INVESTIGATING THE RELATIONSHIP BETWEEN VISITOR LOCATION AND MOTIVATIONS TO ATTEND A MUSEUM

Abstract
This paper investigates the role of visitor location and other related contributing factors in determining motivation to attend the Queen Victoria Museum and Art Gallery in the regional city of Launceston, Tasmania. It carries out an assessment of the literature on visitor motivation to attend museums and galleries, including visiting as a learning experience and as an environment for wellbeing. It also considers the role of visitor location in determining the factors behind the visit. Following our adoption of a visitor survey, this paper carries out a demographic visitor profile before considering our findings on geographical location, engagement with the museum and marketing engagement (including by visitor location). The study then carries out a series of independent t-tests with respect to visitor location, followed by ANOVA calculations with respect to the overall mean findings for different subgroups. Following this, confirmatory factor analyses determine item suitability, with four factors being identified. Following discussion of the findings and the drawing of conclusions, a series of recommendations for theory and practice are made, beginning with implications for QVMAG itself before broadening insight for other museums, galleries and cultural attractions more generally.

Key words: Museums, visitor motivation, regional location.
INVESTIGATING THE RELATIONSHIP BETWEEN VISITOR LOCATION
AND MOTIVATIONS TO ATTEND A MUSEUM

INTRODUCTION
Museums and art galleries are increasingly investing both time and effort in order to better understand why visitors are motivated to attend their venues (Kelly, 2006; Black, 2012; Prentice 2004 and Kim et al 2007). By conducting analysis of visitors’ intentions to attend these venues, it can enable the establishments to better understand and explore the needs of all its visitors, especially those with constricted financial controls (Economou, 2004). A predominate paradigm for formulating and testing motivations within the tourism context has been the Push-Pull Theory (Crompton 1979; Dann 1977, 1981). This theory suggests that visitors are “pushed” to participate from internal imbalances such as the need to get an optimal level of excitement, in addition to being “pulled” by the offerings of a specific destination such as museums and their environment. The pull motivations that a cultural destination offers are thought to be specific to that destination, whereas the push motivations are viewed more generally and have the options of being fulfilled by a variation of different activities such as engaging experiences with people (Crompton 1979; Iso-Ahola 1990).

Research conducted by Richards (1997) suggested that people who visit cultural attractions, such as heritage sites, arts, drama and cultural manifestations away from their usual place of residence can be described as cultural tourists. Richards and Munsters (2010) suggest that cultural tourism is defined as a cultural experience; therefore, cultural experiences have become one of the main motivations to travel to different locations. However, most motivational research into museum attendance has focussed upon visitors and inferences to non-visitors have to be made cautiously from such literature. (Prentice et al. 1997). Richards (1997) goes on to suggest that a factor to be considered for the increase in attendance to cultural attractions, such
as museums, is that the visitor tends to be middle class with a higher degree of financial income and educational level. Falk and Dierking (2013) support this statement by indicating that, when it comes to deciding leisure activities, it is often a form of negotiation between the financial outlay, such as the investment in both the time and money needed, and then the intangible benefits, such as the value and importance visitors place on the activity.

It is suggested by Remoaldo et al. (2014) that attracting visitors is becoming more challenging as there is now a greater desire by visitors to include more cultural elements in their experience. Ritchie and Hudson (2009) and Yankholmes and Akyeampong (2010) suggested that visitors’ desire to experience other cultures in multiple forms and the need to gain an authentic and memorable experience are key drivers for visitors. Mayer (2015) goes on to suggest that there has been an increasing popularity towards visitors’ authenticity of their experience for attending attractions such as museums and art galleries (Evrard and Krebs, 2017). However, what can be regarded as reliable empirical results analysed from field studies concerning the behaviour of these visitors is still debated and lacks a clear consensus (Ashworth, 2010; Crompton, 1979; Crompton and McKay 1997; Falk, 2006; Falk, 2009; Maeng, et al. 2016). Dawson and Jenson (2011) point out that there needs to be clear contextualisation of visitor experience in order to secure a much deeper biographical, societal and psychological understanding of their background. The increased importance of museums and art galleries as an informal platform to educate visitors has increased the involvement and interaction from visitors; therefore, children and their parents are more engaged and motivated with the experiences provided by the museum (Gong and Tung, 2017). However, recent studies that have analysed visitor behaviour indicates that visitors to these locations are not just limited to educational and cultural participants but now include those who wish to seek and study the
experience presented by the exhibit system (Falk and Dierking, 1992; Falk and Dierking, 2013; Mayer, 2015; Pi-Chu Wu, 2017; Heimlich and Horr, 2010 and Smith et al. 2010)

Despite a new generation of potentially motivated visitors attending museums and art galleries, the escalation and success of more mainstream leisure activities has imposed many challenges to the museum sector and in fact increased competition for, and affected, attendance (Lehman, 2009). To assist in understanding how to maintain attendance in museums and art galleries, Wallace (2016) conducted comprehensive research into museum marketing that sought to create and sustain the image of a museum. The aim was to emphasise not only the image but also to identify the repeat visitation and support of visitors. Falk and Dierking (2013) suggest that visitors who attend museums hope to do new things during their visit and not just in educational terms. This approach and behaviour, as indicated by Chou (2013), suggests that the historical attitude and culture of the more traditional museum format is facing new challenges because of limited visitor interaction and the desire to be entertained.

