DOI: https://doi.org/10.20870/oeno-one.2024.58.1.7541

OPEN ACCESS

ORIGINAL RESEARCH ARTICLE

Measuring wine and beer drinking experience in a context of limited socialisation: a case study with Spanish drinkers

María-Pilar Sáenz-Navajas[1]*, Dominique Valentin[2], Carlos Gómez-Corona[3] and Heber Rodrigues[4]

[1] Instituto de Ciencias de la Vid y del Vino (ICVV) (UR-CSIC-GR), Carretera de Burgos Km. 6, Finca La Grajera, 26007 Logroño, La Rioja, Spain
[2] Centre des Sciences du Goût et de l'Alimentation, CNRS, INRAE, Institut Agro, Université de Bourgogne, F-21000 Dijon, France
[3] XOC Estudio, Mexico City, Mexico
[4] The Secret Vine, 3 Maltese Road, Chelmsford, Essex, CM1 2PB, United Kingdom

*correspondence: mpsaenz@icvv.es

Associate editor: Sophie Tempère

Received: 26 April 2023

Accepted: 23 November 2023

Published: 9 January 2024

This article is published under the **Creative Commons licence** (CC BY 4.0).

Use of all or part of the content of this article must mention the authors, the year of publication, the title, the name of the journal, the volume, the pages and the DOI in compliance with the information given above.

ABSTRACT

Drinking experience has gained the attention of researchers in recent years, mainly measured in different social-leisure contexts. However, no or very little, scientific attention has been paid to the drinking experience phenomenon when detached from the influence of the enjoyment of the social factor component. The objective of this study was to understand the wine and beer drinking experience during the pandemic confinement/lockdown and its relationship with the fear of the COVID-19 disease. A total of 423 Spanish participants were interviewed online to 1) measure their alcohol consumption, 2) explore their beer and wine drinking experience, and 3) evaluate their fears linked to COVID-19. The results firstly show that the dimensions (i.e., sensory, affective and cognitive) of the wine/beer drinking experience previously reported in social-leisure environments are similar to those found in a context with limited social interaction, such as the lockdown. Secondly, the drinking experience differs across participants and is related to their frequency of wine consumption. More frequent wine consumers show a cognitive-oriented experience, while affective and/or sensory experiences are related to lower wine consumption. Thirdly, the results show that the drinking experience is driven by fear linked to COVID-19, as it is higher in more affective-driven consumers. These results highlight the importance of the role of socialisation in the wine and beer drinking experience and how different drinking experiences are related to distinct levels of fear related to COVID-19.

KEYWORDS: consumption experience, wine, affects, senses, cognition, socialising, context

INTRODUCTION

"*Having reached the drawing room, guests were offered drinks, if they were lucky, and strangers were introduced to each other*" (Tinniswood, 2019, p. 49). This extract from the book *'The house party - A short history of leisure, pleasure and the country house weekend*' by Adrian Tinniswood, precisely illustrates the social interaction interface and discloses one of the most timeless characteristics of drinking: its social role. Drinking alcoholic beverages is a widespread source of individual and social pleasure in most cultures around the world (Stimson *et al*., 2013) and is as old as human society itself: we lift our glasses to toast the birth of a child, in the same way we raise them in memory of someone who has passed away.

The ritual of drinking alcoholic beverages is versatile, mostly due to its active sharing aspect. Historical essays on alcoholic beverage consumption highlight the human's need for mood-altering substances since pre-history (see Wadley, 2016; for a complete review). Part of social context, alcoholic beverages are widely used as a prerequisite in trade and diplomacy (Barclay, 2003), as a sign of prestige (Do *et al.*, 2009), to regulate sexual functions (Wilsnack and Wilsnack, 1997), as a means of seduction (Polychronis, 2008) and power (Arnold, 1999). However, this drinking versatility (e.g., consumption patterns and differences in perceptions) seems to also be affected by the context of consumption (Sester *et al*., 2013). For example, it is highly probable that the same Champagne tasted under the northern lights in cold Iceland will generate different responses among tasters when tasted on a sunny day in the Caribbean Islands in Jamaica. This is because the elements that contribute to the context (e.g., scenery, temperature and other people) may change the consumer's mood and emotional reaction (Danner *et al*., 2020). In addition, all tasting practices are 'subjective' in that they involve a subject (a person) intervening between the drink (the object) and the judgment (Parr, 2019). This process, known as the top-down perception process, contributes strongly to what is called the "drinking experience".

Drinking experience[1] (Gómez-Corona and Valentin, 2019) was defined as: "*the awareness of the psychological effects elicited by the interaction with a product, including the degree to which all our senses are stimulated, the meanings and values we attach to the product, and the feelings and emotions that are elicited*" (Hekkert and Schifferstein, 2008, p2). This concept is strongly linked to the more general concept of experiential marketing. According to Schmitt and Zarantonello (2013), "*value does not only reside in the objects of purchase (products and services), and their utilitarian and functional benefits. Value also lies in the hedonic and experiential elements surrounding the product and service, and in the experience of consumption itself"* (p. 26). In other words, product consumption gives rise to a variety of experiences related to the perception, understanding and judgement of the product. These multidimensional facets of the consumption experience can be explored by measuring the affective, cognitive and sensory responses of consumers, as indicated by the Visual Product Experience (VPE) model developed by Warell (2008) when working on automobile design. Gómez-Corona *et al*. (2017) applied this model to explore the drinking experience of beer. The authors hypothesised that the experience of drinking beer is a combination of affective, cognitive and sensory reactions, rather than a linear continuum of hedonic reactions (e.g., liking or disliking). A total of 400 Mexican consumers were invited in a bar to drink a beer (craft or industrial). They were asked to rate their liking of the beer and to select from a list the phrases that best described their drinking experience, using the Check-All-That-Apply (CATA) method. The results showed no significant differences in expected liking and purchase intention between the beers evaluated. However, the beers were differentiated by the CATA phrases: cognitive phrases were more frequently checked off for craft beers, while sensory and affective phrases were more frequently ticked for industrial beers.

The same multidimensional approach was recently applied to wine consumption by Oyinseye *et al*. (2022). The wine drinking experience of Spanish participants was evaluated using a focus group methodology in a real consumption situation (restaurant). The authors categorised the responses of the participants according to three different levels of involvement (low involved consumers, highly involved consumers and experts). The main findings indicated that in all groups, sensory, affective and cognitive dimensions operate to shape the participants' drinking experience, albeit at different levels. Low-involved consumers privileged sensory and emotional dimensions, while the experts paid special attention to the sensory and cognitive dimensions. Highly involved consumers relied on sensory, cognitive and affective cues.

In these two empirical pieces of work, the drinking experience was measured in places of leisure (a bar and restaurant respectively), which people mainly frequent to socialise, among other reasons. This raises the question of the role of the social context in the *drinking experience*. How would the experience of drinking beer or wine be different if the context was not so festive and social, such as the pandemic we have just lived through? Interestingly, a recently released documentary called "*Hell of Cruise*", highlighted the panic of the passengers aboard the Diamond Princess cruise ship when they were quarantined in the Japanese port of Yokohama during the early days of the COVID-19 outbreak. The passengers were reported to have increased their alcohol consumption on board during the quarantine in response to their feelings of fear, anxiety, boredom and stress.

Quarantine and lockdown were massively adopted by most nations around the globe to prevent and/or try to control the exponential spread of the coronavirus disease. In this context, since the beginning of the pandemic, considerable

1 The concept of experience is operationalised distinctly according to the scientific domain in which it is approached (see Gómez-Corona and Valentin, 2019, for the domain-dependent definition of "experience").

effort has been made to understand the influence of lockdown on alcohol drinking patterns (Rodrigues *et al*., 2022), alcohol use and misuse (Clay and Parker, 2020), alcohol and tobacco consumption (Koopmann *et al*., 2021; Stanton *et al*., 2020), loneliness, alcohol use and suicidality (Bell *et al.*, 2022), and fear and alcohol consumption (Flaudias *et al*., 2021). Nevertheless, as far as we are aware, no study has been carried out to understand how lockdown and fear influenced the drinking experience (and its sensory, affective and cognitive dimensions) during the outbreak of the COVID-19 disease.

The aim of this research was twofold: 1) to study the relative importance of affective, cognitive and sensory dimensions on the drinking experience of beer and wine consumers in the context of lockdown, and 2) to verify the relationship between the fear linked to lockdown and the drinking experience. To achieve these objectives, an online-based experiment was designed and applied to Spanish participants during the first lockdown in 2020. Hence, two research questions were developed:

Q1: Is the relative importance of the dimensions of the wine and beer *drinking experience* of Spanish consumers in a lockdown context comparable to social-leisure contexts?

