Can Australian Shopping Centres Sustain the Small and Medium Enterprises in the Digital Economy?

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This paper aims to comprehend the prospect of small independent retailers ‘in categorised shopping centres by analysing consumer browsing behaviour in the Australian retail market. Furthermore, the paper examines the significance of extended trading hours in facilitating consumer browsing behaviour in shopping centres. The role of browsing behaviour in shopping centres is important as previous studies indicate shoppers visit a shopping centre with predetermined purchase objectives more often. Thus, dissemination of information to potential customers has become the core strategy for sustaining growth in the digital economy. The results of this research indicate online shopping to influence consumer browsing behaviour within a shopping centre, especially at the regional shopping centres. Furthermore, shoppers are becoming more goal oriented and the browsing activity is steadily shifting towards online shopping. This has diminished the attractiveness of mid-size shopping centres the most, whereas, the larger sized shopping centre are highly preferred by shoppers for browsing activity. In addition, results show positive prospects for larger size shopping centres despite the online shopping influence in the Australian retail market.

Keywords — deregulation of trading hours; consumer browsing behaviour; speciality stores; shopping centres and online shopping competitiveness in Australia.

INTRODUCTION

Over the years, the rise in corporately owned planned shopping centres (Goodman and Coiacetto, 2012) and the growth of online shopping have increased the competition in the Australian retail market. With online shopping providing 24 hours access to retailers (Salehi et al., 2012) and regional shopping centres attracting a higher number of shoppers with the availability of larger product assortment (Baker, 2010), the significance of regulated trading hours in maintaining the competency of smaller traditional retail centres and independent retailers have become uncertain. Further, the weekend extended trading hours (i.e. Sunday) have drawn criticism from the social, economic and religious viewpoint of consumer welfare (Price, 2005).

The rise in the number of employed females and changes in the lifestyle of the shoppers’ raises the need for flexibility in the trading hours of the shopping centres in Australia. Stimson and Haynes (2012) observed consumer shopping behaviour to be significantly influenced by the temporal factor, therefore, deregulation of trading hour is considered necessary to facilitate such changes in the demography and maintain the vitality of the urban environment (Parsons et al., 2010, Huddleston, 2010). However such changes are perceived to be less favourable towards small retail centres and

Considering the impact of deregulation of trading hours on small businesses, this paper focusses on examining shoppers’ browsing behaviour and their preferred shopping destination during the extended trading hours. The extended trading hours in this study is focussed on one of the weekday (Thursday late evening hours). Furthermore, the study also investigates if online shopping influences shoppers browsing behaviour in shopping centres significantly. The reason for examining browsing behaviour is twofold: firstly, shoppers’ browsing activity is observed to influence shoppers’ impulse purchases and future purchases which benefit the specialty stores in shopping centres (Xia, 2010, Jarboe and McDaniel, 1987). According to Pride and Ferrell (2010) the specialty stores does not sell special products, but carries a deep assortment within a narrow line of goods. In this context, the Specialty stores owned by small independent retailers are considered. Secondly, shoppers spend more time browsing specialty products in shopping centre as these products carry greater risk (Ghosh et al., 2010, Winzar, 1992). Specialty products are defined as those “based on traditional craftsmanship and are characterised by small-scale batch production” (Kupke, 2001). Hence, extended trading hours should facilitate shoppers that prefer browsing specialty products in shopping centres.

In order to address the objective of this research a case study was employed in the suburb of Sunnybank, Queensland. Three categories of shopping centres were selected for this study: regional shopping centre1, sub-regional shopping centre2 and neighbourhood centre3 sharing the same catchment area. The Shopping Centre Council of Australia distinguishes the categories of shopping centre based on their size and number of department stores located within. These three categories of shopping centre consist of 83 percent of the total specialty stores in the Australian retail market (URBIS, 2015). While the focus of this research is on shoppers’ browsing behaviour, it is hoped that the observations will delineate its importance towards the growth of shopping centres and SMEs

**Overview of the Economic Impact of Regulated Trading Hours on Shopping Centres and The Growth of Online Shopping in Australia**

