



## Multidimensional representation of wine drinking experience: Effects of the level of consumers' expertise and involvement

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### ABSTRACT

In experiential literature there is a collective accord that consumers' experiences should be conceptualised in a multi-dimensional configuration. From the sensory science viewpoint, the recent focus on consumption experience is gaining momentum but more findings are still needed. This study aims to reveal the dimensions shaping the wine drinking experience as well as their saliency and predominance among consumers with different levels of involvement and expertise. Six contextual focus group interviews were performed with 43 Spanish wine consumers and professionals stratified into groups based on levels of involvement and expertise. The main findings indicate that in all groups, the dimensions of sense, affect, and cognition operate to shape the drinking experience but at different levels. Low involved consumers (LI) privilege sensory and emotional dimensions, while experts attend closely to the sensory and cognitive dimensions. High involved consumers (HI) have an intermediate behaviour between LI and experts relying similarly on sensory, cognitive and affective cues. Results are put in perspective with findings in experiential literature spotlighting the application of the multidimensional experiential framework in sensory and consumer wine science.

### 1. Introduction

A growing number of consumer research is focused on the experiential aspect of consumption. Not until few years ago, experiential studies were focused on research conducted in consumer materialism and experiential marketing (Schmitt, Joško Brakus, & Zarantonello, 2015). The earliest documentation of consumption experience was in an article written by Hirschman and Holbrook (1982) which addressed hedonism, aestheticism, and materialism. From this time onward, different branches of experience research have been explored integrating "user experience" (Warell, 2008), "product experience" (Desmet & Hekkert, 2007), and "consumption experience" (Triantafyllidou & Siomkos, 2014) including "eating experience" (Spence & Velasco, 2018) and "drinking experience" (Schifferstein, 2009). Product experience is mainly related to material objects or possessions, while foods and beverages are linked to consumption experiences. Product or consumption experience studies carried out in consumer research, mainly seek to

identify and explore consumers' subjective experiences derived from interaction with products (Schifferstein & Cleiren, 2005).

The fundamental precept of experiential consumption is established on the fact that value does not reside only in the objects of purchase (products and services), as well as their utilitarian and functional benefits but also in the experience of consumption itself including the hedonic and experiential elements surrounding engagement with the product and service (Schmitt & Zarantonello, 2013). This is further illustrated by Schmitt et al. (2015) who proposed that consumers' experience can be conceptualised into its materialistic and experiential constituents. The materialistic component denotes the value attributed to the product based on the monetary and material elements of the purchase and consumption while the experiential component designates the value generated from the perceived experiential aspects of the purchase.

From a pragmatic point of view, the consumer science literature, considers experience as a multi-dimensional configuration that can be

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explored by measuring cognitive, affective and sensory responses as the model proposed by Warell (2008) for the evaluation of perceived experience of automobile design. This concept arises from the idea that experiences generate a response that involves interplay between mind, emotional or physical-related sensations (Csikszentmihalyi & Robinson, 1990; Osborne, 1977). However, in the field of food and beverage consumer behaviour the concept of experience is sparsely explored, and most works are focused on the overall liking of products (Schmitt & Zarantonello, 2013). This conventional approach is not exhaustive in itself as differences in experiences go beyond liking. In this context, there is a need to include concepts derived from product experience studies in the field of food and beverages for increasing the understanding of the interaction between the product and the consumer. A recent study measuring beer drinking experience in real context situations gives credence to the multidimensionality of drinking experience (Gómez-Corona & Valentin, 2019). This study shows that beer experience is not a continuum on a linear scale (measured by univariate hedonic scores) but results from the interaction of different dimensions pre, peri and post-consumption.

Recent literature suggests that the role of the experiential dimensions highlighted by Warell (2008) are product-dependent. For example, Jaeger, Worch, Phelps, Jin, and Cardello (2021) showed that while the sensory dimension was very stable for both craft-beer and industrial-beer drinkers, the emotional dimension varied between informed and non-informed conditions depending on the product. Thus, the positive emotions of craft-beer consumers increased when information related to the type of elaboration was presented, while no significant effect was observed for industrial-beer consumers. This effect was explained in terms of expectations and assimilation models, which suggest that information generating positive consumer expectations will increase affective judgements, while the contrary is observed for information producing negative expectations (Jaeger et al., 2021). This is also consistent with the fact that industrial beers hold more utilitarian significance than craft beers, which seem to represent both experiential and symbolic value, and not just utilitarian (Gómez-Corona et al., 2017).

Given the importance of the product on modulating product experience and considering the uniqueness and complexity of wine (Hollebeek, Jaeger, Brodie, & Balemi, 2007), the present study intends to extend the stream of works on the experiential research on this product category. Wine shows unique consumer behaviour in comparison with other consumer goods. This is attributed to its incomparable production cycle (annual production), and its inconsistency in production given its high dependence on bioclimatic factors (Hollebeek et al., 2007). Charters and Pettigrew (2005) suggested that the experience of wine consumption and the appreciation of art forms, especially music, share some key points including the potential of the nature of pleasure in the experience to be a combination of cognitive, emotional or sensory responses. However, these authors recognise that in their study participants focused their responses on the cognitive aspects of wine consumption, which was attributed to the philosophical nature of their approach. Considering wine from the consumer experience perspective the present work provides new insights into the classical literature related to wine, which has been mainly focused on deciphering the key sensory drivers (extrinsic and intrinsic) of liking, choice or quality (Piqueras-Fiszman & Spence, 2012; Sáenz-Navajas et al., 2016; Yang & Lee, 2020). Even if more recently, there is an increasing number of works acknowledging that hedonic responses (i.e., liking or quality perception) are not enough for understanding consumers' perception. To this regard, the emotional responses evoked by the product have drawn attention providing additional and interesting insights into wine appreciation (Danner, Johnson, Ristic, Meiselman, & Bastian, 2020; Mora et al., 2021; Niimi, Danner, & Bastian, 2019; Ristic et al., 2019) as well as the interaction of sensory and emotional dimensions (Niimi, Boss, Jeffery, & Bastian, 2017). Notwithstanding, as far as the authors are concerned, there is no work focused on understanding the wine consumer in a product experience framework considering wine

experience as the result of the interaction between sensory, cognitive and affective dimensions.