Q2: Did the fear linked to the Coronavirus lockdown influence the wine and beer *drinking experience*?

MATERIALS AND METHODS

1. Participants

Five-hundred and eighty-nine Spanish participants were interviewed from 28 April to 7 May in 2020. A total of 423 responses (71 % of those interviewed) were considered based on the participants fulfilling the following criteria: 1) they had lived in Spain over the last 10 years, 2) they drank wine or beer at least once a month during lockdown, and 3) they were over 18 years of age. Fourteen % of participants said they lived alone during lockdown, while 86 % lived with other people.

A balanced proportion of men (45 %) and women (55 %) participated in the study. Their age ranged from 18 to over 70 years old; the highest number of participants fell between the ages of 30 and 50 (accounting for 57 % of participants). The majority claimed to have incomes that allow them to live comfortably (70 %), and 80 % of the participants had at least a bachelor's degree.

2. Procedure

A survey was carried out on Spanish beer and/or wine consumers living in Spain during lockdown based on a convenience sample. An online questionnaire was distributed using a snowball technique during strict lockdown in Spain (from 15 March until 22 June 2020). In order to recruit participants the questionnaire link was shared on different instant messaging platforms aiming to reach out to the whole Spanish territory. The participants completed the survey from between 28 April and 7 May 2020. The full questionnaire is provided in Supplementary Information (Appendix A). The study was explained at the beginning of the online questionnaire. Participants were informed that they would remain anonymous and that the provided data would only be reported in the aggregate. They had to acknowledge an informed consent statement in order to participate in the study. They did not receive financial compensation for their participation. The first part of the questionnaire focused on evaluating the type and the frequency of alcohol consumption; the following categories were generated: 0 = never, 1= less than once a month, 2 = at least once a month, 3 = at least once a week, 4 = two to three times a week, and 5 = every day during lockdown. This first part also included two similar sections in which the participants stated their consumption habits before and during lockdown. Similar information has already been reported in Rodrigues *et al.* (2022): the responses of 179 Spanish consumers (out of the 426 participants of the present study) were compared with those of a similar number

TABLE 1. Items of the CATA questionnaire associated with three dimensions (cognitive, sensory and affective) employed to evaluate the drivers of consumption.

DIMENSION	Abbreviation	CATA questions
COGNITIVE (C)	C_learn	I like to learn and know more about what I am drinking (origin, variety, cellar, etc)
	C_discover	I like to discover and learn new products
	C_trying	I'm interested in trying products from different origins and made in distinct ways
	C_compare	I like to compare what I am drinking with other similar products that I have tried before (know the brand, the origin, the variety, etc)
SENSORY (S)	S_taste	I like its taste
	S_food pairing	I like to match it with the right food to enhance its flavour
	S_aroma	I enjoy its aroma
	S_mouth	I really enjoy the sensations that it generates in the mouth
AFFECTIVE (A)	A_relax	It relaxes me, calms me
	A_mood	It changes my mood
	A_positive	It makes me feel euphoric, positive
	A_elegant	It makes me feel important, elegant

of British consumers, matching both social groups in terms of age and gender. In the present work, only the information regarding consumption during the lockdown period is reported. The second part consisted of the participants filling in a CATA questionnaire, which aimed at evaluating the drinking experience during lockdown. A list of 12 items related to cognitive, sensory and affective dimensions of the drinking experience (Table 1) were provided based on the results of previous studies on wine (Oyinseye *et al*., 2022) and beer (Gómez-Corona *et al.*, 2017). The item order was randomised per participant to avoid an order-bias in the participants' responses.

In the third part of the questionnaire, fear was evaluated using data collected in a previous study from a free word association activity (Gómez-Corona *et al*., 2021) carried out during lockdown (Table 2). In this study, the participants were instructed to write the first four words that came to mind in response to four inductor words: "coronavirus and food", "coronavirus", "lockdown" and "fear". In the present work, the results considered were limited to the inductor words "coronavirus", and "lockdown" in order to have an overall measure of fear in the lockdown context. The salient categories relating to the identified fear of COVID-19 were the same as in Gómez-Corona *et al.* (2021): Health & Hygiene, Eating Activities, Buying Activities, Human Activities, Government & Countries, and Others. The number of statements representing the selected categories varied to cover all the different ideas that emerged from the free-association task for the two inductor words. This section contains 15 different statements versus the 42 of Gómez-Corona *et al.* (2021), where fear was studied in the context of food choice. Participants rated their level of agreement with the 15 fear-related statements using a five-point Likert scale ranging from (1) "completely disagree" to (5) "completely agree". The order of fear items was randomised for each participant. Finally, sociodemographic information was registered.

3. Data analysis

The frequency of citation of each of the CATA questions was submitted to a multiple correspondence analysis (MCA) which considered the questions as active variables. The frequency of consumption of wine and beer was divided into four categories (0 = never, 1 and = 2 occasional, 3 and 4 = frequent and 5 = everyday) and was projected as a supplementary variable. Finally, to identify consumer clusters with similar consumption experiences, a hierarchical cluster analysis (HCA) was performed on the first three dimensions of the MCA using Euclidean distance and Ward's agglomeration criteria.

To further characterise the clusters derived from MCA-HCA in terms of frequency of consumption of wine and beer, a two-way ANOVA was calculated in which cluster (clusters 1-4) and type of beverage (beer or wine) and their interactions were considered as fixed factors. For significant effects, pair-wise post hoc Fisher tests were calculated.

To identify the most relevant fear items among all participants, the difference between the overall fear score (calculated as the average of the 15 fear scores and all participants) and

TABLE 2. Questions, their code, subcategory and category used to measure overall fear derived from a free-word association task using "fear", "lockdown" and "coronavirus" as inductor words reported by Gómez-Corona et al. (2021). Participants answered using a 5-points scale of agree/disagree.

Question	Code	Subcategory	Dimension
1. I am afraid of losing or not getting my job back	Unemployment	Commercial & economic	Buying activities
2. I am afraid there will be a shortage of products and services	Shortage	Scarcity	Eating activities
3. I am afraid of the consequences of the government's mismanagement of the crisis	Government management	Rules	Government & Countries
4. I am scared of the global economic downturn	Recession	Government & Country	Government & Countries
5. I am afraid of contracting the virus	Virus contract	Virus	Health & Hygiene
6. I am concerned about my sedentary lifestyle and lack of exercise during this period	Sedentariness	Leisure & sports	Health & Hygiene
7. I am afraid of the distance and isolation from the rest of the people around me	Social isolation	Medical situations	Health & Hygiene
8. I am afraid of not having sanitiser/alcohol for hand cleaning and masks to protect myself	Protection items	Hygiene	Health & Hygiene
9. I am afraid of getting infected when I touch the packaging of products or food	Touch packaging	Health	Health & Hygiene
10. I am concerned that social inequality will increase	Social inequality	Inequality & poverty	Human activities
11. I am afraid of fake news and lack of information	Fake/lack of news	Information	Human activities
12. Inability to return to normality scares me	Back to normality	Emotions and moods	Human activities
13. I am afraid of not being able to be happy again	Unhappiness	Emotions and moods	Human activities
14. I am afraid of the emotional instability that the crisis can generate in my family and myself	Emotional instability	Emotions and moods	Human activities
15. I am afraid of uncertainty	Uncertainty	Others	Others

each individual fear item (averaged over all participants) was calculated. The significance of the difference was calculated by two-way ANOVA with Bonferroni correction, considering participants as random factors and fear scores (overall or individual) as fixed factors (alpha risk = 5 %). To visualise the correlations between fear items, a normalised principal component analysis (PCA) was performed on each cluster per fear item. Furthermore, to evaluate the effect of fear on clusters, a one-way ANOVA was calculated with the fear items as dependent variables and the cluster as a fixed factor. Concerning the sociodemographic variables, one-way ANOVAs with the cluster as the fixed factor were performed for continuous variables and chi-square tests for nominal variables. When a significant effect of the cluster was observed, a pair-wise post hoc Fisher test for continuous, and a Marascuilo test for nominal variables were performed. All statistical analyses were performed with XLSTAT software version 2020.