The state and local government authorities in Australia have enacted policies and made restriction in trading hours to sustain the competitiveness of smaller retail centres (Hollander, 2006). One such policy was enacted under the Trading (Allowable Hours) Act 1990 by the Queensland State Government in 1990 (Business Queensland, 2017). Baker (2002) with the Retail Aggregate Space-Time Trip (RASTT) model validated the lack of competitiveness for the smaller retail centres against the bigger centres during the extended trading hours in the Australian retail environment. Thus far the policy is perceived to be effective in sustaining the competitiveness of smaller centres as the return of investment from various retail businesses in the smaller centres have indicated a marginal difference irrespective of their size and locations (McGreal and Kupke, 2014). According to URBIS (2015) “the total aggregated turnover achieved by the shopping centres’ during the 12 month time period ending on June 2014 is approximately AUD$130.7 Billion with inclusive of GST”. The sub-regional shopping centres represent 33% of the total aggregated turnover and are relatively higher than regional shopping centres.

1. The definition of shopping centres relies on the concept of Gross Lettable Area (GLA). This is a measure, created by the Property Council of Australia of the leasable area of all tenants that are located within a shopping centre. A regional shopping centre is defined as a centre consisting of total reporting GLA of more than 50,000 m2 and three full line Discount Department stores with minimum GLA of 5,000 m2 URBIS. 2015. *Australia Shopping Centre Industry: Scale and Performance Measures* [Online]. Available: http://www.scca.org.au/wp-content/uploads/2015/06/Shopping-Centre-Industry-Statistics-August-2015.pdf.


**Role of Browsing Behaviour In the Success Of The Specialty Stores In Shopping Centres**

A specialty store operated by small independent retailers has low brand equity and their success is mainly dependent on the browsing behaviour of the shoppers that are drawn into the shopping centre by the main anchor tenants. Therefore, Jarboe and McDaniel (1987) assert that “without these browsers, who frequently become buyers, many specialty stores would be forced to permanently close their doors”.

Consumer browsing behaviour has both direct and indirect influence on consumers’ purchases and can increase the sales of the shopping centre (Xia, 2010) as most often the consumers motivated to browse are tempted to impulse purchase (Gültekin and Özer, 2012). The alternative advantage of browsing is the use of information as a reference for future purchase (Bloch and Richins, 1983a, Xia, 2010). Therefore, shopping centres facilitating browsing activity benefit both the consumer and the retailers in the long run (Xia, 2010).

Browsers are more likely to be aware of the various existing brands of the product that they intend to purchase than non-browsers (Jarboe and McDaniel, 1987, Xia, 2010). Browsers are usually younger than non-browsers and they also tend to visit the shopping centre more frequently than non-browsers (Jarboe and McDaniel, 1987, Xia, 2010), while Luceri and Latusi (2012) identified that female shoppers enjoy browsing multiple store more than male shoppers.

However, browsers are observed to have become more goal oriented shoppers (Millan, 2007) and Weltevreden (2007) indicates online shopping to have an influence on the time spent by shoppers in shopping centres as they tend to visit with pre-determined purchase objectives. Thus, shoppers tend to make frequent planned visits to shopping centres and consequently a decline in multi-store visit was observed in shopping centres (Luceri and Latusi, 2012).

Furthermore, shoppers face the challenges of time and effort while browsing in centres carrying large product assortment (Haynes, 2009, Goodman, 2012). The depth of product lines carried by Regional shopping centres is large compared to sub-regional shopping centres and neighbourhood shopping centres. However the Economic Literature indicates, larger assortments attracts shoppers and provide options to shoppers’ in finding something that is suitable to their needs (Iyengar
Large assortments are perceived to carry greater novelty of products and shoppers tend to have higher expectations. Goodman and Malkoc (2012) also observed shoppers preferring a larger assortment will tend to do so despite the time pressure.

Hence, this paper aims to answer the three following questions:

1. Does size of the product assortment affect the choice of shoppers’ browsing destination?
2. Does the shoppers’ preferred browsing destination influence the frequency of shopping visit during the extended hours?
3. Does online shopping influence the preference of shopping time significantly in categorised shopping centres?
4. Does size of the product assortment affect the choice of shoppers’ browsing destination?

