



## Danish Consumer Preferences for Wine and the Impact of Involvement

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*Purpose: In this paper we aim to explore consumer preferences for wine in the Danish market (both off-premise and on-premise markets). Although several studies have measured consumer preferences for wine, our study contributes to knowledge by investigating a market that does not have big tradition in wine production and wine is imported. In addition, our study explores the impact of involvement on wine preferences.*

*Design/methodology/approach: Based on a web-based survey, we applied the Best-Worst Scaling (BWS) method to measure the importance of attributes that Danish consumers assign when choosing wine. We further measured consumer level of purchase involvement and we compared their preferences between high and low involvement groups.*

*Findings: Our results show that Danish wine consumers mainly rely on previous experience with wine. Conversely, alcohol content and marketing actions (e.g. promotions) are not factors that Danish wine consumers rely much on when choosing wine. Wine characteristics are important, but are more prominent among the high involved consumers.*

Key words: wine, preferences, involvement, Best-Worst Scaling, Denmark

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## 1. INTRODUCTION

Today there is so much diversity in wine styles that it is almost impossible not to find the wine that suits all needs. Understanding what drives consumer preferences for wine, can therefore contribute in better meeting consumer demands in a market that is characterized by high competitiveness and a big number of brands.

Our study explores Danish consumer preferences for wine. Denmark is the country with the third highest consumption of wine in Europe, only behind France and Italy (International Organization of Vine and Wine, 2015). According to the same source, consumption of wine in 2012 was 32.6 liters per capita. Denmark is not a wine producing country and thus this statistic itself makes Denmark an interesting market to look at.

Until today there is not a known study that has explored Danish consumers' preference for wine and therefore our study aims to give insight into this market. In addition, it is of particular importance to understand what drives preferences in consumer markets where wine is only imported and at the same time high in terms of consumption. Finally, our study adopts preference measures used in earlier studies (Goodman, 2009), that allow us to put our findings in an international context providing further understanding on the drives of consumer preference for wine.

## 2. LITERATURE REVIEW

### 2.1 Consumer preferences for wine

Consumer preferences for wine has been the focus of several studies in the literature (Casini, Corsi, & Goodman, 2009; Goodman, 2009; Goodman, Lockshin, & Cohen, 2007; Jarvis, Rungie, & Lockshin, 2007). Goodman et al. (2007) and later on Goodman (2009) conducted a cross country comparison of consumer preferences for wine that included countries such as Australia, Israel, Germany, China, Brazil and the UK. Their study reveals that preferences for wine are not universal and differences exist across countries. With regards to the off-premise market, the authors showed that Australia, Germany, Israel and the UK all assess previous experience with wine as the most important reason driving their choice. For German, Italian and French consumers, matching the wine with food was also an important driver. On the other hand, Chinese and Brazilian consumers rate brands as an important product attribute. Additionally, the importance of someone recommending a wine showed to be much more pronounced in Germany than the UK, China and Israel. With regards to the on-premise market, the authors showed that in Australia, Germany and the UK consumers' previous experience with the wine was the most important attribute.

#### 2.1. The impact of involvement on wine preferences

Involvement is the motivational and goal-directed emotional state that determines the personal relevance of a purchase decision to a buyer (Rothschild, 1984). This definition can be translated into an interest, enthusiasm and excitement that consumers manifest towards a product category (Goldsmith & Emmert, 1991), and therefore exerts considerable influence on their decision making process (Laurent & Kapferer, 1985; Quester & Smart, 1996). Several authors have seen involvement as consisting of several facets. For example, Laurent and Kapferer (1985) distinguish involvement into five dimensions: product importance, risk importance, risk probability, sign and pleasure. Lockshin, Spawton, and Macintosh (1997)

further distinguish between three different dimensions of involvement: product involvement, brand involvement and purchase involvement. In our study we consider purchase involvement which we relate to the level of concern for, or interest in, the purchase process triggered by the need to consider a particular purchase (Beatty, Homer, & Kahle, 1988).

In relation to wine, consumers with high involvement are influenced more from certain wine characteristics. However, these results are not always universal. For example, Hollebeek, Jaeger, Brodie, and Balemi (2007) found that high involved consumers show importance to region of origin, whereas price is more important for less involved consumers. Quester and Smart (1996) found that involved consumers show more importance to region and wine style, whereas the less involved consumers showed more importance to grape variety.