Wine consumption has been shown to elicit multi-sensory experiences through its intrinsic (e.g. flavours, colour, taste) and extrinsic dimensions (e.g. bottle shape, labelling), which interact with the consumer (Campo, Reinoso-Carvalho, & Rosato, 2021; Charters & Pettigrew, 2007) and the context (Dacremont & Sester, 2019) to form the overall hedonic response. Consumer preferences and perceived quality have been demonstrated to differ among consumers due to varying factors such as culture (Sáenz-Navajas, Ballester, Pêcher, Peyron, & Valentin, 2013) or level of involvement or expertise with the product (Sáenz-Navajas et al., 2015; Urdapilleta, Demarchi, & Parr, 2021; Urdapilleta, Parr, Dacremont, & Green, 2011). Regarding product involvement, there is a plethora of works showing that it is an important mediator of wine behaviour (Aurifeille, Quester, Lockshin, & Spawton, 2002; Bruwer & Huang, 2012; Cox, 2009; Hollebeek et al., 2007; Lockshin, Quester, & Spawton, 2001; Lockshin, Spawton, & Macintosh, 1997; Torri et al., 2013). Mittal (1989) stated that hedonic or self-expressive products, such as wine, evoke enduring involvement which represents experiential rather than utilitarian value (Higie & Feick, 1989) as could be the case of a detergent, which can be an important product but does not involve an enduring involvement (Rahman & Reynolds, 2015). To this regard, Higie and Feick (1989) defined enduring involvement as "an individual difference variable representing the arousal potential of a product or activity that causes personal relevance", being this personal relevance related to the fact that consumers link the product with their self-image. This concept is directly related to the concept of product involvement as defined by Bruwer and Huang (2012): "a motivational state of mind of a person with wine or wine-related activity". For example, high involved (HI) consumers were shown to rely on their own knowledge and experience for wine selection, differently from low involved (LI) who prefer considering recommendations from friends (Koksal, 2021). HI consumers drink wine more often than LI consumers (Rahman & Reynolds, 2015) and consider more product cues such as taste, grape variety or region of origin to infer quality, than LI consumers, that tend to simplify their choice decisions by relying heavily on price as the main factor (Hollebeek et al., 2007). HI consumers are information seekers because they are specially interested in learning about wine (Cox, 2009), being thus prone to act as opinion leaders (Koksal, 2021). Based on these previous findings we can expect that the level of involvement of consumers with wine would modulate the drivers building the wine consumption experience as observed for wine preference, perceived quality or wine choice.

To sum up, the objective of this work is to provide a specific extension to the study of Gómez-Corona, Escalona-Buendía, Chollet, and Valentin (2017) by considering the interaction of cognitive, affective and sensory dimensions occurring at different moments including pre, peri and post-consumption stages, to understand the wine drinking experience with focus on studying the role of consumers' expertise and product involvement. More specifically we hypothesise that the relative weight and saliency of cognitive, affective and sensory dimensions varies based on the level of involvement or expertise of the participants.

## 2. Materials and methods

A preliminary and a main study were carried out. The preliminary study allowed us to identify Spanish consumers with different levels of wine product involvement. This study serves as a baseline towards the recruitment of non-expert participants (i.e., low and high involved consumers) for the main study based on focus group sessions.

### 2.1. Preliminary study. Selection of participants

#### 2.1.1. Participants

A total of 231 respondents majorly from the region of La Rioja participated in the online survey (103 males, 127 females; age range

18–81 years, average age = 46). Efforts were made to restrict the recruitment to only participants who live and have spent most of their life in La Rioja to ensure consistency with respect to the region-of-origin (ROO) effect and familiarity.

### 2.1.2. Procedure

The instrument of data collection was an online survey using the Google Forms® platform. The questionnaire was originally developed in English and was then translated into Spanish. A pretest was conducted to identify plausible grey areas such as technical difficulties in the research instrument and protocol prior to implementation during the study. Items that were identified as unclear were then revised. The questionnaires were comprised of demographic information, buying behaviours, and attitudes towards the perceived healthiness of wine.

The survey comprised of three sections: socio-demographics, wine consumption pattern, habits and opinions. Habits and opinions about wine were assessed using a 23-items scale question (see Appendix A) designed for measuring consumers' wine involvement level (Bruwer & Buller, 2013) and corresponding to five different dimensions of involvement comprising Interest, Behaviour, Ritual, Pleasure and Risk. The presentation of the questions was randomised so that each respondent had a unique order of presentation. The respondents were required to rate the extent to which they agreed with the statement on a scale of 5-point scale (1 = strongly disagree; 2 = disagree; 3 = not agree/nor disagree; 4 = agree; 5 = strongly disagree). Seven out of the 23 items were reversed-order questions.

### 2.1.3. Survey recruitment

The link to the survey was distributed to potential respondents through e-mail and online social networks (Facebook, WhatsApp). The sample frame consisted of a database of an extended network of colleagues, associates, family and friends living in the region of La Rioja.

Survey respondents could indicate whether they were willing to be contacted for a subsequent focus group discussion of which 104 respondents (approx. 45%) specified interest. The survey ran for a period of 3 weeks.

### 2.1.4. Data analysis

The calculation of the level of involvement was done according to Bruwer and Buller (2013). Firstly, for the reversed-questions, scores of 1, 2, 4 and 5 were replaced by 5, 4, 2 and 1 respectively. Then, the level of involvement for each participant was calculated as the average among the 23 items. Finally, the respondents were split into three groups: low; moderate; high. Participants with low and high involvement presented mean scores lower than the 33rd percentile and higher than 67th percentile, respectively.

## 2.2. Main study

### 2.2.1. Participants

Forty-three Spanish wine professionals and consumers (21 males, 22 females; mean age = 44; range 35–66) recruited from the preliminary study and from a network of established winemakers (experts) were involved in the focus group sessions. Accordingly, consumers with low (LI) and high level (HI) of involvement were selected. Invitations were sent to eligible consumers based on pre-established screening criteria (native Spanish speaker, consumes wine at least once a month, minimum 10 years' residential status in the study location, no wine related occupation of any kind). Experts participation was solicited from the Oenologists Association of Rioja region (Spain) with 14 years being the average reported wine industrial experience (range of 8–33 years). In total 16 and 11 participants participated to the low and high level of involvement focus group discussions, respectively, and 16 participants took part in the expert sessions. Socio-demographics of the focus groups participants is provided in Table 1.

**Table 1**

Demographic characteristics of the focus group participants.

