6. 1.2kg organic papaya
7. 700ml Dove shampoo
8. 1000ml Dove cream shower
9. A4 size Campus spiral notebook
10. A pair of Nike socks
11. Bath towel
12. Ikea wastepaper basket
13. High Sierra knapsack
14. 1kg organic carrots
15. 150gms organic spinach
16. Floor rug
17. Made in Malaysia slippers
18. Umbrella

List of the items in Section 2 of Questionnaire
1. 1.2L plastic container made in Malaysia and 1.2L plastic container made in Germany
2. 1kg Jasmine brown rice and 1kg Jasmine white rice
3. 3kg Carrefour detergent powder and 3kg Trojan detergent powder
4. 4AA Duracell batteries and 4AA Eveready batteries
5. 10 packets of Carrefour handkerchief tissues and 10 packets of Royal Gold handkerchief tissue
6. 20 rolls of Carrefour toilet rolls and 20 rolls of Scott toilet rolls
7. 240gms organic noodles and 240gms non-organic noodles
8. 250gms Darlie Flouride toothpaste and 250gms Carrefour Flouride toothpaste
9. 400gms Axion dishwash paste and 400gms Carrefour dishwash paste
10. 440 sheets A4 Carrefour multipurpose paper and 440 Sheets A4 Double A multipurpose paper
11. 600ml Spritzer mineral water and 600ml Carrefour mineral water
12. 1000ml Carrefour dishwashing liquid and 1000ml Sunlight dishwashing liquid
13. A4 hardcover ring file and A4 manila cardboard ring file
14. A box of Carrefour tissue paper and a box of Scott tissue paper
15. Nokia 1110 and Nokia 7390
16. Ballpoint Parker pen and ballpoint Kilometrico pen
17. Plastic cutleries and silver cutleries