

## **Moderating effects of wine involvement in wine tourism**

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### **Abstract**

This paper explores the moderating effects of wine involvement on wine tourism behaviour, together with individuals' self-image congruity with wine tourism, attitude to wine tourism and their intentions to visit a wine region. A sample of 696 of wine consumers was obtained. Structural equation modeling was used to test the hypotheses about the different kind of invariance's among the model for respondents who are high involved wine consumers vs. those who are low involved wine consumers. The results suggest consumers who have high involvement with wine are more congruent with wine tourists, than those who do not have a low level of involvement in wine. Attitude to wine tourism and its impact on intentions to visit a wine region were positively significant for both high and low involvement groups.

**Keywords:** Wine tourism, involvement, self-congruity

**Topic areas:** Consumer buying and choice behaviour

## **Introduction**

Consumer involvement has long been a focus of many consumer behaviour researchers and also the focus of tourist and leisure studies. This paper, the moderating effects of wine involvement will be tested on wine tourism behaviour, together with self congruity with wine tourism and intentions to visit a wine region. A sample of 696 of wine consumers was obtained, and analysed using structural equation modeling to determine potential differences between low involved wine consumers and high involved wine consumers and their intentions to visit wine regions.

## **Involvement**

Involvement has been defined as an internal state variable that indicates the amount of arousal, interest, or drive evoked by a particular stimulus or situation (Park and Mittal, 1985), and has been described as the key motivating factor for understanding consumer choices in the market. Park and Mittal (1985) describe involvement as a construct which ultimately influences purchasing behaviour, and influences the response to persuasive communication (Petty and Cacioppo, 1983).

The most widely used involvement measurement instruments was developed by Zaichkowsky (1985) as a single index 'personal involvement inventory' (PII) and Laurent and Kapferer (1985) four faceted 'consumer involvement profile' (CIP). The operationalisation of involvement has been complicated in so much as the use of the construct in differing conceptual views. Mittal and Lee (1989) identify two forms of involvement, that is the sources of involvement and the effects of involvement. The 'sources' include utilitarian, sign and hedonic values, which have been identified by other researchers as antecedents of involvement. The other form is 'effects' of involvement which include: extensiveness of decision making, interest in advertising, social observations, brand commitment and product usage. Researchers have identified and focused on a type of involvement of interest, namely product or enduring involvement, brand decision involvement and purchasing involvement (Lockshin et al., 1997), as well as instrumental, communicative, affective, cognitive involvement (Mittal and Lee, 1989). As a result involvement is important because of its potential effect on consumers attitudes toward an activity or product, and their behaviour with respect to the activity or product (Havitz and Dimanche, 1990).

Involvement construct has been well established in wine purchasing behaviour and retail choice. Laurent and Kapferer (1985, Kapferer and Laurent, 1985) first developed involvement profiles using a number of culinary products in the range of products they tested, including champagne. Zaichkowsky (1985) also used red wine, and found that it was a differentiating product where consumers were extremely interested or relatively ambivalent. Lockshin et al. (2001, Lockshin et al., 1997) used the involvement construct as a segmentation instrument of wine consumers, and also include attitudinal and behavioural measures. They found that involved wine consumer buy wine more often and at higher prices than low involved wine consumers, subscribe to specialty magazines, visit websites, linger in the retail shop, talk to sales people, and discuss their interest with friends (Lockshin and Spawton, 2001). Whilst low involved buyers still enjoy the product category they are more influenced by point of sales, do not talk to sales people, nor do they linger over their purchase. High involved wine consumers use complex cues to make purchase decision such as region, style, wine maker, vintage and vineyard. Low involvement buyers tend to use price, brand and label (Rasmussen and Lockshin, 1999) as cues to which wine to buy. Quester and Smart (1996) however found high involved wine consumers considered wine region more important and wine style higher than low involved. Further research by Lockshin, Jarvis, d'Hauteville, and Perrouty (2006) further supports the notion of differences between high and low involvement consumers in their wine choice behaviour, where brand, region, award, price and involved as expected are quite complex. The link between wine involvement and wine tourism activity has only recently been explored by Brown, Havitz and Getz (2006). They were interested to test if an interest in wine would lead a consumer to travel to the place there the product was produced. They developed a wine