Levels of involvement	TotalNo.	GenderMale Female	Age range (years)	Mean age (years)	Years of expertise (years)
Low	8	5 3	35–60	42.8	–
Low	8	3 5	35–60	45.6	–
High	5	3 2	35–50	40.2	–
High	6	5 2	35–70	52.5	–
Expert	7	4 3	35–55	46.4	20.4
Expert	9	2 7	35–70	41.2	15.5

### 2.2.2. Focus groups

A total of six focus group sessions were held on three different days. Two separate focus group sessions for each group category (LI, HI, expert) were organised on different days and time. To counterbalance the effect of time and day, on a given day two sessions with participants from different category (LI, HI, expert) were carried out.

The operationalisation of the six focus groups sessions extended over a period of two weeks in February 2020 and were carried out in the evening hours (19:00–20:15 or 20:45–22:00) conforming with Spanish social habits and customs. The sessions were conducted in a traditional restaurant in the city centre following a contextualised methodological approach as suggested by consumer research works (Gómez-Corona & Valentin, 2019; Koster, 2009). The ambience, restaurant atmosphere and wines presented functioned as stimulators bringing the context into perspective, evoking and liberating non-conscious wine associated experiences. Another observed advantage of this approach is that it fosters social connectivity and conviviality among participants.

A semi-structured moderator guide containing open-ended questions hinged on experiential consumption constructs was developed based on Gómez-Corona et al. (2017). The guideline served as the operationalised template for all group sessions privileging fluidity and the natural flow of conversations as opposed to a rigid adherence. Principal themes addressed by the session guidelines are provided in Table 2. The complete guide can be found in Appendix B of Supporting information. The groups were briefed about the objectives of the research at the end of the session and appreciated for their participation. All sessions were audiotaped, and video recorded with participants' authorisation. Participation was voluntary and no incentive was offered. Focus group sessions summary is provided in Table 3.

### 2.2.3. Data treatment

Upon termination of the six focus group sessions, the recorded tapes were transcribed verbatim and audio and video records were deleted. Each judge was assigned a code and confidentiality was preserved. Transcriptions were organised in three corpora, one for each level of involvement. Our strategy to analyse the three corpora was twofold. First, we carried out a quantitative analysis which allows us to identify the semantic fields used by the three groups of participants via a correspondence analysis. Second, we carried out a content analysis based on our specific hypothesis.

*Quantitative analysis:* For each corpus, the lemmatised word

**Table 2**

Principal themes addressed during the focus group sessions. Guideline of questions detailing these themes is provided in Appendix B.

Themes
1. Purchase and consumption habits
2. Product experience/context surrounding wine consumption
3. Health properties modulating wine perception and consumption
4. Sensory and organoleptic dimensions
5. Affective dimensions
6. Cognitive dimensions/extrinsic properties
7. Consumption experience mediators
8. Attitudes and predispositions towards wine

**Table 3**  
Descriptive overview of the focus group sessions.

Group	No. of participants	Duration	Level of involvement
1	8	0 h 48 m 22 s	Low level of involvement
2	5	0 h 55 m 42 s	High level of involvement
3	6	1 h 06 m 31 s	High level of involvement
4	7	1 h 09 m 38 s	Expert
5	9	1 h 17 m 20 s	Expert
6	8	0 h 38 m 32 s	Low level of involvement

occurrences (one count maximum by participant) were calculated based on active forms (nouns, verbs, and adjectives). With illustrative purposes, a Correspondence Analysis (CA) was performed on the contingency table containing the citation frequency of words (in columns) with at least five citations for each of the three groups (LI, HI, expert: in rows). To facilitate the interpretation of the CA dimensions, a Chi-square test ( $\alpha < 0.05$ ) was calculated for the frequency of citation of words for each group of participants to identify items cited more or less frequently than the expected theoretical value. Words cited more frequently than expected in a given group were considered as characteristic of that group and marked in the same colour code (Fig. 1) as the type of participants in the CA plot.

Quantitative analyses were carried out using XLSTAT (Addinsoft, New York, USA), SPAD (CISIA-CESRESTA, Montreuil, France) and R 4.0 softwares.

**Content analysis:** A content analysis of the corpus was performed to provide structure, framework and understanding of the transcribed data. This entailed organising, classifying, summarising, and writing a cohesive description of the data, context, and participants (Hsieh & Shannon, 2005). To identify themes and patterns, two researchers created classification codes to organise the data independently. These codes were derived from the research questions, key words or phrases that frequently appear in the text. Every time words or phrases related to a concept appeared in the text, sentences or paragraphs containing them were bracketed and a code was written next to the bracket. Texts were then organised based on the codes. Once the corpus was coded, a

description synthesising the themes and their interrelationships was written independently by the two researchers. The encoded themes and descriptive summary of each researcher were discussed and upon consensus were subsequently translated into English and verified for linguistic consistency. Ultimately tentative answers to research questions were given.

The frequency of citation of themes related to sensory, cognitive and affective dimensions were counted for each group of participants. Chi-square test was applied for highlighting intra-group significant differences ( $P < 0.05$ ). For significant effects, Marascuilo post hoc pairwise comparisons (95%) were carried out.