In order to gain a better understanding of their motivation to visit tourist attractions such as museums, research has turned to what the possible correlations between visitors attending and the likelihood of them returning could be. Attracting new visitors is the main focus; however, visitor repeat admission is a behaviour that often follows what is perceived as receiving a type of service (Pi-Chu Wu, 2017). Mencarelli et al. (2010) suggest that if a comprehensive and thought out marketing strategy is in place this will improve the operational efficiency of the museums. Therefore, visitors will base their return on the quality of their experience and what they perceive as good or bad value for money at that time (Hume, 2011). In return, this may yield an encouraging outcome for the visitor and the opportunity for them to return. Furthermore, if the visitors feel that they had a perceived good experience whilst at the museum,
it would also be likely that they would engage in positive word of mouth, encourage new and repeat visits.

As a result, the purpose of this research is to investigate the relationship between visitor location and motivations to attend a museum, in this case, the Queen Victoria Museum and Art Gallery (QVMAG) in the city of Launceston, Tasmania, Australia. Originally opened in 1891, QVMAG is situated on two sites in the city. One is a dedicated art gallery and the other houses the natural sciences and history collections in a former 19th century railway workshop. It is Australia’s largest regional museum and is a major cultural institution in its area, both at local and state levels. Within this context, our research has three major objectives: to assess the extent to which the perceived motives change across different geographical locations for varying age groups, identify the differences between domestic and overseas visitor groups and their engagement with QVMAG, and evaluate the extent to which these motives validated the push and pull motivations.

LITERATURE

Motives for attending museums and art galleries

In the arts and cultural literature, a number of approaches to motivation have been taken to better understand the cultural consumer. For example, Hood’s (1983) early study introduced the study of ‘values’ as opposed to simply considering demographics, and used frequency of visitation as a framework. Subsequently, later research from Prentice, et al. (1997) indicates that general studies that relate to museums identified general dimensions of experiences sought and it has been established that visitors to Museums and Art galleries generally seek social or recreational experiences from their visit to a museum; in particular, for satisfying their general interest and curiosity, for informal education and for social interaction. Whilst there appears to
be a confusion between ‘values’ and ‘motives’, this study centred on the values which were found to be the bases for leisure-choice decision-making. Importantly, Hood (1983, p. 142) noted that:

…each of the three segments - frequent participants, occasional participants, and nonparticipants is seeking specifically different values, satisfactions, and experiences through leisure activities such as museum going.

Engagement is also considered to be one of the key drivers for attending arts galleries and museums (e.g. Brodie et al, 2013; Higgins and Scholer, 2009; Mollen and Wilson, 2010). However, Babbidge (2019) suggest that there is also a novelty factor when it comes to attending museums. Research conducted by Babbidge (2019) indicated that modern museums often attract visitors who are motivated by social influences that can be satisfied by attending the museum only once and they are not likely to revisit. Earlier studies suggested that key motive and reasons for attending could also include the need for personal achievement, an affiliation to the venue or the general uniqueness of the museum or art gallery (McClelland, 1987; Mowen and Minor, 2000). Alternatives to the engagement terms include devotion, attachment, commitment and even emotional connection (Ball and Tasaki, 1992; Marci, 2006; Mollen and Wilson, 2010, Pimentel and Reynolds, 2004). Edmonds et al. (2006) and Welsh, (2005) suggest that when it comes to enhancing visitors experience, the level of engagement within museums often attributes to the consumption experience. Edmonds et al. (2006, p. 307), go on to claim that when reviewing engagement there are three major contributors that are important: Attractors, Sustainers and Relaters. An Attractors seeks to call attention from passers-by; Sustainers’ motivation to participate is maintained; and Relaters support the creation of a relationship with the system to enable the visitor to return to interact with it in the future. Each attribute plays a pivotal part of engagement, whether that be encouraging the visitors to review the system in the first instance, keep the visitor actively involved from the outset or allowing
for the support of a continuing relationship that encourages the visitors to return to the venue. This moves away from studies that have mainly focused on how visitors influence their level of engagement with the venue they attend (Black, 2012; French and Runyard, 2011).

The motives for attending and engagement with museums and art galleries do, however, differ across specific demographics such as age (Brida et al. 2016). The American Alliance of Museums Press (2010) produced empirical evidence which indicated that the main age group who attend museums and art galleries were 45 – 54 year olds. This was further reinforced by data which suggest that 19 – 35 year olds in general felt left out as the content of the venues was targeted towards the social and economic elite (Brunecky, 2010; Falk and Dierking, 2013). This finding is further supported by Brida et al. (2016) who state that when reviewing engagement and motives for attending the venues, females who have often attended university, and aged between 45 – 54 years old, are generally more likely to visit museums than their male counterparts. Being in a marriage or civil partnership or retired will decrease the attendance and engagement level. When it comes to the drivers for engagement with museums and art galleries, gender does not present as being a main factor. There are additional considerations that need to be factored in such as ethnicity, time availability and the distance to the venues (Amestoy, 2008; Amestoy and Rodriguez, 2013). Visitors who live a distance away from the museum or art gallery are more than likely to be prepared to visit than those who live closer (Lee et al. 2015). One rationale to explain this is that visiting a museum can be identified as a planned activity which may occur whilst on a tourist holiday. This also suggests that a sizeable portion of museum and art gallery visitors can be described as tourists (Brida, et al. 2016; Richards, 1997; Richards and Munsters, 2010).
Visitors – a learning experience