Methodology

In an order to assess the objective of this research, the theoretical framework is based on Huff’s Gravity Model and Davis’ Technological Acceptance Model (TAM). Huff’s gravity model is a good fit for this study as the three assumed determinants of this model: are the centre attractiveness (size of the shopping centre), distance and more importantly the impact of alternative centres within the catchment area of the shopping centre (Woo and Pearce, 2015). Hence, the Huff’s model will not only delineate the impact of other centres, but also indicate the significance of extended trading hours on categorised shopping centres. Suburban residents in Adelaide for example supported the liberalisation of trading hours, but indicated such changes to pertain to shopping centres that are located in close proximity to their residence (SafeWork, 2013).

Davis’ Technological Acceptance Model (TAM) (Davis, 1989) provides a conceptual framework for measuring the user acceptance of technology (Ha and Stoel, 2009, Davis et al., 1989) and proposes two beliefs: perceived usefulness and perceived ease of use. Perceived usefulness is defined as the use of technology in enhancing ones performance dimension, whereas perceived ease of use refers to the degree a prospective user is able to use the technology free of effort (Davis et al., 1989). The element of trust is included in this model as online payment method influences present and future usage of online shopping (Forsythe, 2003, Kim, 2014).

Furthermore, Bloch (1982) and Xia (2010) identified browsers as exhibiting high product involvement in acquiring the product information than non-browsers. Product involvement is defined as the level of interest shown by a consumer on a particular product class based on the consumer’s needs, values, and interests (Bloch, 1982). Therefore, in order to examine browsers browsing behaviour, it is essential to associate browsing behaviour with a particular product category that is of shoppers’ interest.

During the calendar year 2015-2016, (National Australia Bank, February 2017, Bank, January 2016) three product categories: fashion, homewares & appliances and personal & recreational product categories comprised 84% of the total consumer spending on small online retailers in Australia. Hence, the three product categories in this research are selected to access shoppers’ most preferred shopping destination in browsing these product categories from a given set of shopping options. Shoppers were to select one product category and indicate their most preferred shopping destination from the given five shopping options: 1) regional shopping centre, 2) sub-regional shopping centre, 3) neighbourhood shopping centre, 4) online shopping and 5) other shopping centres.

**Case Study Description**

The case study was carried out in the suburb of Brisbane metropolitan area. Sunnybank Plaza a sub-regional shopping centre located in the suburb of Sunnybank, Queensland facilitated this research by granting the approval to perform the in-centre questionnaire survey and interviews. Conducting questionnaire survey at Sunnybank Plaza (Sub-regional centre) is suitable for this project as it has Westfield Garden City Shopping centre (Regional) and various other Neighbourhood shopping centres operating in close proximity. Yang (2002) indicated shoppers to have greater spatial dependence within 3 km range irrespective of their mode of transport to the shopping centre. Further, Vaughan and Valerie (2009) identified Australian shoppers to be time pressed; therefore, the catchment area of the Sunnybank Plaza is calculated within a 3 km range (as shown in figure 1).

**Sampling And Data Collection**

A closed-ended questionnaires survey was employed as it increases the reliability of the information (Neuman, 2011), making it possible to collect more complete and accurate information. The survey respondents were restricted to shoppers who are residing within the catchment area of Sunnybank Plaza. The questionnaire survey was collected using a mixed method (both online and in-centre survey).

A stratified random sampling was employed in order to represent the major characteristics of the target population by sampling a proportional number of each sub-group. According to Bailey (2013), female shoppers account for 72 percent of the total customers visiting shopping centres in Australia. Therefore, the strata are based on 70% female and 30% male shoppers.

The questionnaire survey was completed by 300 respondents and the random samples were generated from each stratum at 2:3 ratio. Consequently, a sample size of 200 respondents is used to conduct the statistical analysis.

A 5 point Likert scale (i.e. 1 as “not at all” and 5 as “all the time”) was employed to record the responses of the shoppers and also to facilitate reliability of exploratory factor analysis (Lozano et al., 2008). The questionnaire survey was design according to (Dillman et al., 2014) and was developed after organising an interview with the shopping centre manager and focus group discussions with the shoppers. The shoppers’ objective and recreational browsing time spent in shopping centre was collected in a continuous scale (in minutes) and age, gender, and shoppers preferred product category were measured in binary scale. The data was analysed through SPSS and R software using “Psych” package.
findings

A cross tabulation is performed to highlight where shoppers prefer to browse for the three product categories. The result of cross tabulation indicates the fashion product category to be preferred by the majority of the respondents and a regional shopping centre attracts most of these shoppers (see table 1).