### 3. Results

#### 3.1. Preliminary study

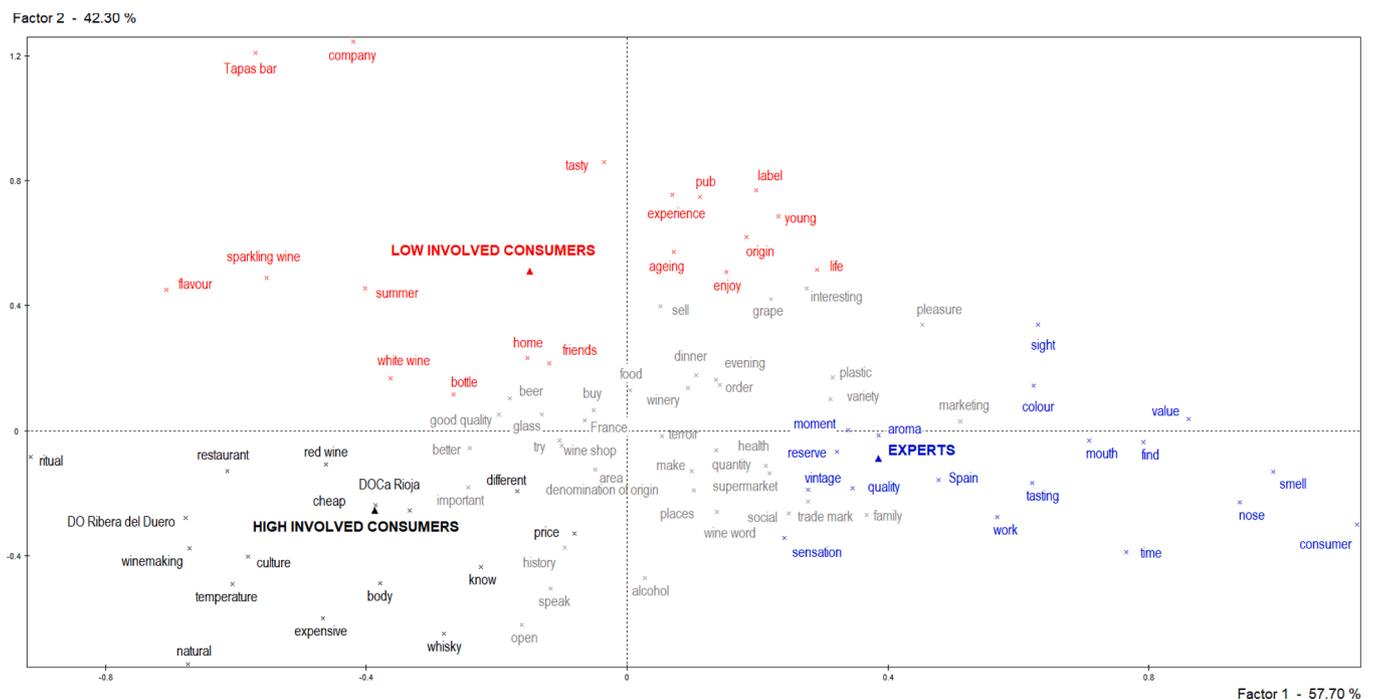
The score of level of involvement (LIS) ranged from 1.67 to 4.44 with average =  $3.11 \pm 0.49$ . A percentile scaling at 33% (LIS = 2.92) and 67% (LIS = 3.35) with the array of data was used to stratify the scores into different levels of involvement. Accordingly, three groups of consumers were obtained based on their level of involvement: 1) low (LIS < 2.93), 2) moderate (LIS = 2.93–3.35), and 3) high (LIS > 3.35).

Respondents in the moderate category were excluded from the list of prospective participants as only respondents in the low and high levels were considered for the focus group. This was to ensure that there were only two concise and distinct levels of involvement thereby eliminating the possibility of a potential overlap.

#### 3.2. Main study. Focus groups

##### 3.2.1. Quantitative analysis

The CA plot presented in Fig. 1 shows that dimension 1, which accounts for 58% of the explained variance, opposes experts to consumers (both low and high-involved), while dimension 2 (42%) opposes LI consumers to HI consumers.



**Fig. 1.** Correspondence analysis showing the distribution of words derived from contingency table based on the frequency of citation. Generic words (not differing among consumers) are in grey, words cited more frequently by low-involved (LI) consumers in red, by high-involved (HI) in black and in blue by experts. The displayed words have a minimum citation frequency of five during the discourse ( $\geq 5$ ).

consumption experience i.e., the company (*friends, company*), location (*tapas bar, pub, home*), or occasion (*summer*). Their coupling to affective factors (*enjoy, life, experience*) seems to give meaning and significance to their drinking experience. There is also a connection between certain wine extrinsic factors influencing their consumption experience such as wine type or style as *white wine* and *sparkling wines* or *young wines* and *aged wines*, and wine extrinsic factors related to the aesthetic of product presentation (*bottle, label*). The importance of the sensory dimension is buttressed using generic descriptive terms such as *flavour* and *tasty*. HI consumers employed words linked to cognitive aspects such as *culture, natural, winemaking, know, different, or wine origin* (DOCa Rioja or DO Ribera del Duero) or extrinsic factors such as price (*cheap, expensive, price*), type of wine (*red wine*) or other complex products comparable to wine in terms of cognitive and sensory factors such as *whisky*. Sensory cues are also employed to describe their drinking experience (*body, temperature*), while the affective cues seem to be dominated by the *ritual* attached to the drinking experience taking place in specific contexts (*restaurant*). The experts attach special importance to sensory-related cues (*smell, nose, mouth, tasting, colour, sight, aroma, sensation, quality*) for describing their drinking experience with wine, which are mainly linked to cognitive drivers involving motivation and curiosity when drinking a wine (*find*), technical aspects (*vintage, reserve, work*) and wine origin (*Spain*) and how they infer wine quality (*value*) perceived by consumers (*consumer*). Affective aspects are reduced to some cues related to the consumption such as the *moment* to have a wine experience. These results confirm that the wine drinking experience for the three groups of participants is driven by affective, sensory and cognitive cues occurring during the pre-, during, and post-consumption phases.

### 3.2.2. Content analysis

Table 4 shows the frequency of citation of the different themes related to the overall drinking experience according to the levels of involvement and expertise. Sensory was the most salient dimension for experts followed by the cognitive one, while affective, followed by sensory dimensions were most salient for LI consumers. HI consumers present an intermediate behaviour and do not seem to have a dominant dimension driving their consumption experience.

To further deep in the results, a content analysis articulated in three stages involved in the building of the consumption experience (pre-consumption, consumption and post-consumption) was carried out.

**3.2.2.1. Pre-consumption phase: Wine purchase, storage and serving rituals.** Differences in purchase, storage and serving conditions were observed among the three groups of consumers. Wine purchases generally take place in wineries, specialised wine shops and supermarkets. Wine consumers residing in a wine producing region are conferred with the advantage of having friends, family or associates who are involved in wine production, distribution, or sales. As a consequent, LI consumers report to seldom buy wines as it is generally given or offered as gifts; *“I usually get it as a gift, but if I never buy wine, I try to buy quality wine, like a good crianza like Tobelos...”*. In the circumstance where they have to make wine purchase for personal consumption, the decision process is often governed either by marketing strategies that adorns the product with a good aesthetic appeal; *“Sure, but I’m still being swayed by marketing. If, there are two wines and one is better than the other but I like the label of one better, I say I’ll take this one”* or from previous experience *“in*

**Table 4**  
Salient themes and frequency of citation identified from content analysis.

Main Themes	Low Involved	High Involved	Experts	Total
Sensory experience	35 <sup>ab</sup>	52 <sup>a</sup>	55 <sup>a</sup>	132
Cognitive experience	21 <sup>b</sup>	49 <sup>a</sup>	40 <sup>ab</sup>	110
Affective experience	43 <sup>a</sup>	35 <sup>a</sup>	30 <sup>b</sup>	108

For a given group of participants, different letters indicate significant differences ( $P < 0.05$ ) according to chi-square test and Marascuilo pair-wise post-hoc test.