RESULTS

The results were divided into five sub-sections: 1) beer and wine drinking experience, 2) characterisation of the participants based on their drinking experience, 3) characterisation of the participants based on the frequency of their wine and beer consumption, 4) explanation of the

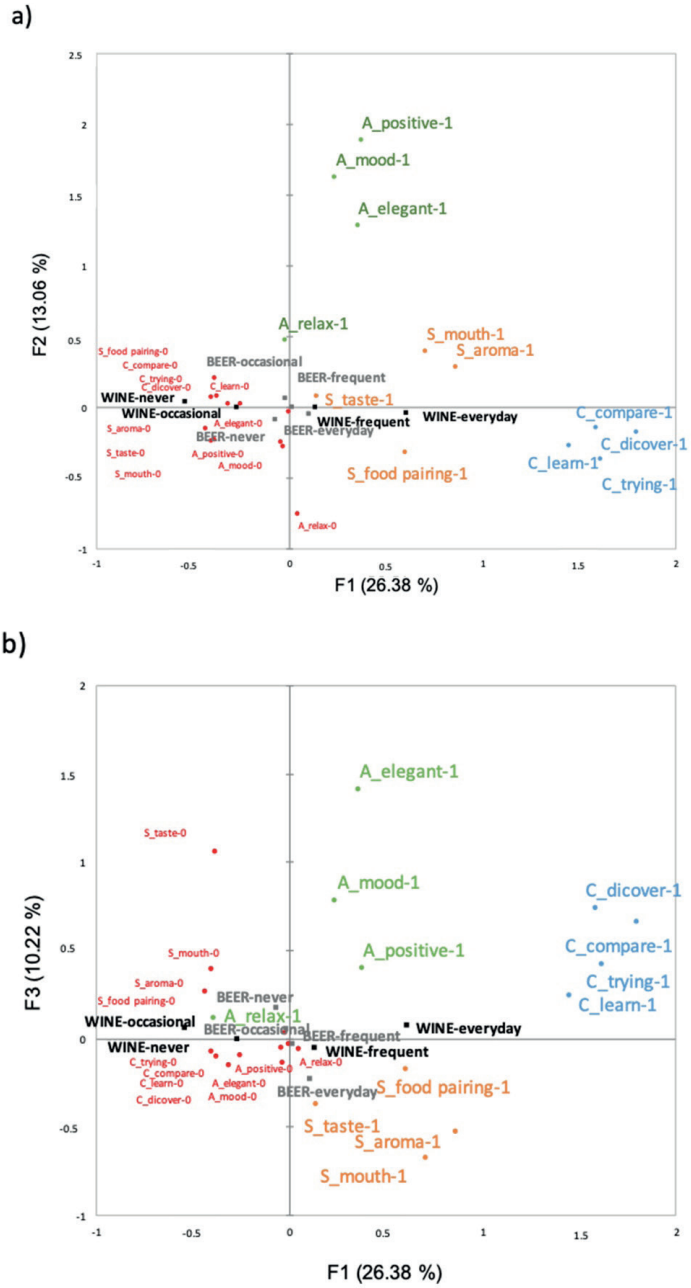


FIGURE 1. Projection of CATA question items and their corresponding dimensions (Sensory in orange, Cognitive in red and Affective in green) related to the drivers of the consumption of alcoholic beverages on a) F1 and F2, and b) F1 and F3 of the MCA.

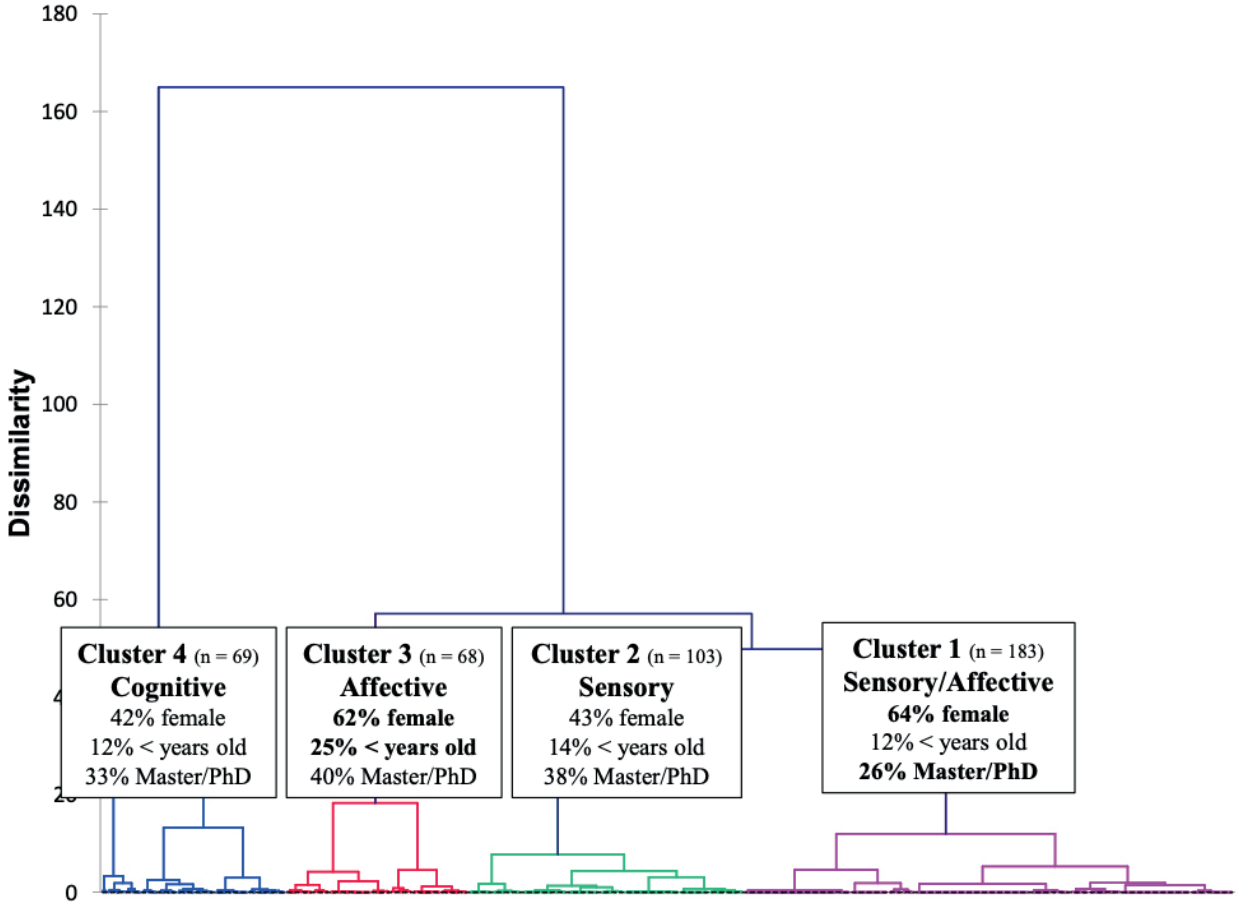


FIGURE 2. Dendrogram of the four main participant clusters (n = number of individuals); calculated from the first three dimensions derived from the MCA performed on the CATA question items corresponding to cognitive, sensory and affective dimensions of the drinking experience.

associated variables in the different clusters of participants based on their drinking experience, and 5) fear related to COVID-19 and its effect on drinking experience.

1. Identification of clusters of consumers with different drinking experience

The different dimensions of the drinking experience (cognitive, sensory and affective) analysed via the MCA are shown in Figures 1a and 1b. The first MCA factor (F1, 26.4 % of the variance) was mainly driven by cognitive variables (in blue on the right-hand side of Figure 1a). The second one (F2, 13.1 % of variance) was mainly driven by affective-related variables (in green at the top of Figure 1a). The third one (F3, 10.2 % of variance) are opposite the affective variables (in green and at the top of Figure 1b) and the sensory variables (in orange in the bottom-middle of Figure 1b). Interestingly, the individual items that form each category are shown grouped together, which confirms their pertinence to the original dimensions formed *a priori*.

The HCA of the first three MCA factors yielded four main clusters of consumers representing their motivation for consuming wine and/or beer. As shown in Figure 2, Cluster 1 (Sensory/Affective) was the largest with 183 of consumers (43 %), followed by Cluster 2 (Sensory) with 103 consumers (24 %), and then Clusters 3 (Affective) and 4 (Cognitive) each comprising 16 % of consumers.

2. Characterisation of clusters: sociodemographic characteristics

In order to further characterise the clusters in terms of sociodemographic variables, Table 3 shows the sex, age, economic situation and educational level of each cluster of consumers. Concerning the variable sex, Clusters 1 and 3 contained a significantly higher number of women than men ($p < 0.001$) with 62 % and 64 % women respectively, while Clusters 2 and 4 were balanced (43 % and 44 % women respectively).

All four clusters showed similar patterns in terms of age. More than 50 % of the consumers of all the cluster belonged to the 30–50 years old age segment. The percentage of consumers above 60 years old was minor (ranging from 6 % in Cluster 3 to 13 % in Cluster 4). Cluster 3 comprised younger consumers than Clusters 1 and 2, as 25 % of Cluster 3 was under 30 years old and 20 % above 50 years old; meanwhile, in Clusters 1 and 2, less than 15 % were under 30 years old, and 30 % and 35 % respectively were above 50 years old. Cluster 4 mainly comprised consumers in the 30-50 age range, while consumers under 30 years old comprised only 12 % of total consumers.