involvement scale (WIS), based on Laurent and Kapferers (1985) involvement scale. They found three factors in their WIS: expertise, enjoyment and symbolic centrality. Based on the mean factor scores, through cluster analysis they found four segments of wine involved consumers, which they labelled: Hedonic aficionados, cautious enthusiasts, fastidious epicureans and functional differentiators. Their research also analysed the four segments and their interest in visiting a wine region in the next 3 years, where only two groups indicated an interest to visit. This variable appeared to be a one item construct.

The influence of the destination imagery on consumer behaviour is also found to be different for low involved wine tourists vs. medium/high wine tourists. For example, the choice of wine route for a high/medium involved tourists may be based on visiting a particular winery. This however, may not apply for those consumers who are low involved wine consumers, where destination imagery strongly effects the decision or intention to visit a winery or wine region.

### **Self congruity**

Self-image congruity models are based on the notion of the cognitive matching between value expressive attributes of a given product or brand and the consumers' self-image (Sirgy and Johar, 1985). Self-congruence is an important factor in product choice, where consumers prefer products and brands with a symbolic meaning that is consistent with their self-concept. Sirgy (1985) has brought the self-image congruence theory into the forefront of consumer behaviour and developed the self-image congruence model that integrates the actual self and the ideal self-components of the self-concept with product image to explain consumer behaviour.

One of the antecedents of involvement include sign value, which has relevance for touristic experiences. Baudrillard (1970, cited in Havitz and Dimanche, 1990) stated that a person consumes a product for its sign value in order to belong to one's own group or to differentiate oneself by reference to a group of superior status. This notion supports the theory of self-congruity theory of consuming product and services which support ones actual self-image, social self-image or ideal self-image.

For this study, involvement measures comprise involvement with wine consumption, and not with the activity of wine tourism. The paper will focus on the extent of moderating influence that wine involvement will have on wine tourism visitation behaviour.

The hypothesised moderating effects which are tested include:

H<sub>1</sub>: High involved wine consumers will have a higher self-congruity with wine tourism than low involved wine consumers.

H<sub>2</sub>: High involved wine consumers will have higher intentions to visit than low involved wine consumers.

H<sub>3</sub>: High involved wine consumers will have higher positive attitudes to wine tourism than low involved wine consumers.

### **Research Methodology**

This section will outline the method of data analysis, the survey design, and sampling design. Structural equation modelling (SEM) will be used for theory testing and development, as a result maximum likelihood (ML) will be used as it is theory orientated and emphasises the transition from exploratory to confirmatory analysis (Anderson and Gerbing, 1988). MacKenzie (2001) outlines the advantages of structural equation modelling, with the key issues that being the ability to take random and systematic measurement error into account. The model building process involves two

distinct models, a confirmatory measurement model and the structural model (Byrne, 1998, Kline, 1998). As tourism literature is a developing discipline, particularly within wine tourism, it was necessary to conduct exploratory factor analysis (EFA) on the constructs. EFA however does not provide an explicit test of unidimensionality, therefore confirmatory factor analysis (CFA) provides a more rigorous evaluation of unidimensionality according to the constraints imposed by internal and external consistency (Gerbing and Anderson, 1988). Exploratory factor analysis was conducted using SPSS 16.0, whilst CFA and SEM was computed using LISREL 8.72.

The dependent variable in this research study is intention to visit a winery. The independent variables are self-image congruity, functional destination image, affective destination image, and attitudes toward wine tourism. Wine involvement is used as moderating variable in the model, with the focus of this paper reporting on the influence of wine involvement on intention to visit a winery. Intention to visit a winery construct was measured with three items, adapted from Sparks (2007) and Getz and Brown (2006). The involvement scale was based on items developed for a Wine Involvement Scale (WIS) by Brown, Havitz and Getz (2006). The items in WIS measure were used, however knowledge items were analysed separately, and not included in the involvement measure. Questions developed by Lockshin et al (2001) measuring product interest/involvement, brand decision involvement and purchasing involvement were also included. The final involvement scale comprised 16 items, on a seven-point likert scale, where 1 = strongly disagree, through to 7 = strongly agree. When researchers are interested in employing involvement as a mediator of relationships among other consumer behaviour variables, then it is necessary only to use a measure of overall involvement (Mittal, 1995).