<table>
<thead>
<tr>
<th>Product categories</th>
<th>Shopping destination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regional shopping centre</td>
</tr>
<tr>
<td>Fashion products</td>
<td>70</td>
</tr>
<tr>
<td>Personal &amp; recreational products</td>
<td>14</td>
</tr>
<tr>
<td>Homewares &amp; electronic appliances</td>
<td>38</td>
</tr>
</tbody>
</table>

Table 1: Cross tabulation between shoppers preferred product category and their preferred shopping destination

The time spent by shoppers in browsing the product was recorded in a continuous scale and exhibits a non-normal distribution. Therefore, a non-parametric statistical test is employed to analyse the significance of shoppers’ browsing time in shopping centres. The Mann-Whitney U test is applied to access the existence of any significant browsing time difference between the categories in a variable that is measured in binary scale such as gender and age (see table 2). The result indicates gender causes significant differences in the browsing time spent on the product categories during their objective and recreational shopping visit. Thus creating a stratum of the sample based on gender is pertinent to this research objective.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Time spent browsing the product during Objective shopping visit</th>
<th>Time spent browsing the product during recreational visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>Mean Std. deviation</td>
<td>Mean Std. deviation</td>
</tr>
<tr>
<td>Male (n=60)</td>
<td>26.68** 22.60</td>
<td>27.62** 35.75</td>
</tr>
<tr>
<td>Female (n=140)</td>
<td>39.24* 37.95</td>
<td>55.13* 58.50</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34 years (n=155)</td>
<td>34.55 34.78</td>
<td>49.23 57.00</td>
</tr>
<tr>
<td>35-54 years (n=85)</td>
<td>38.67 33.72</td>
<td>38.78 42.31</td>
</tr>
<tr>
<td>Fashion (n=104)</td>
<td>44.08** 40.65</td>
<td>55.19** 57.70</td>
</tr>
<tr>
<td>Homewares and appliances (n=68)</td>
<td>30.44 27.80</td>
<td>42.60 53.89</td>
</tr>
<tr>
<td>Personal and recreational (n=28)</td>
<td>24.11 18.76</td>
<td>34.54 41.74</td>
</tr>
</tbody>
</table>

Table 2: Independent samples Mann-Whitney U Test result

An exploratory factor analysis (EFA) was performed using a polychoric correlation matrix which is best suited for ordinal scales (Holgado-Tello et al., 2010) in identifying relationships between the variables and also reducing variables with low factor loadings. Prior to performing EFA, the measure of sampling adequacy was calculated using KMO and Bartlett’s test of sphericity. The KMO score of 0.761 and Bartlett’s test (chi-square value of 646.765 at 66 degrees of freedom with 5% significance level) indicated the sample size to be adequate for factor analysis. The number of factors to retain was determined through parallel analysis and scree plot. Three factors with eigenvalue greater than 1 were identified and retained. The EFA employed a maximum likelihood method for polychoric correlation matrix (Holgado-Tello et al., 2010) and was subjected to Varimax rotation. From the EFA result, variables greater than 0.4 factor loadings were retained. The reliability of each factor were calculated using the Ordinal alpha reliability scale (Gadermann et al., 2012, Zumbo et al., 2007) and the result meets the minimum threshold of 0.70 (see table 3).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Significance of Extended trading hours</th>
<th>Impact of Online shopping</th>
<th>Shopping inconvenience due to limited trading hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carry shopping list manually or physically when visiting shopping centre</td>
<td>--</td>
<td>0.52</td>
<td>--</td>
</tr>
<tr>
<td>Compare products online prior to purchasing in-store</td>
<td>--</td>
<td>0.74</td>
<td>--</td>
</tr>
<tr>
<td>Rely online due to limited trading hours of the shopping centres</td>
<td>--</td>
<td>0.49</td>
<td>--</td>
</tr>
<tr>
<td>Level of trust on online transactions</td>
<td>--</td>
<td>0.71</td>
<td>--</td>
</tr>
<tr>
<td>Frequency of online purchases over a period of two years</td>
<td>--</td>
<td>0.55</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 4: Spearman Rank Correlation analysis result