### **3. METHODOLOGY**

#### **3.1. Measuring consumer preference**

We assessed consumer preferences for wine using the Best-Worst Scaling (BWS) method (Marley & Louviere, 2005). BWS has several advantages compared to alternative scaling methods, such as that it is unbiased by individual scale usage and that it allows for comparisons across consumer segments (Cohen, 2009). During a BWS task, participants are asked to indicate the most (best) and least (worst) important attribute from sub-sets of all attributes (Marley & Louviere, 2005). In this study, we asked participants to choose the attribute that most and the attribute that least influenced their choice of wine when buying in wine. We assessed both off-premise (i.e. retail) and on-premise (i.e. restaurant, bar, café) markets.

We adopted the list of attributes from Casini et al. (2009) and used in several other studies (e.g. Chrysochou, Krystallis, Mocanu, & Lewis, 2012; Cohen, 2009; Goodman, 2009; Goodman et al., 2007). This decision was made to ensure content validity and consistency, but also to allow us to compare the study findings with results obtained in other countries. We only made an adjustment in two of the attributes in the on-premise attribute list (“varietal” was replaced with “grape variety” and “available in half bottle (375ml.)” with “a description of how the wine tastes in the menu”). This decision was made to ensure that the attribute list met the context of the market, and thus ensuring face validity. The final list of attributes is shown in Tables 2 (off-premise) and 3 (on-premise).

We combined the 13 attributes of each list into 13 sub-sets of 4 items each using a Balanced Incomplete Block design. This type of design ensures that each attribute appears the same number of times (i.e. four times) across all sub-sets and that within each sub-set each pair of attributes appears only once. The aggregated BWS score was estimated by subtracting the frequency of times that each attribute was chosen as least important from the frequency of times that it was chosen as most important. Therefore, the aggregated BWS score varied from -4 (i.e. four times chosen as least important) to 4 (i.e. four times chosen as most important).

#### **3.2. Questionnaire and data collection**

We organized the questionnaire into four sections. In the first section we included questions referring to the participants’ wine consumption behavior. In particular, we asked consumers about the frequency of consumption and the number of glasses of wine that they

drink on a typical week. In the second section, participants were introduced to the BWS task, first for the off-premise and then for on-premise market. Those participants who never consumed wine were screened out from this section of the survey. Next, participants were asked questions in relation to involvement in wine. To measure involvement we used the scale from Beatty et al. (1988), and more specifically the three items measuring purchase involvement (e.g. I am very concerned about what brands of wine I purchase). Finally, the last section of the questionnaire included questions regarding participants' socio-demographic characteristics.

The questionnaire was translated in Danish. The online survey took place in June 2015 and was administered by a professional market research agency.

## 4. RESULTS

### 4.1. Sample characteristics

In total, 339 consumers participated in the survey. From those, 42 (12.4%) never consumed wine and were screened out from the survey. Table 1 presents the demographic characteristics of the sample kept in the analysis (N=297). The sample consists of more females (53.2%), aged between 40-59 years (42.8%), who live in a household of two (46.4%) and earn an average income (41.4%). We tested for differences with consumers who did not consume wine, and we did not find any significant difference. In relation to consumption frequency, 46.1% of the sample consumed wine at least once a week, and drank approximately 3.9 glasses of wine on a typical week.

**Table 1: Demographic characteristics of the sample**

	N (=297)	%
<b>Gender</b>		
Male	139	46.8
Female	158	53.2
<b>Age groups</b>		
18-39 years	61	20.5
40-59 years	127	42.8
60+ years	109	36.7
<b>Household</b>		
One	86	29.0
Two	138	46.4
More than two	73	24.6
<b>Marital Status</b>		
Married	154	51.9
Single / Not-married	143	48.1
<b>Education</b>		
Low education	154	51.9
High education	143	48.1
<b>Income (DKK)</b>		
Low income: 299,999 and below	101	34.0
Middle income: 300,000 – 599,999	123	41.4
High income: 600,000 and above	73	24.6

The involvement scale was internal consistent ( $\alpha=.827$ ). We then averaged the manifest items of the scale ( $M=3.16$ ;  $SD=1.35$ ) and conducted a medium split. The low involved group accounted for 50.4% of the sample ( $M=2.02$ ;  $SD=0.67$ ), whereas the high involved group for 49.5% of the sample ( $M=4.32$ ;  $SD=0.74$ ).

#### 4.1 Consumer preferences

Table 2 presents results for the off-premise market. “*Tasted the wine previously*” is by far the most important attribute. Characteristics of the wine (e.g. “*Origin*” and “*Grape Variety*”) and “*Information on the back label*” follow next. The least important attributes are “*Alcohol level below 13%*”, “*Promotional display in-store*”, “*An attractive front label*”. Looking at differences between involvement groups, the high involvement group gives more importance on “*Grape variety*” and “*Brand name*”, and less importance on “*Information on the shelf*” and “*Promotional display in-store*”.