Understanding why domestic and overseas visitors attend art galleries and museums is still subjective despite the increased awareness (Packer and Ballantyne, 2002). However as Allan (2013) points out, countries such as Jordan tend to exhibit different kinds of cultural productions within the museums to draw in different international visitors. As early as 1990 the European Union attempted to create an information society which enabled visitors to have access to cultural environments (Brophy and Butter, 2007). However, quantifying this kind of learning experience is problematic due to the multiple reasons relating to why visitors attend these venues. Not all visitors, for example, acknowledge the experience within the galleries as actual learning (Amosford, 2007). A study by Volo (2009 p. 5) points out that there are two approaches to understanding the learning experience; “experience as the experience essence which happens in the mind of the visitor and the experience as offering” which tourism and leisure providers create and market”. These differing approaches agree that the external and objective elements offered by providers influence visitors’ internal and subjective responses, and that both are essential in understanding the visitor learning experience. However, Falk and Storksdiek (2005) suggest that there are two traditional frameworks that attempt to evaluate the learning experience of art and galleries visitors: a socio-cultural learning framework that focuses on the learning process rather than looking solely at the outcomes (Schauble et al. 1997); and the Contextual Model of Learning with a key focus on the “interactions between an individual’s (hypothetical) personal, sociocultural, and physical contexts over time” (Falk and Storksdiek, 2005, p. 745). Through the visitor identity lens, Falk (2009) constructs a typology of museum visitors: explorer, facilitator, experience seeker, professional/hobbyist and recharger. In effect, each of these ‘identities’ will have different groups of motivations, and understanding this allows museums to better target their marketing efforts.
Alternatively, Hooper-Greenhill et al. (2003) developed a generic learning outcomes framework (GLO) which can be applied in museum contexts (see Figure 1). This was focused on identifying the learning experience through a basic approach and measure, including questions on, for example, enjoying the museum visit. Monaco and Moussouri (2009, p. 318) elaborate on GLO’s impact by noting that “… the perceived benefits visitors have from a museum visit may include changes in knowledge or skills and so on but, more often than not, they are much more subtle”. They may be about seeing something in a different light, making new links, or discovering that museums can be fun places. Learning should also include additional variables such as understanding, skills acquisition, as well as values and ideas. Central to this is enjoyment and the creation of an inspiring experience, assisted by creative thinking. These can be achieved through activities, changes in behaviour and the progression of learning outcomes. However, despite Monaco and Moussouri’s (2009) belief that the GLO framework is not applicable, it is considered an appropriate foundation for studying with increased certainty applications enhance the visitors’ learning outcomes experiences. Dieck et al. (2016) argue that due to the limited research previously carried out which scrutinises the knowledge, understanding, skills, attitude, values, enjoyment, inspiration, creativity, activity, behaviour and progression; it is difficult to fully adopt the framework in all settings. Brown (2007) goes on to point out that despite the GLO Framework being widely utilised with almost have the UK museums using the framework, it is important to highlight that none of the GLOs actually measure learning directly; instead the GLO Framework measure indirect factors associated with learning, as an example whether the experience was enjoyable or inspiring. Another point raised by Brown was that it is clear that GLOs are subjective measures, not objective measures of performance. As such the results should be taken with a pinch of salt where small numbers of respondents are concerned. Large numbers are needed to produce
reliable results. Large numbers imply post-launch testing. Few institutions have the resources to test learning activities with large numbers prior to a public launch.

![Generic Learning Outcomes](image)

**Figure 1.** Generic Learning Outcomes (Hooper-Greenhill et al. 2003)

**An environment for wellbeing**

Museums have recognised the benefits of promoting health and well-being, including the broad concept of happiness. (Reed, 2018). Research conducted around museums often looks at the concepts of happiness, well-being and culture but refer to them broadly rather than as distinct ideas of momentary emotions or long-term traits. McGonigal (2009) suggests that museums and cultural activities can be viewed as opportunities for visitors to enhance their personal happiness and well-being. The chance to attend museums, which are designed as environments where visitors can have positive experiences and participate in their activities, allows them to maintain control over how and when they experience positive emotions. Silverman (2010) points out that museums’ interest in well-being is often framed around society and helping them to fill their public service role. McGonigal (2009 p. 51) argues that to make this happen more museums “should be in the business of making people happy”. McGonigal (2009) suggests that museums often provide experiences that motivate visitors to enhance their well-
being, such as spending time with people they like, creating a feeling of being part of something bigger than oneself, and to discover things they did not know.

Museums are striving to understand how they impact on visitors’ well-being and happiness, despite numerous studies already being conducted. Lynch (2017) suggests that museums and art galleries should be more responsible for encouraging happiness and well-being for all their visitors, as well as striving to understand how this occurs (Diener, 2000; Layard, 2010); for example, museums’ role in promoting health and its impact on well-being, the effect of participating in and viewing art’s role on promoting well-being, and how the museum environment and social interactions influence well-being. Davies (2014) suggests that museums should be utilised as one of the tools within a toolbox for well-being and happiness in the future, and should take health and society seriously. Silverman (2010) points out that museums have attempted to demonstrate the social impact on improving health, well-being and happiness in five ways: promoting relaxation, encouraging introspection to understand their feelings and thoughts to increase mental health, disseminating health education to allow individuals to care for themselves, addressing broader social health concerns, and enhancing healthcare environments. However, a study conducted by Chatterjee and Noble (2013) concluded that although the five variables captured the impact on improving health and happiness, their research indicated that there is an additional variable; that E-museums as a force to support social togetherness and interaction to enhance well-being could also be added.

Although there is no clear definition of what is an E-Museum, Sylaiou et al. (2008, p. 1) describe it as a “collection of digitally recorded images, sound files, text documents and other data of historical, scientific, or cultural interest that are accessed through electronic media”. Russo et al. (2006) go on to suggest that social media is a growing problem in the museum environment as it challenges existing communication models with few museums having a clear
strategy for engaging communities in content creation. Asquith, (2012) suggests that when visitors attend museums or art galleries, their experience is enhanced by the environment if it is welcoming and leaves a positive experience and impression with the visitor. More broadly, Bitner (1992, p. 57) suggest that the “… effect of atmospherics, or physical design and décor elements on consumers and workers can have an influence in their behaviours and create customer expectations”.