The EFA identified the variables that have high association with the significance of extended trading hours and the inconvenience of limited trading hours. The dependent variable here is the frequency of shoppers visiting regional shopping centre during the extended trading hours. The frequency of shoppers visiting sub-regional and neighbourhood centre during the extended hours were discarded, as it exhibited no significant association with any of the factors. A Spearman Correlation Analysis was employed to access the relationship between shoppers’ preferred shopping destination for browsing the product of their interest and the significance of extended trading hours in delineating the frequency of shopping visit to regional shopping centre during the extended trading hours (see table 4).

<table>
<thead>
<tr>
<th>Factors</th>
<th>Regional Shopping Centre (n=122)</th>
<th>Sub-regional shopping centre (n=15)</th>
<th>Neighbourhood shopping centre (n=15)</th>
<th>Online shopping (n=35)</th>
<th>Other shopping centres (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of shopping visit to regional shopping centre on Thursday during late evening hours</td>
<td>0.386**</td>
<td>0.253</td>
<td>0.500</td>
<td>0.473*</td>
<td>0.466</td>
</tr>
<tr>
<td>Inconvenience</td>
<td>0.729**</td>
<td>0.411</td>
<td>0.373</td>
<td>0.628**</td>
<td>0.592*</td>
</tr>
<tr>
<td>Prefer shopping on days having extended trading hours</td>
<td>0.452**</td>
<td>0.239</td>
<td>0.533*</td>
<td>0.410*</td>
<td>0.379</td>
</tr>
<tr>
<td>Importance of distance to shopping centre</td>
<td>0.017</td>
<td>0.139</td>
<td>0.299</td>
<td>0.371*</td>
<td>0.190</td>
</tr>
</tbody>
</table>

Significance level: P<0.05*; P<0.01**

Table 4: Spearman Rank Correlation analysis result
From the EFA result, five variables exhibit high association in describing the impact of online shopping. These variables are used as independent variables in accessing any significant differences in the browsing time spent by shoppers in regional shopping centres, sub-regional shopping centres and neighbourhood centres. The Kruskal-Wallis test is employed for this analysis. From the test, only one variable was observed to have an impact on shoppers browsing time. The result indicates the frequency of online purchases have an impact on the browsing time spent by goal-oriented shoppers that prefer regional shopping centres (see Table 5).

The findings in the current study demonstrate the presence of product information online mediates shoppers’ browsing motivation and time spent on specialty products in the shopping centre. Hence, the consumer browsing behaviour has evolved with the advancement in technology and its relationship to the role of limited trading hours which was substantiated by Baker (2002), that safeguarded the migration of shoppers from small retail centres to bigger centres. However, this may become ineffective in coming years unless the shopping centres differentiate its product offerings and Michon et al. (2015) suggests the shopping centres need to have a well-defined fashion orientation to get shoppers involved with the shopping environment. Thus, this paper concludes by emphasizing that regional shopping centres can sustain more competitiveness for SMEs than other categories of shopping centres despite the influence of online shopping on consumer browsing behaviour, given the provision of extended trading hours during the weekdays.