**Table 2: Attribute importance (off-premise) an differences between involvement groups**

Attribute	Mean BWS	SD	Low Involved	High Involved	<i>t</i> (p-value)
Tasted the wine previously	2.31	1.86	2.47	2.16	1.44 (.151)
Origin of the wine	0.69	1.91	0.48	0.90	-1.93 (.055)
Grape variety	0.49	2.09	<b>0.10</b>	<b>0.89</b>	<b>-3.32 (.001)</b>
Information on the back label	0.39	1.67	0.53	0.25	1.46 (.145)
Matching my food	0.27	2.23	0.25	0.30	-0.20 (.839)
Someone recommended it	0.26	1.56	0.20	0.31	-0.62 (.534)
Medal/award	0.08	2.09	0.01	0.16	-0.62 (.537)
Brand name	-0.15	1.55	<b>-0.35</b>	<b>0.05</b>	<b>-2.20 (.028)</b>
I read about it	-0.36	1.51	-0.34	-0.39	0.27 (.786)
Information on the shelf	-0.62	1.78	<b>-0.07</b>	<b>-1.18</b>	<b>5.70 (.000)</b>
An attractive front label	-1.16	1.76	-1.17	-1.15	-0.12 (.908)
Promotional display in-store	-1.32	1.90	<b>-1.01</b>	<b>-1.63</b>	<b>2.87 (.004)</b>
Alcohol level below 13%	-1.85	1.67	-1.99	-1.70	-1.51 (.132)

Table 3 presents results for the on-premise market. “*I have had the wine before and liked it*” is the most important attribute, followed by “*Waiter recommended*”. Characteristics of the wine (e.g. “*Grape variety*” and “*Origin of the wine*”) are less important. Finally, the least important attributes are “*Alcohol level below 13%*” and “*Promotion card on the table*”. Looking at differences between involvement groups, the high involvement group gives more importance on “*Grape variety*”, “*Origin of the wine*” and “*Alcohol level below 13%*”, and less importance on “*Waiter recommended*”, “*Suggested by another at the table*” and “*Suggestion on the menu*”.

**Table 3: Attribute importance (on-premise) and differences between involvement groups**

Attribute	Mean BWS	SD	Low Involved	High Involved	<i>t</i> ( <i>p</i> -value)
I have had the wine before and liked it	1.57	1.79	1.55	1.59	-0.15 (.879)
Waiter recommended	1.22	2.06	<b>1.48</b>	<b>0.96</b>	<b>2.20 (.029)</b>
I matched it to my food	0.95	1.91	0.81	1.09	-1.24 (.216)
Suggested by another at the table	0.51	2.07	<b>0.79</b>	<b>0.22</b>	<b>2.41 (.016)</b>
Grape variety	0.13	2.18	<b>-0.23</b>	<b>0.49</b>	<b>-2.87 (.004)</b>
Suggestion on the menu	0.11	1.43	<b>0.30</b>	<b>-0.08</b>	<b>2.31 (.022)</b>
Available by the glass	0.08	2.17	0.31	-0.15	1.85 (.065)
Try something different	-0.19	1.67	-0.25	-0.13	-0.64 (.523)
Origin of the wine	-0.33	1.99	<b>-0.69</b>	<b>0.05</b>	<b>-3.26 (.001)</b>
A description of how the wine tastes in the menu	-0.45	1.70	-0.27	-0.63	1.87 (.063)
I had read about it, but never tasted	-0.56	1.49	-0.67	-0.45	-1.26 (.208)
Promotion card on the table	-0.93	1.44	-0.95	-0.92	-0.17 (.866)
Alcohol level below 13%	-2.28	1.73	<b>-2.49</b>	<b>-2.07</b>	<b>-2.13 (.034)</b>

#### 4. DISCUSSION

Putting the results together, we can conclude that Danish wine consumers mainly rely on previous experience with wine. Conversely, alcohol content and marketing actions are not factors that Danish wine consumers rely much on when choosing wine. Wine characteristics are also important, but are more prominent among those consumers with higher purchase involvement with wine.