*the end you know 4–5 brands that you won’t miss, because they are the ones you have usually drunk”*. Information displayed on the labels is read to inform subsequent purchase utilising the bottom-up cognitive approach as a signifier of wine quality; *“The last one I read, had a very cool label, and it said about the moments that you will remember or that you will enjoy this wine, you will enjoy it in company, it gave you something more than where it was from, the origin and so on, and I said, look how cool, I thought it was very nice”*. When they visit wine shops to purchase wine with a gift offering intent they request professional recommendation to increase the prospect of obtaining the ideal wine: *“Look, I’ve gotten used to giving away wine, whenever I go out and have friends and such, I’m always getting used to it and giving them wine, also, of course, I take advice from the man in the wine shop”*.

Differently, HI consumers prefer to make purchase from supermarkets with large offerings of wines and wineries. They have admiration and interest in discovering and exposing their palates to newness in taste and variety, the cognitive factors playing a very important role. They capitalise and relish the shopping experience offered by wineries and wine shops by requesting pre-purchase information usually to guide wine selection process and to acquire more product knowledge: *“I like to buy in wine shops because I like to be explained [when I buy] and be told this one is new as I don’t know what I’ll get. This is very pleasing to me”*. They declare to rely to a lesser extent on extrinsic cues as they think that pre-conceived notion before drinking does not generate any specific expectation about the wine.

Experts purchase wine from a plethora of sources but disfavour the purchase of wine from the supermarket due to the unsuitable/inadaptive conditions under which the wines are displayed: *“It is easier to make a bad purchase in the supermarket, besides the conditions of the wine are not the best, temperature, light, etc”*. As a result, wines are bought online and the purchase can be influenced by extrinsic factors such as bottle shape (conical bottle), brand, cap (low quality screw cap) etc. Experts also report to buy directly in the winery, admitting that their purchase decision is cognitive driven and based on the story behind wine production: *“I tend to buy the wine in the cellar, because I think it’s where the soul of the wine is and I really like that story behind it”*. Interestingly, wine professionals report to capture labelling information to infer naïve consumer’s expectations: *“I am aware that the consumer is impacted so we look at it as well”*.

The level of involvement and expertise also shapes wine storage practices. The experts and HI consumers report to derive satisfaction in having a wine collection that contains several bottles of wine. These wines are stored in a secluded and cool storage room/compartment for subsequent consumption soon after purchase. The storage temperature is optimally maintained for preservation of the wine’s intrinsic properties: *“Well, I keep it in a storage room as she said. It is underground and it is cool and ventilated, which is very important because if you have it in a locked garage it is not the same”*. The practice is not done to age/improve the wine per se as long storage time is perceived to weaken the wine quality (unlike the concept of *vin de garde* in France): *“[if you keep them] it is that they have degraded and it’s a shame”*. Differently, LI consumers do not tend to have several bottles of wine at home as purchase is made for immediate intake, but they declare employing it as a souvenir to symbolise goodwill: *“It’s my farewell gift whenever someone comes home and leaves, I offer them a bottle of wine”*. This information highlights that HI and experts are mainly cognitive in their approach, different from LI who seem to be mostly affective-guided.

Both consumer groups, HI and LI, engage in wine serving and drinking ritual to a varying degree and unanimously ascribe this ritual as what distinguishes and gives wine superiority over other beverages: *“I think there is a ritual, always behind, it’s not just pouring the glass, first the moment to choose it, then the moment to take it out, to show the bottle, to open it, it has a little ritual as well”*. This ritual exposure creates an associative learning that is consolidated on subsequent encounters which attaches an affective value to wine experience: *“You go to a restaurant, ask for a beer and they take it out, and yet you ask for a bottle of*

wine, and they teach you the ritual, the cork, that's if you like it". The experts associate this ritual to the pre-drinking experience mainly dominated by the sensory dimension which is a vital component of the tasting protocol: "firstly I see the colour, but wine colour is for me secondary, I mainly focus on wine odour when tasting, the last step is to taste it and I evaluate its harmony, that is, how sensations are assembled, and thus I judge general harmony based on in-mouth sensations".

**3.2.2.2. Consumption and post-consumption phases. Sensory dimension:** The different sensory descriptors mobilised to describe the chemosensory sensation during wine intake are in congruence with the level of involvement and expertise. LI consumers employ a global, indistinct description of the taste of wine: "The first thing about wine is that it tastes like wine, the taste of the wine at all times". Reference was also made to the in-mouth sensation and texture: "What I value most in a wine is how it feels when I swallow it directly". Likewise, HI consumers use generic, multi-dimensional and holistic sensory descriptors related to what is being perceived in the oral cavity (taste, throat, palate): "the taste in your throat, the aftertaste you get from a good wine or the aroma from the last empty glass is spectacular"; "What do I like best? First the complexity it has". In contrast, experts adopt a rather focal systematic and holistic approach underscoring the importance of aroma, balance, and harmony: "...it is true that you look for balance between all of them, the nose, the mouth and a little bit of the final sensations that the wine leaves are what most marks the wine and above all the balance that is a whole".

Opinions differ when it comes to wine quality, though all groups uniformly agreed that taste, texture and mouthfeel are important drivers. For experts, perceived flavours are important factors driving quality in addition to visual cues: "I would also say that the sight which we are going to put to use right now is quite important". For LI consumers, quality is rather associated to positive global drinking experience: "You have things to enjoy wine, you smell it, you taste it as pleasure rather than as drink. If you give me a good wine, I can take it with a good steak or a good fish". They also addressed the fact that wine quality is a personal matter: "Yes, I believe there are no bad wines, there are different palates". For some LI consumers, wine flavour is mainly secondary. For example, they report mixing wine and soda to make it more drinkable: "Young wine, if I want to drink it, [I drink it] with soda or Coca Cola, to minimise stomach discomfort, which is very noticeable".