Research question

The literature review has focused on the motives, the environment and the learning experience of visitors who frequent museums and visitor location effects (Bitner, 1992; Dean, 1994; Falk and Dierking, 1992; Hooper-Greenhill, 1994; Layard 2000; Packer and Ballantyne, 2002). As such a number of themes are apparent. We have explored how communities and visitors have different perceptions of museums and how these perceptions provide different motivations, enablers or barriers to visit (Dean, 1994; Falk, 1993). We have also considered why visitors who live a distance from the venue are more prepared for the visit than those who live closer. For example, Brida et al. (2016) suggests that this is often due to the planning that goes into the visit beforehand, as it is seen by visitors as an activity outside their normal routine. Finally, museums and art galleries are viewed as places that can contribute to, and enhance, the well-being and health of the visitors who attend and perhaps society more generally (McGonigal, 2009).

Within this context, we propose the following research question:

What is the effect of geographic location on visitors’ motivations to attend a museum and what is its relationship to other motivational factors?
METHOD

In order to address this research question, this study comprised a survey of visitors at the Queen Victoria Museum and Art Gallery (QVMAG) in Launceston, Tasmania. Originally opened in 1891, QVMAG is Australia’s largest regional museum, and is situated on two sites in the city of Launceston which is in the north of the state (see Figure 1). One is a dedicated art gallery and the other houses the natural sciences and history collections in a former 19th century railway workshop. This mixture of science, history and art is unique in Australia. In its 2018-2019 annual report, the QVMAG explicitly states that it views its appeal as local, national and international. Its mission statement sets out its ambitions for the future:

Our Country, Our People, Our Stories: QVMAG is a place where our community explores, connects and is inspired. We are northern Tasmania’s authority on art, biodiversity and history. (QVMAG, 2019)

QVMAG is the premier cultural organisation in the north of Tasmania, and as such plays a significant role in the region’s social and economic environment, as well being a major tourist drawcard (Lehman, Wickham and Fillis, 2020).
Earlier studies suggested that conducting only qualitative research methods such as interviews and focus groups have some limitations by inhibiting respondents emotions (Elliott and Jankel-Elliott, 2003) and respondents could be unwilling to reveal or admit their true motivations which could be considered "less socially acceptable" (Ashworth, 2004, p. 96). Quantitative research may be most familiar to physical scientists questions are answered based on the analysis of numerical data. Quantitative methods allow the researcher to measure cause and effect, determine statistically significant changes in variables, and look for correlations between variables. In quantitative studies, researchers first identify variables that may influence learning. Only one variable should change at a time during a study. Thus, researchers must carefully consider how to control for potentially confounding variables. Therefore, with a view
to obtaining a comprehensive sample of all QVMAG visitors the self-developed survey instrument was administered to both QVMAG’s sites, the museum and the art gallery utilising a convenient sampling technique. Volunteers and staff administered the survey on both sites in two sessions, morning and afternoon, with the survey period taking place over 21 days in January 2016. Posters advertising the survey and its purpose, along with tables and chairs, were placed in entrance spaces. Those administering the survey were given training and provided with a manual to assist them in answering questions. In this way we sought to avoid bias in the sample, where interviewers do not approach respondents randomly, but rather show a preference for a certain type of response. In addition those completing the survey were ‘rewarded’ with a free cup of coffee at the on-site café. In total 2329 visitors completed the survey. This is a significant sample size and compares very favourably to the sample size of other surveys in the arts and cultural arena.

All the completed surveys were entered into a spreadsheet in preparation for analysis. At this point respondents that had not answered every question were removed from the dataset. A total of 2104 viable respondents remained. The questionnaire included a total of 30 closed-ended questions. The survey consisted of three main parts: 1) dealing with the attendance at cultural attractions in general; 2) the visit to the destination and the motives behind it; and 3) visitors’ socio-demographic attributes (gender, age, education, local of residence, including overseas, and level of income). In the questions about the destination and the motives, a 5 points Likert scale was used (1 being “not at all” and 5 being “very much” in terms of importance). Descriptive statistics, t-tests, one way ANOVA and Factor analysis were used to check the statistical significance of the results. In order to select the factors presented in Table 4 we reviewed literature influencing visitors at the museum and subsequently identified four,
Development, Relationships, environment and values and culture. (McGonigal, 2009; Amosford, 2007; Brophy and Butter, 2007; Babbidge (2019).

DATA ANALYSIS

Demographic visitor profile

A total of 2299 useable responses were collected. The data suggest that museums and art galleries are likely to attract high income earning, educated, older members of the community, those who have visited museums or art galleries more than 3 times a year, and more women likely to attend than males. The results indicated that 58% of the participants had a household income of $50,000 (AUD) or above, 59.9% of the visitors had either a Postgraduate or university degree, 61.2% were aged between 45 and 75 years of age and 53.1% suggested that they visited the museum or art gallery more than 3 times in a year. The gender split of the visitors also revealed that 61.3% were female, 37.9% were male and .8% preferred not to disclose their gender. This is in line with other studies which have found females to be the majority of visitors to museums in all age cohorts (Museums and Galleries NSW, 2010; 2013).

Geographical location

The geographical results in Table 1 suggest that, although the visitors come from widespread locations widespread across Tasmania and beyond, the majority come from interstate, followed by the Launceston area. The remaining visitors are from other Tasmanian regions or from overseas.