Compared to studies conducted in other countries, our results show that for the off-premise market Danish consumers have equal preferences to consumers in other markets. In fact, “tasted the wine previously” is amongst the two most influential attributes in countries such as Australia, Austria, Brazil, China, France, Germany, Israel, Italy, New Zealand, Taiwan, UK and the United States (Goodman, 2009; Goodman et al., 2007), whereas the alcohol content are the least important ones. For the on-premise market, Danish consumers show also similar characteristics, showing more importance on previous experience with the wine and less importance on alcohol content. One notable difference is that Danish consumers are much more prone to seek suggestions from the waiter than the UK, Germany and Australia (Goodman et al., 2007).

Our results have implications for the Danish market. First of all, Danish consumers do not rely much on marketing actions (e.g. promotions). Therefore, retailers need to find different means of promoting their wines, such as providing more information about wine style and characteristics. Such strategies would be more effective for consumers with higher

purchase involvement. The important role of prior experience requires retailers first not to vary often their offerings, but at the same time offering the opportunity for consumers to taste them. In fact, wine tasting events or promotions are not that common as they are in other markets, especially wine producing ones that offer the opportunity to visit wineries, and thus such strategies should be more widely adopted. In regards to the on-premise market Danish consumers are more prone to seek advice about wine from either another person at the table or from the waiter. This particular finding should provide incentive enough for managers to optimize their waiters with all the right tools to give their customers the best possible experience and advice on the wine they should drink.

## 5. REFERENCES

- Beatty, S. E., Homer, P., and Kahle, L. R. (1988), "The involvement - commitment model: Theory and implications," *Journal of Business Research*, Vol 16 No. 2, pp. 149-167.
- Casini, L., Corsi, A. M., and Goodman, S. (2009), "Consumer preferences of wine in Italy applying best-worst scaling," *International Journal of Wine Business Research*, Vol. 21 No. 1, pp. 64-78.
- CBI – Centre for the Promotion of Imports (2014), "Which trends offer opportunities on the Danish wine market?" Netherlands Ministry of Foreign Affairs.
- Chrysochou, P., Krystallis, A., Mocanu, A., and Lewis, R. L. (2012), "Generation Y preferences for wine: An exploratory study of the US market applying the Best-Worst Scaling," *British Food Journal*, Vol. 114 No. 4, pp. 516-528.
- Cohen, E. (2009), "Applying best-worst scaling to wine marketing," *International Journal of Wine Business Research*, Vol. 21 No. 1, pp. 8-23.
- Goldsmith, R. E., and Emmert, J. (1991), "Measuring product category involvement: a multitrait-multimethod study," *Journal of Business Research*, Vol. 23 No. 4, pp. 363-371.
- Goodman, S. (2009), "An international comparison of retail consumer wine choice," *International Journal of Wine Business Research*, Vol. 21 No. 1, pp. 41-49.
- Goodman, S., Lockshin, L., and Cohen, E. (2007), "Influencers of consumer choice: Comparing international markets," *Wine Industry Journal*, Vol. 22 No. 3, pp. 87-91.
- Hollebeek, L. D., Jaeger, S. R., Brodie, R. J., and Balemi, A. (2007), "The influence of involvement on purchase intention for new world wine," *Food Quality and Preference*, Vol. 18 No. 8, pp. 1033-1049.
- International Organisation of Vine and Wine (2015). "StatOIV Extracts," available at: <http://www.oiv.int/oiv/info/enstatoivextracts2> (accessed 2 May, 2015).
- Jarvis, W., Rungie, C., and Lockshin, L. (2007), "Revealed preference analysis of red wine attributes using polarisation," *International Journal of Wine Business Research*, Vol. 19 No. 2, pp. 127-138.
- Laurent, G., and Kapferer, J.-N. (1985), "Measuring consumer involvement profiles," *Journal of Marketing Research*, Vol. 22 No. 1, pp. 41-53.
- Lockshin, L. S., Spawton, A. L., and Macintosh, G. (1997), "Using product, brand and purchasing involvement for retail segmentation," *Journal of Retailing and Consumer Services*, Vol. 4 No. 3, pp.171-183.

- Marley, A. A. J., and Louviere, J. J. (2005), "Some probabilistic models of best, worst, and best-worst choices," *Journal of Mathematical Psychology*, Vol. 49 No. 6, No. 464-480.
- Quester, P. G., and Smart, J. (1996), "Product involvement in consumer wine purchases: Its demographic determinants and influence on choice attributes," *International Journal of Wine Marketing*, Vol. 8 No. 3, pp. 37-56.
- Rothschild, M. L. (1984), "Perspectives on involvement: current problems and future directions," *Advances in Consumer Research*, Vol. 11 No. 1, pp. 216-217.