Wine sensory quality was also discussed in relation to price. LI consumers opined that wine prices can be influenced by other determinants aside the sensory quality: "I am not very knowledgeable about wine but I am sure there are very expensive wines that are more by name than anything else...". This price-quality imbalance is further amplified by the HI consumers and experts. They observed that the quality of Spanish wines is devaluated in terms of its lower selling price as opposed to regional wines of similar standing when in fact they are of solid potentials and good quality: "I think that in general they are of a good quality and quite low in price. I think it is clear that as you taste them, you get more and more excited, and that's where we are going".

Finally, there is a consensus that temperature is important for the appreciation of wine especially in terms of augmenting and weakening the desirable and undesirable components respectively: "In the end, acidic wines have to get rid of the acidity with temperature".

**Cognitive dimension:** All participants manifested a common interest in wine but the rationale and motivation shaping this interest varies among the groups. For HI consumers, wine is inherently cultural, and often associated with family: "Because in my house I have seen that my father always drank wine for his meals since I was a child, and in the environment that I grew up in, wine has been culture for me". This does not, however, resonate with LI consumers who stated that interest in wine is equivalent to general thirst for knowledge: "I think you feel like you're acquiring knowledge, archiving flavours, learning to distinguish denominations, and in the end it's like you can get interested in literature or other things, because it's like having an archive, a wine culture, and in the end I think that's also

enriching". For experts, the interest in wine is much more specific. They reported having a firm passion, unwavering interest and liking for wine: "...I don't think there's anything as good as a wine". Additionally, every wine is perceived to have a history and drinking it can bring this story into existence: "I think that behind every wine there is a story be it in the manner of production, the terroir, variety, etc. which for me is very interesting and thus, I think you can get a lot out of a wine". This is further echoed by the HI participants: "but what I love about wine is that it has a story and I read the story of every wine and whoever sells it and then I pass it on to others".

In line with this opposition between general and specific interest in wine, LI participants show little interest for oenotourism as holidays and vacations are planned based on non-wine related factors, but tend to profit when within a wine producing region or country: "...whenever I travel if there is wine in the country I try to bring a bottle of wine". In contrast, HI consumers and experts would rather explore the merit of visiting wineries, exposing their sense to novel flavours and find value in newness of taste and variety which are all efforts towards wine knowledge acquisition: "Yes, and I also agree. I almost always travel a lot and when I travel, I almost always fall into a winery. I don't care if it's in Spain or abroad, I always try to visit a winery anywhere".

Judging the quality of wine can be a daunting cognitive task for wine novices. LI consumers' drinking experience is more positive when they do not employ much conscious effort while judging the wine, thus familiarity is linked to higher perceived quality: "I usually drink wines I tasted before and I liked, usually I have three or four wines that I like and I drink". They tend to mitigate risk prompting preference for wines with familiar extrinsic cues, mainly the region of origin. They advocate and give utmost preference to Spanish wines as it is perceived to outclass wines from other regions. It is alluded that this gesture of loyalty is a common practice and they therefore find it appropriate to conform: "It's like in all countries, the French say the best wine is from France, the Germans say the best is from Germany, which they are used to drinking". Experts and to a lesser extent HI consumers do not however adopt this approach because they tend to discover different wines that generate a wide range of sensations: "drinking wine is stimulating because it makes you think of and match the sensations generated by this wine with others you tasted before, the variety, the origin, the winemaking procedures.... or probably you are tasting something new, that you have never tasted before".

**Affective dimension:** The relaxing and tension releasing effect of wine is a common denomination among all groups of consumers. Wine as a beverage commodity is considered a relaxant that helps to unplug from life's daily stress. "Relaxation", "happiness", "peace", "satisfaction" are some of the words chosen to describe the felt sensation. The affective impact reverberates among the experts: "the fact that it gives me pleasant sensations, because it relaxes me to begin with, is like a kind of ethereal sensation". For HI participants, the elegant notions associated with wine confers it special significance making its consumption galvanising and delightful: "Great! I feel important because I'm doing something that is truly a unique celebration". Conversely for the LI consumers, it is important that the drinking experience is pleasurable and provides positive sensory and emotional feedback. Wine intake is a means to an end and this need should be fulfilled: "I associate drinking good wine with pleasure, not just drinking for the sake of drinking".

Experts and HI consumers also reported that wine elicit emotions that do not materialise with other alcoholic beverages, although this functionality depends on interest in the specific product. Furthermore, wine evokes certain childhood memory, and this experience was meaningful in creating a positive emotional association with the product: "I absolutely associate it with pleasure. I like this from the first memory that I have when I was about 6 years old or so, it's been years that it has been connected". Additionally, experts often leverage their wine expertise to ensure that others obtain and gain positive emotional feedback from wine intake: "What you're trying to do is make other people like it, not you like it, I'm trying to make my girlfriend's grandfather like it, my father like it, my uncle like it, my friends like it".

All groups of consumers mentioned the fact that wine is a social beverage taken communally. It is an integral component of social engagement and connection. The types of wine consumed varies and fluctuates as a function of the occasion, season, location, and company. LI consumers do not find personal relevance in consuming wine alone as this seems to undermine the derived satisfaction: *“I came to the truth that it is only on special occasions [I drink wine], that is, when I eat with friends, doing outings at the Bars Avenue. At home it’s strange for me to open a bottle of wine in a regular way for lunch or dinner”*. It is also related that the occasion/company confers wine its importance as wine intake can rarely exist neither can it be completely isolated from the company or occasion mediating its consumption and links to positive emotions: *“At times when you are super comfortable with wine, with your people or such, I still enjoy saying that I will stay another day and enjoy the company again”*.

This notion is only partially supported by the HI consumers who mentioned that wine can be enjoyed independently of the company present. The latter mainly functions as an addendum to the relaxing and soothing feeling derived from the wine: *“I really enjoy wine and the people we are with usually like the world of wine so I think we all want to learn and we all contribute especially when we are with someone else who knows more than we do, this is interesting”*. Experts do not disregard the merits of associating wine intake to a special occasion, they however assert that wine possesses self-sufficient value to instigate its intake: *“...and it is not necessarily finding special moments, the fact of wanting it is already special I want to drink good wine alone or with company”*.