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launceston area</td>
<td>791</td>
<td>34.4</td>
</tr>
<tr>
<td>Southern region</td>
<td>100</td>
<td>4.3</td>
</tr>
<tr>
<td>North western region</td>
<td>84</td>
<td>3.7</td>
</tr>
<tr>
<td>Interstate</td>
<td>1055</td>
<td>45.9</td>
</tr>
<tr>
<td>Overseas</td>
<td>227</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Table 1 – Geographical location
QVMAG engagement and importance

In the first section of the questionnaire, the respondents were asked if they prepared themselves prior to visiting the museum by accessing the website or Facebook. Interestingly the majority of visitors selected no (63%) whilst 36% selected yes, whereas 1% did not selected either option. This supports the results in Figure 2 where only 544 indicated that they learnt about the QVMAG through social media or the website (16%). The visitors to the museum and art galleries were also asked to identify whether they were prepared for the visit to QVMAG sites. As presented, the response was positive, with 78.1% of the respondents selecting yes, whereas only 21.9% opted for no. A further question was asked whether the respondents felt that the museums and art galleries were important for the community and the overwhelming response was yes with 99%, compared to the 1% that selected the no option. Therefore this indicates that the visitors were aware of the importance to community engagement and that they would at some point visit other QVMAG sites.

Marketing engagement

Figure 2 identifies the marketing communications methods used by visitors to learn about QVMAG. These findings suggest that the majority of visitors who selected a specific category referred to friends, relatives or colleagues (28%) or visited the tourist office and or the tourism websites (24%) However, 25% of the visitors selected the ‘other’ category, although there was no follow-up responses provided by the visitors. Interestingly only 7% of visitors learnt about QVMAG through a social media platform and 17% through their own website.
Figure 2 – How did you learn about the QVMAG?

Marketing engagement by geographical location

Figure 3 indicates how the marketing engagement strategy was acknowledged by the visitors in relation to their geographical location. Interestingly the findings indicate that there are marketing strategies that can be explored further for creating better visibility of the QVMAG. Conversely, those living in the interstate area primarily learnt about QVMAG by the tourism website or tourist office which equates to 25% from all the other means of how the visitors learnt about QVMAG. Whereas those from the North Western region primarily learnt about the QVMAG from a friend or relative (29%), Which in turn is similar to the Southern region (29%).
Figure 3 – How did you learn about the QVMAG by location?

Overall means - independent t test with respect to visitor location

The overall mean scores across all 18 Likert scale items, indicated that there were significant gender differences, \( t = 2.764, \text{df} = 2.276, p < 0.009 \). There were significant differences with respect to preparation before a museum visit, \( t = 3.350, \text{df} = 2271.5, p < 0.010 \); between those who felt that art galleries and museums were important for the community, \( t = 4.667, \text{df} = 2172.1, p < 0.006 \) and the likelihood of visiting other QVMAG sites, \( t = 4.493, \text{df} = 2214.5, p < 0.002 \). (Table 2). This supports the research objective that aimed to identify the differences between domestic and overseas visitor groups and their engagement with QVMAG. One of the findings suggests that both male and female responses were positive against the independent variables with the majority of responses selecting very much from the survey.

<table>
<thead>
<tr>
<th>Group</th>
<th>M</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total group</strong></td>
<td>3.50</td>
<td>2299</td>
</tr>
<tr>
<td>Male</td>
<td>3.59</td>
<td>872</td>
</tr>
<tr>
<td>Female</td>
<td>3.72</td>
<td>1407</td>
</tr>
<tr>
<td>Preparation before visits – Yes</td>
<td>3.76</td>
<td>825</td>
</tr>
<tr>
<td>No</td>
<td>3.63</td>
<td>1449</td>
</tr>
<tr>
<td>Art Gallery importance - Yes</td>
<td>3.68</td>
<td>2271</td>
</tr>
</tbody>
</table>
Table 2 – Overall means for different groups

Table 3 presents the ANOVA overall mean findings for different subgroups. There were statistical significance across the groups with respect to visitor location (<.05). These findings in line with the research objective, to assess the extent to which the perceived motives change across different geographical locations for varying age groups, indicate that there is clear statistical significance amongst the geographical and demographical groupings.