Regarding the participants' financial situation, all four clusters comprised mostly consumers who were comfortable in terms of their incomes (between 64 % and 75 % in Clusters 4 and 3 respectively), and in Clusters 3 and 4, 22 % and 33 % respectively claimed to have enough to make ends meet. Consumers who find it difficult to make ends meet were minor in all clusters.

Regarding qualifications, Clusters 2, 3 and 4 mostly contained participants with a bachelor or higher degree, followed by participants with only secondary school qualifications. The participants in Cluster 1 seemed to have a slightly lower level of education, with most claiming to have a bachelor degree, followed by those who have a Masters/PhD and finally those with just secondary school education. In all cases, participants with only vocational and elementary studies represent a minority (maximum 7 %).

In summary, the notable differential sociodemographic aspects of the four clusters were that Cluster 1 mainly contained women with a slightly lower level of education than the other three clusters, Cluster 3 comprised the highest proportion of young women, and the participants in Cluster 4 had lower incomes than those in the other three clusters, but they had enough to make ends meet.

3. Characterisation of clusters: frequency of wine and beer consumption

To further characterise the clusters, the frequency of consumption of beer and wine was studied. In this regard, it is worth noting that the cognitive dimension (F1 in Figure 1a) was related to the frequency of wine consumption. Cognitive-driven participants claimed to drink wine at least once a week (every day and frequently), whereas less cognitive-driven participants said they were less frequent wine consumers (less than or at least once a month). This effect was supported by the results of the two-way ANOVA (cluster and type of beverage as fixed factors) calculated from the frequency of consumption: a significant effect for cluster ($F = 16.99$, $p < 0.0001$) and a significant interaction with the type of beverage ($F = 19.19$, $p < 0.0001$) were found. Figure 3 shows the frequency of consumption of wine and beer of the four clusters of participants. While the results confirm that participants belonging to the four clusters drink beer with no significant differences in terms of frequency (i.e., more than once a month and less than once a week), they show significant differences for the consumption of wine. The participants in Cluster 1 said they drink wine occasionally (i.e., around once a month), while those in Clusters 2 and 3 drink it more frequently (once a week). The participants in Cluster 4 are the most frequent wine consumers, as they drink wine between two and three times a week on average.

TABLE 3. Sociodemographic data of all participants (expressed as %) and for each of the clusters (expressed as % within each cluster).

%	TOTAL (n = 423)	Cluster 1 (n = 183)	Cluster 2 (n = 103)	Cluster 3 (n = 68)	Cluster 4 (n = 69)
SEX					
male	45	36b	57	38b	58
female	55	64a	43	62a	42
AGE					
18 to 29 years old	14	12bc	14abc	25a	12bc
30 to 39 years old	27	25a	25ab	28a	29ab
40 to 49 years old	32	33a	26a	29a	37a
50 to 59 years old	18	21ab	22ab	12ab	12bc
60 to 69 years old	8	8c	10bc	6b	9c
70 years or more	1	1d	3c	0b	1c
ECONOMIC SITUATON					
Comfortable with current income	70	70a	73a	75a	64a
Enough to make ends meet	27	29b	24b	22b	33b
Difficulties making ends meet	2	1c	2c	3c	3c
Serious difficulties making ends meet	0	1c	1c	0c	0c
EDUCATIONAL LEVEL					
Masters/PhD	32	26b	38a	40a	33a
Bachelor Degree	48	50a	51a	41a	48a
Secondary school	4	17b	11b	13b	12b
Vocational school	14	5c	0c	6bc	6b
Elementary school	1	2c	0c	0c	1b

For each cluster, chi-square tests were carried out to evaluate the differences between the variables. For significant effects ($p < 0.05$ with Bonferroni correction), Marascuilo´s post-hoc pair-wise tests were performed (distinct letters within each cluster represent significant differences between the categories).

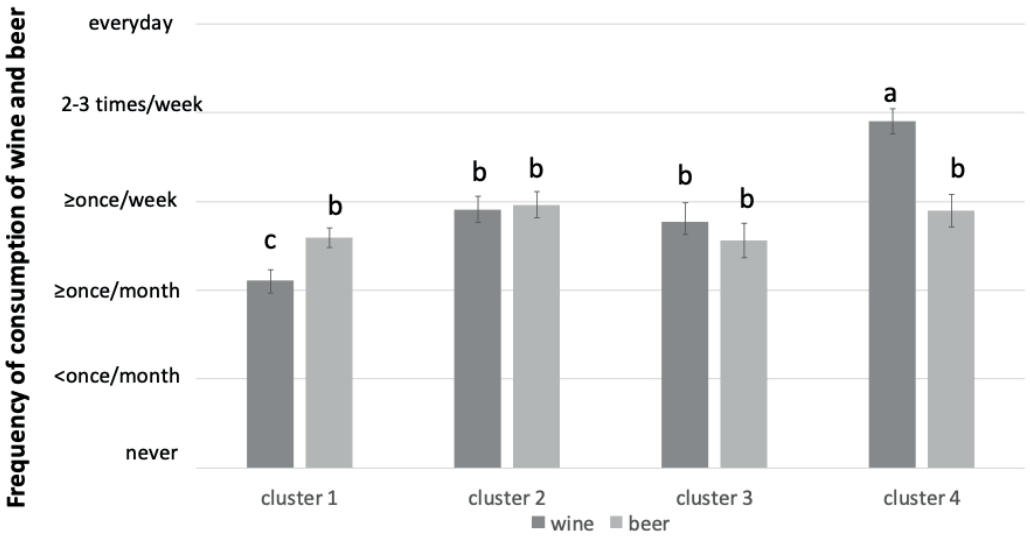


FIGURE 3. Frequency of consumption of beer and wine across clusters. Different letters indicate significant differences.

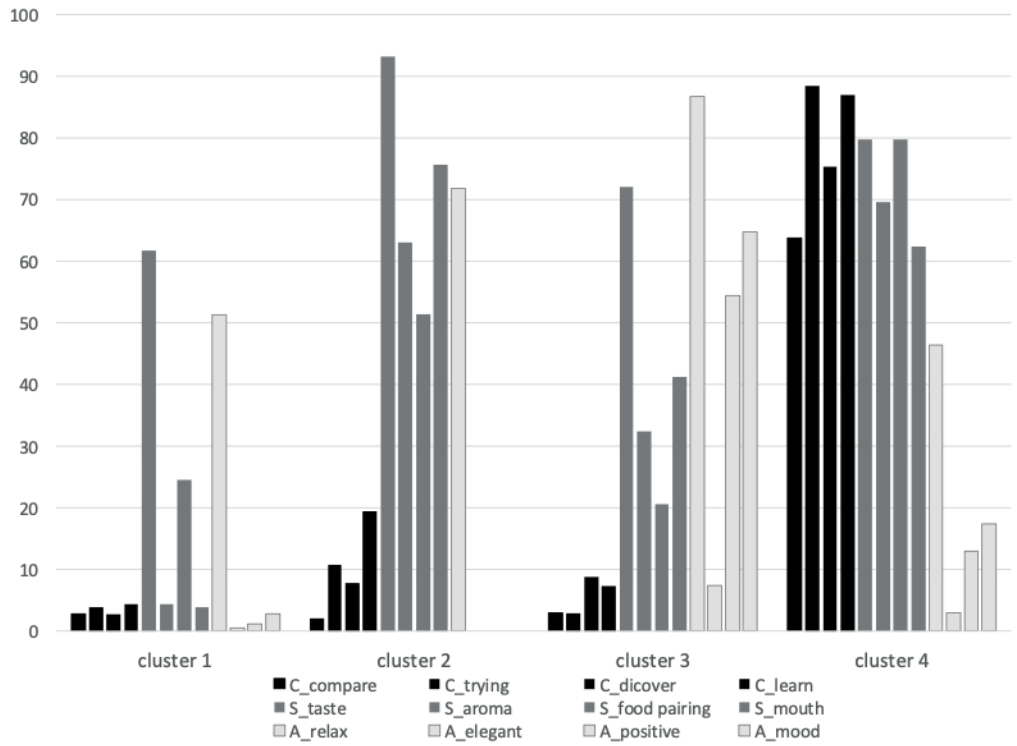


FIGURE 4. Frequency of citation (expressed as % by cluster) for each of the CATA items: C = Cognitive (black), S = Sensory (dark grey) and A = Affective (light grey).