A last topic that emerged was related to the benefits linked to wine consumption. Although opinions about wine’s health benefits are widely divided among participants, moderate intake was uniformly projected as being positive for health. Taking it in the right measure is considered to be crucial to maximise benefit and minimise harmful effect. Fermented beverages like wine are considered natural drinks making them less harmful to the health: *“I think that fermented drinks such as beer or wine have nothing to do with distilled drinks. I think that fermented drinks are less harmful to your health than distilled drinks are”*. The benefits of wine are mainly related to the affective dimension, thus for LI consumers, sociability and pleasantness associated with the context of intake dictates the gained benefits of wine rather than its constituents. The pleasure it affords outweighs any attributed health benefit: *“What I’m saying is that when you drink wine in company it means that you enjoy life and what gives you longevity is not the wine, but the enjoyment of things”*. Equally, experts associate it to a way of life that is significant in getting the most out of it: *“I believe that it has positive things and that it is also associated with a way of life and that this way of life helps to fulfil more years in a more relaxed way, without rushing. You do not drink wine in a hurry. Wine and rushing take years off for sure”*.

#### 4. Discussion

Osborne (1977) and Csikszentmihalyi and Robinson (1990) suggested that the interaction between emotional, cognitive and sensory dimensions can explain experiences. The present work is based on past literature that illustrated certain parallelisms between the experiences of artworks such as music and wine consumption experience (Charters and Pettigrew, 2005). This idea was recently supported by food-related studies that have demonstrated that consumption experiences require a focus on the interaction of the product with the consumer at different levels: sensory, cognitive, and affective (Dacremont & Sester, 2019; Gómez-Corona, Escalona-Buendía et al., 2017). In this context, the main objective of the present work was to extend previous research on the multidimensional experience in relation to wine and to introduce a new element in the experiential framework by evaluating the effect of the level of involvement or expertise of consumers on the drinking experience. More specifically, the relative weight and saliency of these dimensions among groups of consumers was evaluated. As an exploratory approach to delineate the key dimensions driving wine drinking experience, six contextualised focus group sessions were carried out. Three

differentiated groups participated in the study: high and low involved consumers and wine experts.

Fig. 2 summarises the dimensions of the drinking experience that emerged from the focus groups. Globally, the results highlight the importance of the cognitive and sensory dimensions on the construction of the consumption experience of experts at the different phases of consumption, while affective and sensory cues seem to govern the experience for LI consumers. HI consumers adopt an intermediate strategy as they rely on cognitive and affective dimensions at the different consumption phases but always considering the sensory cue as an important constituent of the experience. This demonstrates our hypothesis related to the fact that the building blocks of wine drinking experience is modelled by three dimensions that vary in terms of saliency depending on consumer’s involvement level or expertise (Fig. 2).

The higher relevance of the cognitive dimension together with the sensory one for the experts is highlighted (Table 4). This is well in line with results derived from the work of Castriota-Scanderbeg et al. (2005) that demonstrated that during wine intake, brain areas of experts related to flavour integration as well as higher-order processing mechanisms (including working memory and selection of behavioural strategies) are activated. Experts consider the drinking experience a unit of knowledge and thus they have a special interest in establishing relationships between the sensory properties of wines and their memories and previous experiences. Moreover, they find that wine tasting is an avenue to discover novel sensations and expand their sensory libraries that will allow the inference of extrinsic properties (origin, variety, winemaking method, etc.) from sensory attributes. This interaction between cognitive and sensory dimensions is not only privy to experts as HI consumers share similar perspective although their interest is more narrow, generic, and often follows a non-technical approach compared to experts. Differently, LI consumers seem to be less cognitive-oriented than HI or experts as they tend to focus on immediate affective pleasure, which is consistent with the idea that they activate brain areas related to emotional processing when drinking wine (Castriota-Scanderbeg et al., 2005).

The different role of the cognitive dimension for consumers with different levels of involvements (i.e., HI and LI) is consistent with the fact that LI and HI consumers behave differently (Barber, Ismail, & Dodd, 2007; Calvo-Porrall, Ruiz-Vega, & Lévy-Mangin, 2019; Lesschaeve & Bruwer, 2010). The level of involvement is a multidimensional concept that has a concomitant relationship with the degree of wine

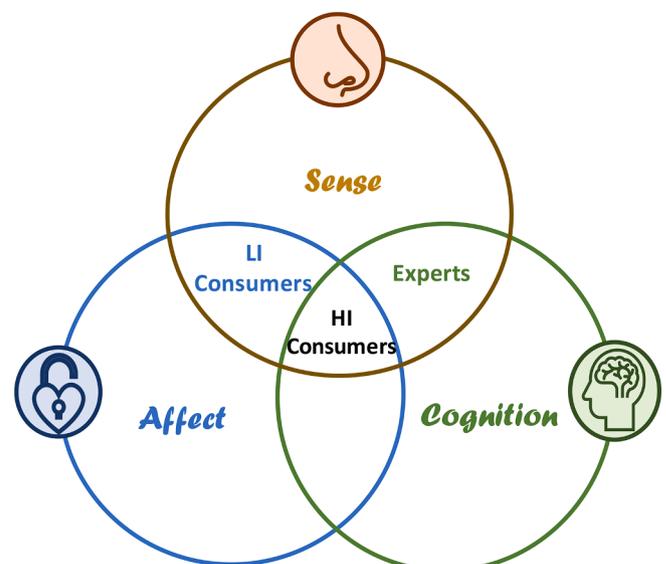


Fig. 2. A schematic illustration of the dimensions driving wine drinking experience for the three groups of participants: low-involved (LI) consumers, high-involved (HI) and experts.

knowledge (Bruwer & Buller, 2013). Bruwer and Buller (2013) considered five main dimensions to define the concept, including interest, behaviour, ritual, pleasure, and risk dimensions, while other authors considered a three dimensional configuration formed by the sub-categories: object valuation, personal identification, and perceived capacity for action (Rouquette, 1997; Urdapilleta et al., 2021). HI seek pleasure by thinking about wine in the drinking experience (Charters & Pettigrew, 2006), which is in consonance with the fact that they are more knowledgeable than LI consumers as they are more interested in learning about wine and wine is considered part of their lifestyle (Barber et al., 2007), contrary to LI consumers for which the cognitive-related interest for wine is quite limited.