In order to test the proposed model it is considered pertinent to collect data from wine consumers, as it has been shown that wine tourism behaviour is related to wine consumption (Brown et al., 2006, Getz and Brown, 2006). This is also supported through the notion that reinforcing existing attitudes is more effective in increasing consumption (or visitation) than trying to change the attitudes of 'nonusers' (Rink, 1998). The sample of wine consumers was purchased from a mailing house, where 5,000 were randomly selected. A total of 778 surveys were received, representing a response rate of 15.5%.

The final sample resulted in 696 respondents from across Australia, with 32.3% from NSW and 22.1% from Victoria. The sample is fairly evenly split between genders (Female, 52.4%, Male 47.3%). The average age of the respondents is 46 years old, with the life stage of the respondents varying. The top three groups of occupations are associate professionals (23.3%), managers (21.8%), or professionals (21.4%). Household income also varied, with 45.3% earning between \$100,001-180,000. See Table 3 for further details.

The vast majority of respondents have previously visited a wine region (94%), with a large spread of visitation amongst the respondents. Once outliers were removed, the average visitation is 8.75 (SD=7, N=568) within Australia. Just over one third of respondents (35.9%) have not previously visited a winery or wine region overseas. Of those who have, 64% have visited either once or twice previously. Overall respondents were very satisfied (M=5.6), with their last visit to a wine region (on a 7 point scale where 1 = very unsatisfied through to 7= very satisfied). The majority of respondents are considered regular wine consumers, where 43.2% of respondents consume wine most days or every day, and 37.3% of respondents consume wine weekly.

## **Results**

This section is interested in the testing of hypotheses about the different kind of invariance's among the model for different groups, that is, to investigate similarities or differences among respondents

who are high involved wine consumers vs. those who are low involved wine consumers. This process of measurement invariance is seldom tested in research, however is increasingly recognised as important to determine the validity of further quantitative comparisons (Vandenberg and Lance, 2000, Garson, 2008).

The moderating construct, wine involvement is considered to be a multidimensional construct which was measured using a 16 item wine involvement scale. As it was an adapted scale, exploratory factor analysis was undertaken, to test the dimensionality of the construct. A calibration sample was randomly selected (N=347) from the full data set. Exploratory factor analysis was conducted using principal-axis factoring (PAF) extraction method. Taking into account sample size, and the case/variable ratio, a minimum of 0.4 was used as the criterion for judging the saliency of factory loadings (Gorsuch, 1974). The final solution retained 7 items resulting in 2 factors: 'Interest' (F1) and 'Enjoyment' (F2). See Table 1 for items and factor loadings.

Table 1: Wine involvement EFA

Item	Item Description	Factor loadings	
		F1 – Interest	F2 - Enjoyment
Wine14	I am very interested in wine	.885	
Wine13	I find conversations about wine very enjoyable	.866	
Wine11	I wish to learn more about wine	.760	
Wine16	Deciding which wine to buy is an important decision	.637	
Wine2	I consider wine to be a central part of my lifestyle	.505	
Wine9	For me, drinking wine is a pleasurable experience		.915
Wine12	Wine is enjoyable to drink socially		.728
	Eigenvalues	3.77	1.07
	% of variance	48.52	10.40

Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.84. Bartlett's Test of Sphericity:  $\chi^2 = 2132.63$  d.f. = 21,  $p < 0.000$ .