4. Characterisation of clusters: dimensions associated with the drinking experience

Figure 4 shows the frequency with which each of the items related to the drinking experience dimension was cited for each cluster. For participants in Cluster 1, which contained mainly women with a lower educational level than the other clusters, the most frequently selected item relating to the sensory dimension was "I like its taste" (60 %), followed by the affective item "Drinking relaxes me, calms me" (51 %). Interestingly, these two items were cited with a similar or higher frequency in the other three clusters, which shows that all the participants of the study, regardless of cluster, use both items to describe their drinking experience. Considering that, in Cluster 1, the frequency of citation of the other items was below 50 %, this cluster can be characterised as having a low citation frequency for all the items. This cluster, which had the lowest citation frequency for all items, comprised the lowest education level and the least frequent wine consumers.

Clusters 2 and 3 exhibited similar patterns in that the cognitive-related items were barely mentioned, which could be related to the shared pattern of occasional wine consumption. Besides this similarity, they differ in the importance given to sensory and affective dimensions. Cluster 2 was characterised by high citation frequency for all sensory-related items (minimum of 50 %), especially for "I like its taste" (93 %) followed by "I really enjoy the sensations that it generates in the mouth", and one affective item "Drinking relaxes me, calms me" (72 %). By contrast, Cluster 3, which was mainly composed of young women, comprises citation frequencies of over 50 % for three out of the four affective-related items, and for "I like its taste" (72 %), which is related to the sensory experience. Interestingly, the affective item "Makes me feel important, elegant" have citation frequencies of below 10 % for all clusters, which suggests that it does not describe the wine or beer experience, or at least not in the context of lockdown. By contrast, this statement appears to have been an important driver for wine consumption for highly involved consumers in a social and leisure context (i.e., in a restaurant during a focus group), as reported by Oyinseye *et al.* (2022). Finally, Cluster 4, which contained the most frequent wine consumers, is eminently cognitive and sensory driven, with all the items belonging to both categories being cited by at least 62 % of the participants.

5. The link between drinking experience and fear

Figure 5 shows the deviation of the individual fear scores from the fear score averaged over all the participants and items (i.e., difference between the overall fear average (3.1) and the average score given by the participants for a given item). Items with positive deviations received scores higher than the average, while negative deviations are scores lower than the average. Among the 15 fear-related items, two socially related items stand out as the most important for the participants: "recession" (scared of the global economic downturn) and "social inequity" (concerned about the increase of social inequity), followed by "uncertainty" (afraid of uncertainty), and "Government management" (afraid of the consequences of the Government's mismanagement of the crisis). These results are well in line with those reported in Gómez-Corona *et al.* (2021), in which the Spanish participants were reported to have mainly social and government-related fears. Two more items linked to the sedentariness and emotional fears were found to be relevant for Spanish wine/beer consumers in the present study. Sedentariness is related to the fear of a sedentary lifestyle and lack of exercise during lockdown and emotional fear linked to the item "back to normality" (scared of not being able to return to normal life). It is also important to note that five fear-related items were explicitly found to be unrelated to the construction of fear:

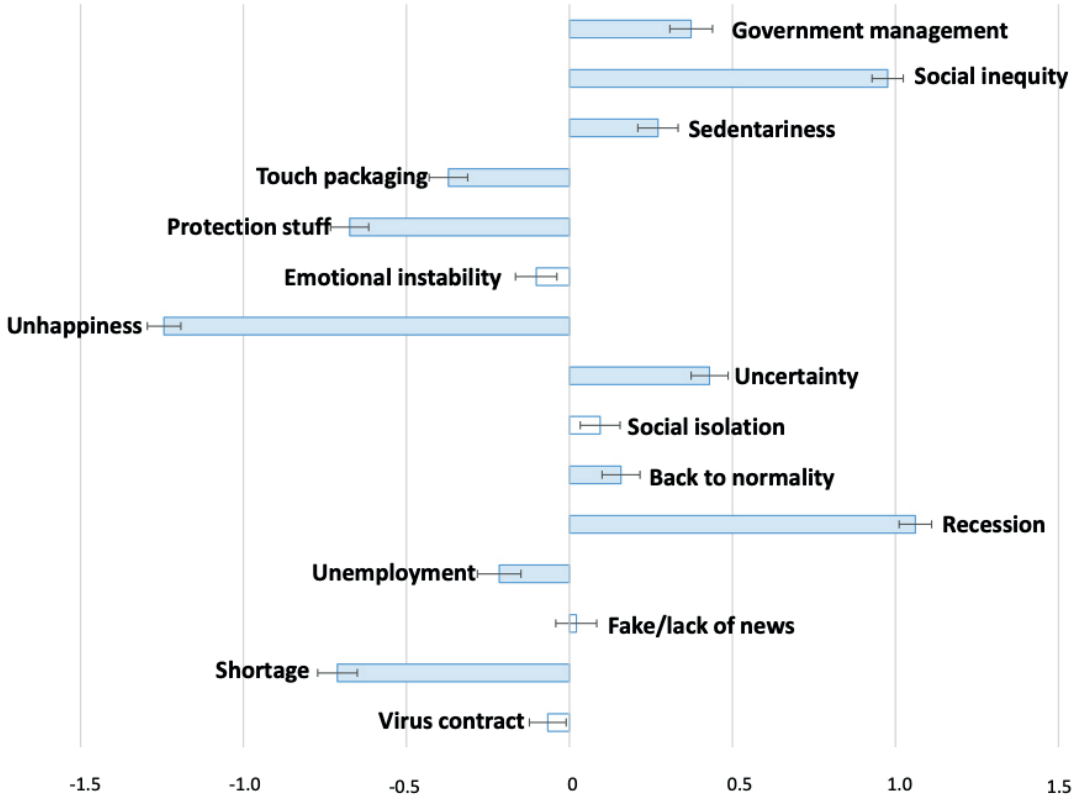


FIGURE 5. Deviation of the individual fear scores from the averaged fear score (3.1) measured using a 5-point scale (1=completely disagree; 2= disagree; 3= not agree/not disagree; 4=agree; 5=completely agree).

Significance calculated by two-way ANOVA (participants as random factor and fear scores as fixed factor) with Bonferroni correction (alpha risk = 5 %). Items with significant differences are marked in blue and items not significantly different in white.

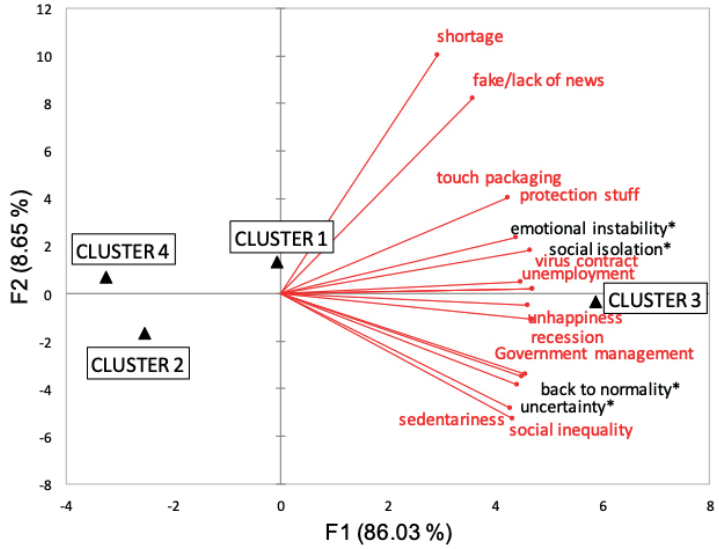


FIGURE 6. Projection of the 15 fear-related items and the four clusters of participants on the first two PCs. Fear questions that significantly differed between the clusters ($p < 0.1$) are labelled in black and marked with an asterisk.