Schmitt et al. (2015) and Charters and Pettigrew (2005) argued that cognition is particularly relevant for the attribution of value and meaning to consumption. Furthermore, White, Thomas-Danguin, Olofsson, Zucco, and Prescott (2020) put forward that inherent benefits are offered by cognitive processes in revealing valuable insights into consumer behaviour by taking into account the role of top-down processing (i.e. consumer's previous knowledge and experience) in chemosensory perception. While the weight of cognitive dimension for LI is less important than for HI and experts, LI consumers consider wine knowledge as a viable psychosocial asset that promotes social desirability. This is brought to bear during wine related exchange and interaction especially as an act of guidance for naïve wine consumers: "...or when people come from outside, I like to say that I'm from La Rioja and well, I'm not an expert, I don't know, but to have some minimum knowledge to have a conversation to tell them something because it makes me happy to say that I'm from here in La Rioja". Furthermore, due to an uninformed (peripheral) knowledge of wine, a bottom-up strategy is adopted by LI, based on superficial properties of wines, which seem to designate the sort of expectation to be conceived, the monetary value to be attributed and the satisfaction to be derived (Honoré-Chedozeau et al., 2019).

Despite the importance HI consumers attach to cognitive and sensory dimensions, it cannot be neglected that the affective dimension plays a crucial role in their drinking experience similar to LI consumers. This result is consistent with the idea that consumers are more predisposed to eat and drink products they expect to yield sensory and affective gratification. Thus, they are often referred to as mood modifiers and consumers often resort to them for mood enhancement (Desmet, 2008). This notion seems peculiar with alcoholic beverages and has been identified as a motivator for beer (Gómez-Corona, Chollet, et al., 2017; Silva et al., 2016) and wine consumption (Calvo-Porrall et al., 2019; Charters & Pettigrew, 2007; Coppin, Audrin, Monseau, & Deneulin, 2021). Calvo-Porrall et al. (2019) confirmed the effect of the level of involvement of consumers on the emotional affective responses of consumers and their role in satisfaction. Thus, HI consumers show a greater influence of positive emotions in satisfaction than LI consumers, which is attributed to the higher affective attachment to wine for the former. Differently, negative emotions elicited by wines do not seem to be linked to the level of dissatisfaction of LI consumers, contrary to what is observed for HI consumers. The authors concluded that for experiencing negative emotions during the drinking experience, consumers must have a minimal level of involvement with wine, otherwise they adopt a passive role.

The last important point to discuss is the similar relative importance attached to the sensory dimension regardless the group of participants. Despite this commonality, the results highlight that the role played by this dimension differs among the three groups. Experts describe the sensory experience following a specific wine tasting process or "wine tasting script" (Honoré-Chedozeau et al., 2019). They first describe the visual cues, followed by the odour/aroma, then the in-mouth sensations to finalise with the overall judgement well in line with other works (Honoré-Chedozeau et al., 2020). They adopt a combination of analytical and holistic approach to make inferences during the drinking experience. In their approach they are firstly analytical and thus adopt a bottom-up strategy, in which they try to identify negative or faulty

aromas related to technical problems and subsequently search positive sensations as observed Honoré-Chedozeau et al. (2020). The last step consists in carrying out an overall judgement, following a holistic approach dominated by a top-down strategy. Therefore, they access to their memories and previous experience to infer quality and preference. Honoré-Chedozeau et al. (2020) suggested that the interpretation of sensory cues based on previous knowledge seems to follow different mechanisms not mutually exclusive, including a combination of feature-based, exemplar-based, and prototype-based models. The feature-based model suggests that they can be more analytical in their approach by trying to identify wine features that are related to any extrinsic feature (variety, or origin among others) of the wine evaluated and identified in previous wines. The exemplar and prototype models, being basically holistic, vary mainly in the way the information is stored in memory. Following the exemplarity model, the similarity between the wine being tasted and that of a stored exemplar is evaluated, while following the prototype model the information is compared to an "average" profile of the category. Differently, for LI or HI no trace of activation of the tasting script is found, as they tend to use simpler descriptions based on their preferences different from experts that use very specific and technical terms to describe the sample. Nonetheless, differences in the sensory experience of both groups of consumers can be identified. LI consumers tend to be sparingly analytical in their approach, that is they follow a bottom-up strategy in which they identify superficial features of the wine to guide their preference. These features are very generic and simple, similar to HI consumers. However, HI consumers follow a more holistic approach in which they provide a quality judgement of the sample and focus their judgments in more specific cues as observed by Rahman and Reynolds (2015). This can be related to the fact that they rely on their own knowledge and experience, and also to their interest to be close to experts and thus to be opinion leaders (Koksal, 2021).

## 5. Conclusions

The present work confirms that the wine drinking experience involves interplay of sensory, emotional and cognitive dimensions and confirms the similitude in the building blocks of wine drinking experience among consumers with different involvement levels and expertise. These elemental variables operate pre-, during and post-consumption to define, modulate and consolidate the drinking experience. In comparing the drinking experience of participants, low-involved consumers privilege the affective experience while experts give predominance to the cognition experience. HI consumers show an intermediate experience between LI consumers and experts, as they report to build their consumption experience based on the cognitive and affective dimensions. The groups of participants attach high importance to the sensory dimension, while its role significantly differs among experts and non-experts.

From a practical point of view, the present work lays the foundations for future work focused on differentiating wines based on the different weight attributed to the dimensions of the drinking experience of diverse consumers. This information would be complementary to liking scores and very valuable for the wine industry.

Concerning the limitations of the present study, it cannot be overlooked that it was conducted among consumers in a wine producing region where wine consumption is inherent and inveterate to socio-cultural life. This as a matter of principle might pre-empt the broader implication of its evidence and as a consequent, future research could lend credit to this emerging field by exploring this conceptualisation among consumers of other alcoholic beverages as well as wine consumers in non-wine producing regions and countries.

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#### CRedit authorship contribution statement

**Peter Oyinseye:** Investigation, Formal analysis, Writing – original draft. **Alejandro Suárez:** Investigation. **Erick Saldaña:** Data curation. **Purificación Fernández-Zurbano:** Writing – review & editing, Funding acquisition. **Dominique Valentin:** Conceptualization, Methodology, Writing – review & editing. **María-Pilar Sáenz-Navajas:** Conceptualization, Investigation, Writing – original draft, Methodology, Formal analysis.

#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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#### Appendix A. Supplementary data

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