<table>
<thead>
<tr>
<th>Group</th>
<th>M</th>
<th>N</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total group</strong></td>
<td>3.66</td>
<td>2299</td>
<td></td>
</tr>
<tr>
<td>None - this was my first time</td>
<td>3.54</td>
<td>161</td>
<td></td>
</tr>
<tr>
<td>1 or 2 times a year</td>
<td>3.63</td>
<td>748</td>
<td></td>
</tr>
<tr>
<td>6 or more times a year</td>
<td>3.82</td>
<td>584</td>
<td></td>
</tr>
<tr>
<td>3 to 5 times a year</td>
<td>3.67</td>
<td>637</td>
<td></td>
</tr>
<tr>
<td>Less than once a year</td>
<td>3.50</td>
<td>166</td>
<td>&lt; 0.11</td>
</tr>
<tr>
<td>18 – 24</td>
<td>3.56</td>
<td>201</td>
<td></td>
</tr>
<tr>
<td>25 – 34</td>
<td>3.65</td>
<td>295</td>
<td></td>
</tr>
<tr>
<td>35 - 44</td>
<td>3.76</td>
<td>387</td>
<td></td>
</tr>
<tr>
<td>45 – 54</td>
<td>3.72</td>
<td>471</td>
<td></td>
</tr>
<tr>
<td>55 – 64</td>
<td>3.67</td>
<td>440</td>
<td></td>
</tr>
<tr>
<td>65 – 74</td>
<td>3.63</td>
<td>388</td>
<td></td>
</tr>
<tr>
<td>75+</td>
<td>3.60</td>
<td>108</td>
<td>&lt;0.08</td>
</tr>
<tr>
<td>Under $30,000</td>
<td>3.66</td>
<td>294</td>
<td></td>
</tr>
<tr>
<td>$30,000 to $49,999</td>
<td>3.76</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>$50,000 to $69,000</td>
<td>3.75</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>$70,000 to $99,999</td>
<td>3.65</td>
<td>405</td>
<td></td>
</tr>
<tr>
<td>$100,000 and over</td>
<td>3.64</td>
<td>645</td>
<td></td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>3.64</td>
<td>401</td>
<td>&lt;0.12</td>
</tr>
<tr>
<td>Secondary</td>
<td>3.68</td>
<td>228</td>
<td></td>
</tr>
<tr>
<td>Senior Secondary</td>
<td>3.69</td>
<td>353</td>
<td></td>
</tr>
<tr>
<td>University degree</td>
<td>3.61</td>
<td>724</td>
<td></td>
</tr>
<tr>
<td>University Postgraduate degree</td>
<td>3.70</td>
<td>652</td>
<td></td>
</tr>
<tr>
<td>VET/Trade certificate</td>
<td>3.74</td>
<td>247</td>
<td></td>
</tr>
</tbody>
</table>
Other & 3.74 & 74 & < 0.13 \\
Launceston area & 3.76 & 791 & \\
Southern area & 3.70 & 100 & \\
North western area & 3.78 & 84 & \\
Interstate & 3.63 & 1055 & \\
Overseas & 3.53 & 227 & < 0.15 \\

Table 3 - Overall means for groups

**Rotated Factor loadings for items**

A confirmatory factor analysis was conducted on the data to determine the suitability of the items in the categories. Factor analysis is one of the most prevalent techniques in multivariate statistics, providing an opening into any underlying common structure in a large dataset. (Ait-Sahalia and Xiu, 2015). In order to conduct a reliable factor analysis the sample size needs to be large enough (Costello and Osborne, 2005; Field, 2009; Tabachnik and Fidell, 2001). The smaller the sample, the greater the chance that the correlation coefficients between items differ from the correlation coefficients between items in other samples (Field, 2009). A general rule of thumb is that there should be 10 - 15 participants per item; therefore as the sample size of this study is 2299 we concluded that a factor analysis could be carried with this data set. The Kaiser- Meyer- Olkin measure sampling adequacy score was good at .876 (the closer to 1 the better) and Bartlett’s Test of Sphericity rejected the null hypothesis, indicating that the strength of the relationship among the variables was strong. The factor analysis found four components with eigenvalues above 1. These four components explained 61.88% of the total variance. Table 4 shows the rotated factor loadings of each item under the proposed factor and evaluates the extent to which these motives validated the push and pull motivations. As noted in Table 4, all items loaded well above .300, which is the minimum perimeter for item adequacy.
### Factor loading

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1 – Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To discover things I do not know</td>
<td>0.777</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To seek personal fulfillment from learning</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To learn more about art, history or science</td>
<td>0.758</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To expand my interests in a particular area</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To have a stimulating cultural experience</td>
<td>0.647</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To invigorate my own creativity</td>
<td>0.587</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 2 - Relationships</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To share my interests with my friends and/or relatives</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To socialise with my friends and/or relatives</td>
<td>0.784</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To show QVMAG to visiting family and/or friends</td>
<td>0.748</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To spend quality time with my family or children</td>
<td>0.698</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To discuss the exhibitions with others</td>
<td>0.601</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To do something I have never done before</td>
<td>0.379</td>
<td></td>
<td></td>
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<tr>
<td><strong>Factor 3 – Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To relax and relieve stress</td>
<td>0.833</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To spend quiet time in a pleasant environment</td>
<td>0.773</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To escape the hustle and bustle of my daily activities</td>
<td>0.752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 4 – Value and cultures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Museums and art galleries should be a place to see local history and culture</td>
<td>0.849</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Museums and art galleries should be of educational value to the community</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Museums and art galleries should add to a community’s wellbeing</td>
<td>0.746</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 – Rotated factor analysis

**Summary**

Demographic and inference data has been analysed from the QVMAG responses. The demographic date indicated that more female visitors completed the questionnaire than their male counterparts from the 2299 questionnaire responses (61% Female to 39% Male respectively). In addition further analysis presented indicated that, over 60% of visitors attended the QVMAG at least three times or more a year, whereas 32% attended at least 1 or 2
times. The individual age group who attended the QVAMG the most was the 45 – 54 year olds (20%). The salary option form the respondents indicated that 28% of the respondents who attended QVAMG earned in excess of $100,000, whereas 24% earnt less than $49,000. Regarding education, at least 60% had either a Postgraduate degree or university degree, which indicates the level of academic profiles of the visitors. Finally the geographical location of the visitors suggested that 46% of the respondents were from Interstate whereas only 4% were from the North western region. The factor analysis indicated that there was four main factors from the data: Development, Relationships, Environment and Values and Culture. These four factors align with the literature as to what is important when attending the QVMAG.