In order to determine invariance or otherwise between high and low wine involvement consumers, it was necessary to create two groups (high and low involvement groups), using only one factor. When researchers are interested in employing involvement as a mediator of relationships among other consumer behaviour variables, then it is necessary only to use a measure of overall involvement (Mittal, 1995). F1 'Interest' was chosen as a high/low involvement differentiator as it explained the greatest amount of variance (48.52%) of the involvement construct. The scale used for the items, was a seven point scale, where 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=neutral,

5=somewhat agree, 6=agree, and 7=strongly agree. It was determined for a respondent to have an interest in wine; they would need a score of 5 or more to be considered 'interested'. Two groups were formed, based on their mean scores for F1 only. The low involvement group had a mean less than five ( $M=3.4$ ,  $SD=0.7$ ,  $N=383$ ), and the high involvement group had a mean of five or higher ( $M=5.3$ ,  $SD=0.5$ ,  $N=298$ ). This approach was similar to the median split approach used by Flynn and Goldsmith (1993).

For both high and low involvement groups, similar results were obtained where the factor loadings for each individual item on its respective construct were statistically significant ( $p<.001$ ), in support of the dimensionality of the construct. Prior to valid comparisons between relationships in the structural model can be made, metric equivalence must first be established (Hair et al., 2006). The CFA model was tested for each group simultaneously. It is apparent that the results become significantly worse when the parameter estimates have been constrained to be equal between the two groups. The  $\chi^2 = 76.64$  (19,  $p <.001$ ) so metric variance is supported, suggesting moderation is valid.

The first stage is to test whether the two groups have the same form, without restricting any of the nonfixed parameters, where a poor fit means that it makes little sense to move to the more restrictive hypotheses (Bollen, 1989). This unconstrained multiple group model serves as a baseline against which to judge more restricted models, and impose equality constraints on both the factor loadings and the structural paths (two  $\gamma$ s and one  $\beta$ ) across the baseline model and the two wine involvement groups. This will be followed by testing a model where beta and gamma are constrained in each group. This will constrain the parameters between self-image congruity, functional destination image, and affective destination image to attitude and intent.

The first model tested was the unconstrained model or baseline model. The model fit both the high involvement group and the low involvement group sample data well, with  $\chi^2 = 416.55$  ( $df = 256$ ,  $p <.000$ ),  $CFI = 0.98$ ,  $RMSEA = 0.04$ . The GFI for high wine involvement group is 0.94, whilst the low wine involvement group is 0.93. All the fit indices provide support that the same model form holds for both groups. With the high wine involvement group, both self-image congruity and affective destination image had a significant positive relationship to attitude toward wine tourism. The path between affective destination image had a stronger relationship with attitude toward wine tourism ( $\gamma_{13}^{(1)} = 0.47$ ) than self-image congruity ( $\gamma_{11}^{(1)} = 0.15$ ). High wine involvement respondents have a non significant path between the functional destination image and their attitude toward wine tourism. This differed with low wine involvement respondents, where their self-image congruity was not significant to their attitude toward wine tourism ( $\gamma_{11}^{(2)} = 0.12$ ), whilst functional destination image ( $\gamma_{13}^{(2)} = 0.28$ ) and affective destination image ( $\gamma_{13}^{(2)} = 0.29$ ), both were approximately equal in their effect on attitudes toward wine tourism. The relationship between attitude to wine tourism and its impact on intentions to visit a winery were positively significant for both high ( $\beta_{12}^{(1)} = 0.47$ ) and low ( $\beta_{12}^{(2)} = 0.53$ ) involvement groups. Further restraints were tested, but did not lead to a better fitting model.

## Discussion

As the results demonstrate, high involved wine consumers self-image congruity with wine tourists, had a significant positive relationship to attitude toward wine tourism, whilst low involved wine consumers did not have significant relationship with self-image congruity was not significant to their attitude toward wine tourism. As a result, those consumers who have a high involvement with wine are more congruent with wine tourists, than those who do not have a low level of involvement in wine. This in turn impact the attitude toward wine tourism, where low involved wine consumers did not have a significant relationship between their self-image and their attitude to wine tourism. The relationship between attitude to wine tourism and its impact on intentions to visit a winery were

positively significant for both high and low involvement groups, demonstrating the strength of the attitude construct in consumers future decision making choices. Further research is required to determine the profile of low and high involvement wine consumers, and their associated wine destination image factors which impact future wine tourism behaviour.

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