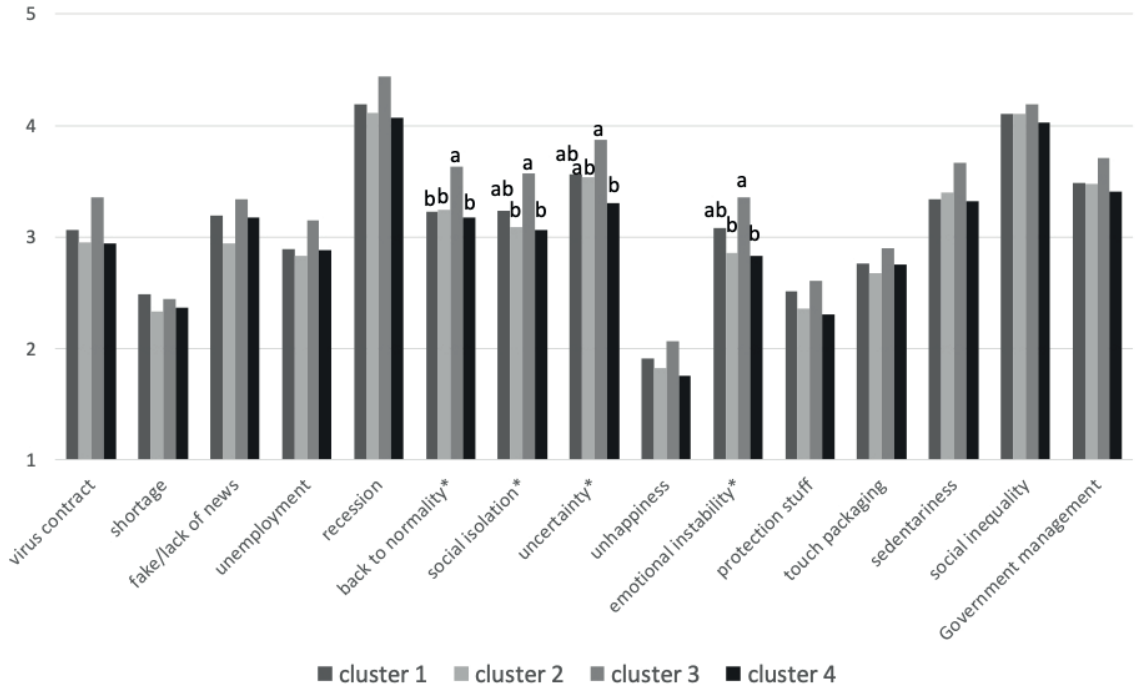


FIGURE 7. Average level of agreement (totally disagree = 1; totally agree = 5) of the four clusters of participants with the 15 fear-related items.

Items that differed significantly between the clusters ($p < 0.1$) are marked with an asterisk. For significant items, different letters mean significant differences according to the Fisher post-hoc test.

"unhappiness" (afraid of not being able to be happy again), followed by "shortage" (afraid of a shortage of products and services), two items linked to hygiene and health ("protection items" and "touch packaging"), and "unemployment". Finally, four items: "emotional instability", "social isolation", "fake/lack of news" and "virus contract" do not differ significantly from zero, suggesting that either they are not important or the opinion of participants concerning these items is highly contradictory.

In order to evaluate the differences between the participants, a PCA was calculated from all the scores of the 15 questions that aimed to measure the overall fear of the participants during the COVID-19 lockdown (Figure 6). Only one PC had an eigenvalue higher than 1 (Kaiser criterion): it explained 86 % of the original variance and was positively correlated with all the evaluated fear items. This first PC placed Cluster 3 on the opposite side to Clusters 2 and 4. Cluster 1 had an intermediate position in terms of fear.

Further ANOVA carried out on the 15 fear items, in which cluster was considered a fixed factor, showed significant effects for four of the items. These items included: "I am afraid of uncertainty" ($F = 2.65$, $p < 0.05$), followed by "I am afraid of the emotional instability that the crisis can generate in my family and myself" ($F = 2.60$, $p < 0.1$), "I am afraid of the distance and isolation from the rest of the people around me" ($F = 2.47$, $p < 0.1$) and "It scares me not being able to return to normality" ($F = 2.21$, $p < 0.1$). In all cases, Cluster 3 showed higher fear-related scores than Clusters 2 and 4, with Cluster 1 showing an intermediate level (Figure 7). This result suggests that fear seems to be higher in participants that have a more affective-driven experience (Cluster 3).

DISCUSSION

The aim of this research was twofold: to study the relative importance of the affective, cognitive and sensory dimensions in the drinking experience of beer and wine consumers in the context of the COVID-19 lockdown, and to explore the relationship between the fear linked to the lockdown and the drinking experience. There were three main outcomes: firstly, the dimensions (i.e., sensory, affective and cognitive) of the drinking experience previously reported in socialising and leisure environments, such as restaurants or bars, were similar to those found in a context of limited socialisation and leisure, such as lockdown; secondly, the differences in frequency of wine consumption indicated different drinking experiences, but this pattern was not observed for beer consumption; and thirdly, the consumers who reported mainly emotional drinking experiences showed higher levels of fear in the COVID lockdown context. These major findings are discussed in detail below and should be interpreted with caution, since some of the cognitive-related items can be more pertinent to wine than to beer, as variety or cellar are mentioned.

1. The wine and beer *drinking experience* in a limited social context

The results of the MCA showed that the *drinking experience* can be divided into the *a priori* dimensions of the experience: sensory, affective and cognitive (F1 mainly represents the cognitive dimension, F2 the affective dimension and F3 the sensory dimension). These results show the same pattern as those of studies by Oyinseye *et al*. (2022) for wine and Gómez-Corona *et al*. (2017) for beer. In these studies, Spanish and Mexican consumers revealed that sensory, affective and cognitive cues are the building blocks of the drinking experience. Both studies used data collected in social and leisure environments (i.e., a restaurant and a bar), different to the lockdown context of the present work; however, these results show that the drivers of the drinking experience seem to be stable regardless of the social context. Yet further work would be needed to confirm these results, as the context of the study (i.e., lockdown) cannot be considered as being strictly non-social, but rather as a modified social context. First, most of the participants (86 %) of the present study said they live with other people, and second, during lockdown, it has been reported that people tended to socialise virtually, such as on social media (Atkinson *et al.*, 2021) or in virtual drinking meetings (Rodrigues *et al.*, 2022).

The second main outcome was that the main differences in drinking experience between participants can be attributed to differences in the frequency of consumption of wine but not of beer, which was similar across the identified clusters. This pattern may be due to the differing social roles of wine and beer among Spanish consumers. Rodrigues *et al*. (2022) revealed that wine consumption, in contrast to beer consumption, is versatile: it is consumed in limited social contexts (at home alone or with a partner while eating main meals) as well as in more social contexts. Beer, on the other hand, is more likely to be consumed in social-leisure environments (in pubs or restaurants, along with friends and small plates of food or snacks). The limited social context (i.e., lockdown), in which wine is more generally consumed, contributed to similar drinking experiences during lockdown to those in previously-mentioned scenarios (Oyinseye *et al*., 2022). However, the distinct beer drinking experiences previously reported by Mexican consumers in a social-leisure context (Gómez-Corona *et al*., 2017) were not observed in the present study. This distinction can be explained in terms of the social role of beer consumption in the population studied (Spanish citizens).

Our results confirm that the drinking experience of occasional wine consumers is mostly related to an affective or sensory experience, while the experience of most frequent wine consumers surveyed in the present work was triggered by cognitive and sensory drivers. This is partly in agreement with results reported by Oyinseye *et al.* (2022). The authors revealed that the more frequent consumers, such as "high involved consumers" (i.e., frequent consumers who are wine lovers or for whom wine is part of their work lives) and "wine experts" (i.e., they are technically and professionally wine-related occupational consumers), recruited in their study appeared to be cognitive-oriented. On the other hand, "low involved consumers" (i.e., occasional consumers for whom wine is not part of their professional occupational routine) tended to privilege sensory and emotional dimensions over cognitive cues.

The greater relevance of the cognitive experience in Cluster 4 consumers (more frequent wine consumers) can be explained by product familiarisation (Gómez-Corona *et al*., 2017; Lelièvre-Desmas *et al*., 2015; Ballester *et al*., 2008). These consumers selected phrases such as "I like to learn and know more about what I am drinking", and "I'm interested in trying products from different origins". This implies that the consumers' relationship with wine relies more on cognitive processes. In other words, their drinking experience is associated with imagining, memorising or mentally representing the product.

Regarding the affective experience, the items most frequently selected by the participants were "Drinking relaxes me, calms me", and "It changes my mood". This pattern highlights the fact that the affective experience is not only shaped by emotion

(relaxed is considered an emotion; Scherer, 2005), but also by mood (Macht and Dettmer, 2006). Moods and emotions, both part of the affective phenomena, are quite different. Mood refers to a diffuse affective state that is of lower intensity than emotion, but considerably longer in duration (see: Di Muro and Murray, 2012). As opposed to emotions, moods do not involve a particular attributed object, but are directed at the surroundings in general. Whereas emotions are usually elicited by an explicit cause, moods typically result from a combination of causes (e.g., bad weather or a complicated day) (Danner *et al.*, 2016). In the drinking experience, emotions are elicited by the object (i.e., the wine or the beer itself), while mood is deliberately manipulated: "it changes my mood". Alcoholic beverages are consumed for their direct positive effect on mood (Desmet, 2008). In our study, the affective experience was higher in women. Similar results have been found in the beer drinking experience (Gómez-Corona *et al*., 2017), in which women use beer to shift from anxiety or stress to calmness and relaxation, as well as in the wine drinking experience (Danner *et al.*, 2016).