**DISCUSSION AND CONCLUSION**

As noted previously, we have framed our investigation of QVMAG within the following research question:

*What is the effect of geographic location on visitors’ motivations to attend a museum and what is its relationship to other motivational factors?*

In the first instance, it is clear from our analysis above that the sense and level of engagement within museums varies between visitors. Prior knowledge, motivation, interest, technology, and time spent in the venue may influence engagement (Brodie *et al.*, 2013; Higgins and Scholer, 2009; Mollen and Wilson, 2010). Although art events and museums provide visitors with different experiences there are different historical and environmental contexts to consider. In everyday life, a museum visit may seem to some people too strenuous an activity, whereas when on holiday, visitors are often more relaxed, have more free time and seek activities to share with their family and friends. A museum visit may come to mind, especially if no alternative activity or event is available, although why visitors attend from overseas is still
subjective (9.9% of those who completed the survey were from overseas) despite an increased awareness (Packer and Ballantyne 2002).

Furthermore, museums are destinations not just of visitors solely interested in the contents museum collections and exhibits may have on display, but also for tourists who are occasional consumers of cultural experiences (Lehman and Reiser, 2014). By focusing here on the role of motives in determining museum attendance, we have found that motivation is itself a driver in need of further investigation e.g. heightened understanding of the enablers of visitor motivation. The very fact that motivation is found to be significant, monitoring all of the factors conventionally considered in the literature on cultural involvement, is itself an interesting result.

As we have seen, the way in which we perceive museums is connected to our motivation surrounding visitation frequency. However, people in the same visitation demographic group do not necessarily perceive museums in the same way. So far, the literature has not investigated in depth the role of individual motivation in shaping the characteristics of the visit to a museum. The contribution of this paper attempts to fill this gap by considering how motivation affects the time spent and reasons for attending the museum. Our paper assessed the willingness of visitors to stay in the museum, whether for the cultural experience or their own creativity; to appreciate the environment by taking the time to be in a tranquil space; to take time away with friends and family or solely for educational purposes.

An objective of this study aimed to identify the differences between domestic and overseas visitor groups and their engagement with QVMAG. The results of our analysis have some interesting implications. Firstly, museum visitors who almost entirely live in the Interstate area with medium educational (59.9%) and cultural attendance levels, appreciate the museum
environment with respect to its activities and services, whereas almost 99% of the findings for QVMAG respondents suggested that museums are good for a community. For the visitors, values and culture are more central than development reasons. Consequently, the museum environment, even when reflecting their perceptions modestly influences the visitors’ general attitudes towards cultural attendance.

The main challenge in the QVMAG museum setting therefore is not improving the quality of the museum displays to increase visitors’ interest and enhance their awareness, although of course that would be desirable (Hume, 2011) What commands priority attention is connecting the museum experience more tightly to the visitors’ overall relationship with how the visitors use the museum, to strengthen their personal habits through more rewarding aesthetic motivation and to make cultural attendance more relevant for their individual processes of well-being. If this association is not established firmly enough, most of the positive effects within the museum visits will potentially retract.

Our findings also indicated that the motivation to attend varies greatly against four factors, Development, relationships, environment and values and culture. These findings support the research objective which sought to assess the extent to which the perceived motives change across different geographical locations for varying age groups. The motivation as to why individuals or groups attended the QVMAG suggested that, irrespective of whether attendees were visiting to relieve stress and relax or meet up with friends and family, it was clear that it was not because they wanted to try something new. On the one hand hard motivated cultural visitors exhibit the intention to stay longer, on the other hand those who are searching for a recreational experience tend to have a longer stay. This suggests that despite the visitors’ motivation, they do tend to engage with the facilities available. As shown in previous research
(Brida et al., 2016; Richards and Munsters, 2010; Richards, 1997; Poria et al. 2005), motivation is also associated with infrequent attendance. Our conclusion, therefore, is that knowledge takes place no matter the individual motives. However, for those having mostly spare time on their hands, learning about culture is not enough to encourage repetition of cultural consumption activities. This conclusion supports the final research objective which aimed to evaluate the extent to which these motives validated the push and pull motivations. This should make museums’ management reflect on the diversity of their visitors and about the fact that it makes sense to try and attract the occasional overseas tourist in search of leisure and entertainment. It does not contrast with the traditional mission of museums, where culture is preserved and conveyed to visitors whilst displayed within the museum exhibit. In fact, this can take place also when tourists visit a museum with high motives.

**RECOMMENDATIONS**

Museums currently find themselves at a crossroads with matters surrounding the engagement of visitors. This research points to areas in which museums can actively start to think about their visitors’ perception and engagement whilst in the museums. The challenge for QVMAG is to attract more male visitors in order to create a more sustainable and balanced customer base and to attract those on household incomes of less than $50,000. Furthermore, there is an opportunity to attract challenge is to attract visitors from the southern and northern regions and from those visiting overseas. The museum has the potential, funding permitting, to drive their media platforms further in order to create a bigger digital presence. This is an imperative phase of communication because this is how individuals can learn about the museum’s offerings while, at the same time, appealing to a younger demographic of potential visitors.
With respect to practical implications, the GLO framework (Figure 1) can be considered an appropriate foundation for studying how wearable augmented reality applications can potentially increase visitors’ learning experiences (Claudia et al, 2015). This interactive way of providing knowledge has facilitated the learning experience through the reconstruction of important events and the provision of overlaid information. Museums such as QVMAG could potentially benefit from such technologies as other museums and art galleries have done so previously; for example, the Stedelijk Museum in Amsterdam was the first museum to use a hand-held guide in their exhibitions in 1952. However, it took nearly a decade before other cultural spaces followed that example, with the American Museum of National History adopting the “Sound Trek” audio guide in 1961 and a hand-held cassette type player was created for the Treasures of Tutankhamun tour in the late 1970s, whilst the Louvre museum introduced the first random access guide in 1993 (Othman et al. 2011). Technologies such as smart phones and tablet computers are now further changing the way technologies are used in museums and art galleries well beyond audio commentary. Othman et al. (2011) noted that fifty seven percent of museums surveyed in North America, Asia and Europe have embraced some form of multimedia guides and the suggestion is to embrace new technologies to further engage and stimulate their visitors.