### Table 5: Independent samples Kruskal-Wallis test for shoppers browsing time in categorised shopping centres

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regional shopping centre</th>
<th>Sub-regional shopping centre</th>
<th>Neighbourhood shopping centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carry shopping list mentally or physically when visiting shopping centre</td>
<td>0.870 (Sig.) 0.806 (Sig.) 0.301 (Sig.) 0.915 (Sig.) 0.531 (Sig.) 0.541 (Sig.)</td>
<td>0.414 (Sig.) 0.917 (Sig.) 0.224 (Sig.) 0.998 (Sig.) 0.628 (Sig.) 0.999 (Sig.)</td>
<td>0.777 (Sig.) 0.343 (Sig.) 0.600 (Sig.) 0.186 (Sig.) 0.618 (Sig.) 0.457 (Sig.)</td>
</tr>
<tr>
<td>Compare products online prior to purchasing in-store</td>
<td>0.734 (Sig.) 0.775 (Sig.) 0.413 (Sig.) 0.118 (Sig.) 0.678 (Sig.) 0.100 (Sig.)</td>
<td>0.608** (Sig.) 0.536 (Sig.) 0.932 (Sig.) 0.743 (Sig.) 0.860 (Sig.) 0.280 (Sig.)</td>
<td>0.368 (Sig.) 0.412 (Sig.) 0.359 (Sig.) 0.234 (Sig.) 0.234 (Sig.) 0.184 (Sig.)</td>
</tr>
<tr>
<td>Frequency of online purchases over a period of two years</td>
<td>37.42 48.11 21.67 35.33 35.33 26.33</td>
<td>35.56 32.63 18.68 51.84 44.86 25.53</td>
<td></td>
</tr>
</tbody>
</table>

Significance level: P<0.05*; P<0.01**; OB: browsing time spent during objective visit to shopping centres; RB: browsing time spent during recreational visit to shopping centres

### Discussion and Conclusion

Consistent with the previous findings of (Luceri and Latusi, 2012), female shoppers spend more time browsing the product than male shoppers in a shopping centre. However, age did not show any significant differences in shoppers browsing time.

The fashion product category was preferred for browsing in shopping centres by the majority of shoppers, while the personal product category was the least preferred product category. Despite being the least preferred product category for browsing in shopping centres, the personal and recreational product category had a higher share of online spending for small online retailers than fashion products (National Australia Bank, February 2017). Furthermore, the browsing time spent on the fashion product category in the shopping centre is significantly different from the browsing time spent for other product categories. Shoppers spend more time while browsing for fashion products. This finding extends earlier studies in consumer shopping behaviour (for example Bloch and Richins, 1983b, Goldsmith et al., 1991) that indicate fashion orientation as the key element in enhancing the shopping environment within the shopping centre.

The results of exploratory factor analysis and spearman correlation indicates shoppers prefer regional shopping centre during the extended trading hours. The results support (Goodman and Malikc, 2012) findings that highlighted shoppers preferring a large assortment tend to visit larger shopping centre despite time scarcity. The online browsers also indicate a preference for shopping during extended trading hours and are much likely to visit the regional shopping centre, while the shopping inconvenience due to limited trading hours of the shopping centre is associated with the requirement of customer assistance. Online shopping lacks sensory gratification (Workman, 2010) and this influences online browsers to visit the shopping centre and seek customer assistance for products that require inspection. Nevertheless, online browsers in the current study exhibit the importance of the size of assortment when determining their shopping destination. One possible explanation can be that online browsers seek variety and the regional shopping centre with the large product assortment can facilitate both shopping convenience and any uncertainties of the shoppers.

Further, the current study indicates distance to shopping centre as an important element while making a shopping trip during the extended trading hours that suits both online browsers and shoppers preferring to browse in a regional shopping centre. According to Vaughan and Valerie (2009) the time press Australian shoppers’ seek proximity for their convenience and Anselmsson (2016) suggests older established shopping centres can remain competitive by improving their accessibility to facilitate the convenience shopping experience. This result supports previous findings of (SafeWork, 2013) that highlighted that the impact of trading hours is significant within the catchment area of the shopping centre.

Finally, the impact of online shopping on shoppers browsing behaviour was limited to time spent in browsing the product in the three categories of shopping centres. Nevertheless, the result indicates the frequency of online shopping to have a significant impact on the browsing time spent by goal-oriented shoppers while shopping at a regional shopping centre. This indicates that online shopping facilitates goal-oriented shoppers minimising the time-spent shopping at regional shopping centres. The sub-regional and neighbourhood shopping centre were not highly preferred by shoppers for their browsing activity. This implies shoppers’ visiting sub-regional shopping centre and neighbourhood centre are not very much involved in the prevailing shopping environment. Baker (2010) observed the neighbourhood centre to have a higher frequency of shopping visits than other categories of shopping centre, but it is mostly for grocery and daily needs rather than browsing for discretionary spending (speciality products). Hence, the frequency of online shopping showed no significant influence on shoppers browsing time at the sub-regional and neighbourhood centre.

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