Regarding the sensory experience, the results show that the participants consciously seek out either one-sense or multisensory stimulations. The sensory item most frequently selected in the study was "I like the taste", followed by "I like to match it with the right food…". Previous authors have highlighted the interrelated role of sensory, emotional and cognitive responses in wine hedonic pleasure (Charters and Pettigrew, 2005), which can be found in consumers with high or low wine consumption frequency (Petit *et al.*, 2022). Along the same lines, pairing ("I like to match it…") was found to be a common practice to stimulate the senses (Casadó-Marín and Anzil, 2022) and promote the harmony between flavour intensities (Jackson, 2023). It is, therefore, not surprising that the sensory experience was similar in all the clusters of consumers.

2. Fear of COVID-19 in the context of lockdown and its effect on drinking experience

Our results indicate that the main fears related to COVID-19 are related to social fears, namely recession and social inequality. To a lesser extent, they are related to uncertainty and government management, and they are not at all related to unhappiness or shortages. The level of fear differed across the clusters of the participants. Although fear of COVID-19 has been previously explored in the scientific literature, making the link between fear of COVID-19 and drinking experience has not been previously explored, at least not to our knowledge. What has been previously studied is the alcohol consumption during crises. It is worth mentioning that there are contradictory results amongst the studies. De Goeij *et al*. (2015) examined the impact of economic crises on alcohol consumption and stated two main effects: people consume higher quantities of alcohol to deal with stress, and there is lower alcohol consumption due to budget constraints. Besides stress, other studies have documented the link between higher alcohol consumption during crises and anxiety and boredom (Amalia and Ionut, 2009; Ben-Zur and Zeidner, 1996; Bosque-Prous *et al*., 2017).

In the specific case of COVID-19, Agnoli and Charters (2022) found that individuals who were generally less anxious about the pandemic showed lower beer consumption more than individuals who experienced greater anxiety. The time spent in lockdown was also relevant, as an increase in the number of days in lockdown was positively related to a decrease in beer consumption. On the other hand, Van Rheenen *et al*. (2020) found an increase in alcohol consumption, since the COVID-19 pandemic in participants with mood disorders compared with those without a mental health disorder. Similarly, Bell *et al*. (2022) studied the effect of alcohol consumption in people with and without pre-existing mental health conditions (e.g., depression, bipolar disorder, anxiety disorder, psychotic disorder, personality disorder, etc.) and concluded that those with a mental health condition reported an increase in alcohol use.

The link between alcohol consumption and COVID-19 has been recently studied by Rodrigues *et al*. (2022); they revealed that, in contrast to British participants, Spanish participants tended to decrease their alcohol consumption during lockdown because of the absence of the social context. However, the decrease was observed mainly for spirits and beer, while wine consumption remained unchanged. In another study involving the COVID-19 confinement in Spain, Laguna *et al*. (2020) reported that 49 % of respondents had decreased their strong spirits consumption by the end of the first confinement (April 2020), and 27.7 % had increased their beer and wine consumption. Other consumers decreased or maintained their regular consumption. Increases in alcohol consumption have been reported in other studies in Australians (25 % of participants: Stanton *et al.*, 2020, and 20 % of participants: Foundation for Alcohol Research and Education, 2020), and in a cross-cultural study (16 countries, 73 % of participants came from European countries) that concluded the increase in alcohol consumption was mainly linked to men (Lamy *et al*., 2022).

In our study, the final link between fear and drinking experience show that the distinct clusters of participants (based on their *drinking experience*) experienced different types and intensity of fear. The first cluster (led by sensory and affective dimensions of drinking experience) with a higher proportion of women and lower level of education, show an intermediate level of fear, compared to the other clusters. Nevertheless, the main differences were found in Cluster 3 (affective dimension of *drinking experience*, higher proportion of young women) with higher fear-related scores and Clusters 2 (sensory experience) and 4 (cognitive experience) with low levels of fear being reported. As mentioned in the results section, this suggests that fear seems to be higher in participants that have a more affective-driven experience. These results echo those of Ozamiz-Etxebarria *et al*. (2022): young participants suffered higher stress, anxiety and depression at the beginning of the pandemic in Spain, and women had significantly higher depression levels. These findings suggest that an affective *drinking experience* as regards wine and/or beer seems to

arise in participants with a higher level of fear of COVID-19. However, no relation to fear of COVID-19 can be linked to a cognitive or sensory drinking experience with regards to wine.

CONCLUSION

To sum-up, the objective of the study was to understand the beer and wine *drinking experience* in the context of the COVID-19 lockdown in Spain and its relation to fear. The methodology used enable us to confirm the building blocks of the drinking experience (sensory, affective or cognitive cues) in a lockdown context, especially for the wine drinking experience. The participants who showed a more affective drinking experience were mainly young women, with a lower frequency of wine consumption. Cognitive experience was higher in participants with a higher consumption of wine; while other participants were clustered mainly according to sensory or affective drinking experience. In the second step of the study, the participants answered a set of questions referring to fear of COVID-19. The biggest fears were linked to social aspects (inequality and recession), while no fear was related to unhappiness or shortage. The link between fear of COVID-19 and wine drinking experience was easily identified in participants with an affective drinking experience, as they were the ones who expressed the most forms of fear. These results suggest that in the affective drinking experience, "relax" or "change my mood", was relevant in participants who also experienced higher levels of fear of COVID-19. It is thus possible to draw the conclusion that the drinking experience is closely linked to an affective dimension during the context of lockdown when it is fear-dependent, in contrast to what happens during social-leisure contexts; in social-leisure contexts, other dimensions (i.e., sensory and cognitive) are important pillars of the individual's drinking experience.

This study has limitations inherent to the CATA questions. First, it would be worth carrying out a complementary analysis of the unselected items in further research to clarify the drivers of the drinking experience, especially for the affective items (i.e., when an item is not selected, because the drink does not modify their affective state, or it is not selected even if their affective state is modified, but this is not the reason why they drink it). Second, some of the items could be adapted to a specific beverage category, so that respondents check off the CATA questionnaire according to one of the categories (beer or wine). Thirdly, while more sensitive items that people may find difficult to share, such as affective items, were generally not found to be chosen less, further studies should consider ways to facilitate the choice of these items.

Moreover, the convenience sampling method that was used to recruit the participants limits the generalisation of the results. Further studies based on more balanced experimental designs should be carried out to test more accurately some of the hypotheses deriving from our work and related to specific populations, like the link between alcohol consumption, fear and young women.

ACKNOWLEDGEMENTS

This research was supported by the Spanish Plan of Innovation, Technical and Scientific Research 2017–2020 through the programmes funded by AEI and MICIU Ramón y Cajal (RYC2019-027995-I for MPSN), along with the Spanish Ministry of Science and Innovation, the Spanish Research Agency and FEDER (PID2021-126031OB-C22).

REFERENCES

Agnoli, L., & Charters, S. (2022). The alcohol consumption of wine drinkers with the onset of COVID-19. *Food Quality and Preference*, 98, 104489. https://doi.org/10.1016/j.foodqual.2021.104489

Amalia, P., & Ionut, P. (2009). Consumers' reaction and organizational response in crisis context. *The Journal of the Faculty of Economics*, 1(5), 779–782.

Arnold, B. (1999). 'Drinking the feast': alcohol and the legitimation of power in Celtic Europe. *Cambridge Archaeological Journal*, *9*(1), 71-93. https://doi.org/10.1017/S0959774300015213

Atkinson, A. M., Sumnall, H., & Meadows, B. (2021). 'We're in this together': A content analysis of marketing by alcohol brands on Facebook and Instagram during the first UK Lockdown, 2020. *International Journal of Drug Policy, 98*. https://doi.org/10.1016/j.drugpo.2021.103376

Ballester, J., Patris, B., Symoneaux, R., & Valentin, D. (2008). Conceptual vs. perceptual wine spaces: Does expertise matter? *Food Quality and Preference*, 19(3), 267-276. https://doi.org/10.1016/j.foodqual.2007.08.001

Barclay, P. D. (2003). 'Gaining Confidence and Friendship in Aborigine Country: Diplomacy, Drinking, and Debauchery on Japan's Southern Frontier. *Social Science Japan Journal*, *6*(1), 77-96. https://doi.org/10.1093/ssjj/6.1.77

Bell, C., Williman, J., Beaglehole, B., Stanley, J., Jenkins, M., Gendall, P., ... & Every-Palmer, S. (2022). Psychological distress, loneliness, alcohol use and suicidality in New Zealanders with mental illness during a strict COVID-19 lockdown. *Australian & New Zealand Journal of Psychiatry*, *56*(7), 800-810. https://doi.org/10.1177/00048674211034317

Ben-Zur, H., & Zeidner, M. (1996). Gender differences in coping reactions under community crisis and daily routine conditions. *Personality and Individual Differences*, *20*, 331–340. https://doi.org/10.1016/0191-8869(95)00173-5