In terms of wider theoretical implications, there is merit in encouraging comparative studies in other regional locations in order to further heighten awareness of the role of visitor location in museum and gallery attendance, as well as in other cultural locations. This research centred on the administering of a visitor survey at one museum over its two sites on the island of Tasmania in its second city. Given the growth in arts and cultural attendance worldwide, it would be appropriate to carry out comparative, cross-cultural work in order to identify the importance of visitor location elsewhere.
REFERENCES


Falk, J. and Dierking, L. D. (2000). Learning from Museums: Visitor Experiences and the making of Meaning. Walnut Creek, California: AltaMira


<table>
<thead>
<tr>
<th>Reviewer Comment</th>
<th>Author Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would be improved if you were to make more explicit links to your objectives and explain clearly the significance of your observations to your work.</td>
<td>The objectives of the paper have now been clarified in the Introduction section, and the significance of our findings have been framed against these in the Conclusion section.</td>
</tr>
<tr>
<td>&gt; Your methodology is well considered, and the quantitative approach well justified. However, you need to link your findings more convincingly to your research aims and the research question. Spell out to the reader explicitly the significance of your results.</td>
<td>The findings have been linked more explicitly to the clarified objectives (which in turn solidifies our claims of significance in the Conclusion section).</td>
</tr>
<tr>
<td>Question</td>
<td>Note</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Who museum visitors are:</td>
<td>An Australian equivalent to the UK context has been added to the paper</td>
</tr>
<tr>
<td>&gt; There is a huge amount of work on this, going back to the USA in the 1960s. The quote below defines the UK position. It would be good to see an Australian equivalent:</td>
<td></td>
</tr>
<tr>
<td>&gt; [In the UK] . high socio-economic background, university-level educational attainment and a professional occupation are still the most reliable predictors of high levels of engagement and participation in a wide range of cultural activities. The higher social groups accounted for 87% of all museum visits, the lower social groups for only 13%. &gt; Warwick Commission, 2015: 33 &amp; 34</td>
<td></td>
</tr>
<tr>
<td>Again, I do not know the Australian equivalent. For Launceston to get 60% visiting three times a year or more is remarkable.</td>
<td>This finding has been compared to international visitation statistics and then commented on RE: new explicit objectives of the paper.</td>
</tr>
<tr>
<td>What are the key alternatives/challengers to the museums in Launceston? Does a lack explain why 60% visit three or more times a year or is it because the museums have learned what to do to bring people back.</td>
<td></td>
</tr>
<tr>
<td>What is the comparison of your regularity of attendance, etc. figures in comparison to Australia generally?</td>
<td></td>
</tr>
<tr>
<td>Why do they come?</td>
<td>The reference to Falk (2009) has been added to the paper.</td>
</tr>
<tr>
<td>&gt; Start with John Falk (2009: 41):</td>
<td></td>
</tr>
<tr>
<td>&gt; '. to fully understand why people choose to visit museums, we need to see museum-going first and foremost as a leisure experience.'</td>
<td></td>
</tr>
<tr>
<td>There are numerous papers on groups wanting to engage together. For Australia it will be worth looking at the work of the great Lynda Kelly.</td>
<td>Papers by Kelly have been reviewed and include in the paper where appropriate.</td>
</tr>
<tr>
<td>Meanwhile, the fact that most people come in groups renders most visitor research of limited value as it all looks at individuals. They '.'prioritise the individual and tend to neglect the importance of social interaction in how visitors behave in and experience museums and galleries' (Davies and Heath 2013, 5).</td>
<td>The objectives of the paper have been refined to include the importance of group attendance at museums as a significant motivator. The reference to Davies and Heath (2013) now informs one of the new objectives of the paper.</td>
</tr>
</tbody>
</table>
And Hood (1983) remains the benchmark for us all: 
> . Being with people, or social interaction 
> . Doing something worthwhile 
> . Feeling comfortable and at ease in one's surrounding 
> . Having a challenge of new experiences 
> . Having an opportunity to learn 
> . Participating actively

References to Hood’s (1983) work has been included in the paper where appropriate.

> Learning is a key motivation, so it is worth looking at Falk (2007:13-14). He suggests that to understand the nature and extent of visitor learning, and the factors influencing it, we must recognise three phases: 
> a) Visitor pre-museum history: particularly prior knowledge, interest, experience, expectations and motivations 
> b) In-museum experiences: including physical setting, exhibition experiences, social interactions, etc. 
> c) Visitor post-museum history: especially reinforcing experiences such as post-visit conversations, related television programmes

Reference to Falk’s (2007) work has now been included in the paper where appropriate.

I would also suggest you look at some of the critiques of GLOs - e.g. 
> Black, 2012 p136ff

Critiques of GLOs has now been included in the paper.

> Few readers will know the geography of Tasmania - we need a little map to give a sense of distances to Launceston.

A figure representing Tasmania geographically has been added to the paper.

Currently, given the emphasis placed on location, the conclusions fail to discuss the outcomes of the research in terms of the relevance of location.

Given the new set of objectives for the paper, the Conclusion section now includes a discussion of the findings as they relate to location.

How many people a year visit the two sites?

Information about visitation numbers has now been included.
| Can you use the questionnaire to compare visitors to the two sites? | We thank the reviewer for this suggestion, however, the purpose of the paper is not to compare visitor motivations between the two museums – that would require an additional set of data about the differences between the museum sites that is beyond the scope of this study |