Bosque-Prous, M., Kunst, A. E., Brugal, M. T., & Espelt, A. (2017). Changes in alcohol consumption in the 50-to 64-year-old European economically active population during an economic crisis. *The European Journal of Public Health*, *27*, 711–716. https://doi.org/10.1093/eurpub/ckx044

Casadó-Marín, L., & Anzil, V. (2022). The semiotics of wine. Analysis of wine-related cultural consensus in two Spanish wine-producing regions. I*nternational Journal of Gastronomy and Food Science*, *28*, 100536. https://doi.org/10.1016/j.ijgfs.2022.100536

Charters, S., & Pettigrew, S. (2005). Is wine consumption an aesthetic experience? *Journal of Wine Research*, *16*, 121-136. https://doi.org/10.1080/09571260500327663

Clay, J. M., & Parker, M. O. (2020). Alcohol use and misuse during the COVID-19 pandemic: a potential public health crisis? *The Lancet. Public Health*, *5*, e259. https://doi.org/10.1016/S2468-2667(20)30088-8

Danner, L., Ristic, R., Johnson, T. E., Meiselman, H. L., Hoek, A. C., Jeffery, D. W., & Bastian, S. E. (2016). Context and wine quality effects on consumers' mood, emotions, liking and willingness to pay for Australian Shiraz wines. *Food Research International*, *89*, 254-265. https://doi.org/10.1016/j.foodres.2016.08.006

Danner, L., Johnson, T. E., Ristic, R., Meiselman, H. L., & Bastian, S. E. (2020). Consumption context effects on fine wine consumer segments' liking and emotions. *Foods*, *9*, 1798. https://doi.org/10.3390/foods9121798

De Goeij, M. C., Suhrcke, M., Toffolutti, V., van de Mheen, D., Schoenmakers, T. M., & Kunst, A. E. (2015). How economic crises affect alcohol consumption and alcohol related health problems: A realist systematic review. *Social Science & Medicine*, *131*, 131–146. https://doi.org/10.1016/j.socscimed.2015.02.025

Desmet, P. M. (2008). Product emotion. In Schifferstein, H. N., & Hekkert, P. (Eds.). *Product Experience*. Elsevier. https://doi.org/10.1016/B978-008045089-6.50018-6

Di Muro, F., & Murray, K. B. (2012). An arousal regulation explanation of mood effects on consumer choice. *Journal of Consumer Research*, *39*, 574-584. https://doi.org/10.1086/664040

Do, V. B., Patris, B., Valentin, D. (2009). Opinions on wine in a new consumer country: A comparative study of Vietnam and France. *Journal of Wine Research*, *29*, 227-245. https://doi.org/10.1080/09571260903471894

Foundation for Alcohol Research and Education (2020). Alcohol Sales and Use during COVID-19. *Foundation for Alcohol Research and Education*: Deakin, Australia.

Flaudias, V., Zerhouni, O., Pereira, B., Cherpitel, C. J., Boudesseul, J., De Chazeron, I., ... & Brousse, G. (2021). The early impact of the COVID-19 lockdown on stress and addictive behaviors in an alcohol-consuming student population in France. *Frontiers in Psychiatry*, *12*, 628631. https://doi.org/10.3389/fpsyt.2021.628631

Gómez-Corona, C., Chollet, S., Escalona-Buendía, H. B., & Valentin, D. (2017). Measuring the drinking experience of beer in real context situations. The impact of affects, senses, and cognition. *Food Quality and Preference, 60*, 113-122. https://doi.org/10.1016/j.foodqual.2017.04.002

Gómez-Corona, C., Rakotosamimanana, V. R., Sáenz-Navajas, M. P., Rodrigues, H., Franco-Luesma, E., Saldaña, E., & Valentin, D. (2021). To fear the unknown: COVID-19 confinement, fear, and food choice. *Food Quality and Preference*, *92*, 104251. https://doi.org/10.1016/j.foodqual.2021.104251

Gómez-Corona, C., & Valentin, D. (2019). An experiential culture: A review on user, product, drinking and eating experiences in consumer research. Food Research International, *115*, 328-337. https://doi.org/10.1016/j.foodres.2018.11.035

Jackson, R. S. (2023). Wine and Food Combination. In Jackson, R.S. (Ed). W*ine Tasting: A Professional Handbook*. Elsevier. https://doi.org/10.1016/B978-0-323-85263-0.00011-9

Hekkert, P., & Schifferstein, H. N. J. (2008). Introducing Product Experience. In H. N. J. Schiffer-Stein, & P. Hekkert (Eds.), Product Experience (pp. 1-8). Amsterdam: Elsevier. https://doi.org/10.1016/B978-008045089-6.50003-4

Koopmann, A., Georgiadou, E., Reinhard, I., Müller, A., Lemenager, T., Kiefer, F., & Hillemacher, T. (2021). The effects of the lockdown during the COVID-19 pandemic on alcohol and tobacco consumption behavior in Germany. *European Addiction Research*, *27*(4), 242-256. https://doi.org/10.1159/000515438

Laguna, L., Fiszman, S., Puerta, P., Chaya, C., & Tárrega, A. (2020). The impact of COVID-19 lockdown on food priorities. Results from a preliminary study using social media and an online survey with Spanish consumers. *Food Quality and Preference, 86*, 104028. https://doi.org/10.1016/j.foodqual.2020.104028

Lamy, E., Viegas, C., Rocha, A., Lucas, M. R., Tavares, S., e Silva, F. C., ... & Anzman-Frasca, S. (2022). Changes in food behavior during the first lockdown of COVID-19 pandemic: A multi-country study about changes in eating habits, motivations, and food-related behaviors. *Food Quality and Preference*, *99*, 104559. https://doi.org/10.1016/j.foodqual.2022.104559

Lelièvre-Desmas, M., Chollet, S., Abdi, H., & Valentin, D. (2015). Becoming a beer expert: Is simple exposure with feedback sufficient to learn beer categories?. *Acta Psychologica*, *161*, 95-103. https://doi.org/10.1016/j.actpsy.2015.08.003

Macht, M., & Dettmer, D. (2006). Everyday mood and emotions after eating a chocolate bar or an apple. *Appetite*, *46*, 332-336. https://doi.org/10.1016/j.appet.2006.01.014

Oyinseye, P., Suárez, A., Saldaña, E., Fernández-Zurbano, P., Valentin, D., & Sáenz-Navajas, M.-P. (2022). Multidimensional representation of wine drinking experience: Effects of the level of consumers' expertise and involvement. *Food Quality and Preference, 98*, 104536. https://doi.org/10.1016/j.foodqual.2022.104536

Ozamiz-Etxebarria, N., Dosil-Santamaria, M., Mondragon, N. I., Gorrotxategi, M. P., Olaya, B., & Santabárbara, J. (2022). The emotional state of young people in northern Spain after one year and a half of the COVID-19 pandemic. *The European Journal of Psychiatry*, *1*, 47. https://doi.org/10.1016/j.ejpsy.2022.09.007

Parr, W. V. (2019). Demystifying wine tasting: Cognitive psychology's contribution. *Food Research International*, *124*, 230-233. https://doi.org/10.1016/j.foodres.2018.03.050

Petit, O., Wang, Q. J., & Spence, C. (2022). Does pleasure facilitate healthy drinking? The role of epicurean pleasure in the regulation of wine consumption. *Journal of Consumer Behaviour*, *21*, 1390-1404. https://doi.org/10.1002/cb.2084

Polychronis, M. (2008). *Seduction and power: dynamics between servers and customers in bars*. Master thesis. Concordia University, Montreal, Quebec, Canada. https://spectrum.library.concordia.ca/id/eprint/976263/

Rodrigues, H., Valentin, D., Franco-Luesma, E., Rakotosamimanana, V. R., Gomez-Corona, C., Saldaña, E., & Sáenz-Navajas, M. P. (2022). How has COVID-19, lockdown and social distancing changed alcohol drinking patterns? A cross-cultural perspective between britons and spaniards. *Food Quality and Preference*, *95*, 104344. https://doi.org/10.1016/j.foodqual.2021.104344

Scherer, K. R. (2005). What are emotions? And how can they be measured? *Social Science Informatio*n, *44*, 695-729. https://doi.org/10.1177/0539018405058216

Sester, C., Deroy, O., Sutan, A., Galia, F., Desmarchelier, J. F., Valentin, D., & Dacremont, C. (2013). "Having a drink in a bar": An immersive approach to explore the effects of context on drink choice. *Food Quality and Preference*, *28*, 23-31. https://doi.org/10.1016/j.foodqual.2012.07.006

Schmitt, B., & Zarantonello, L. (2013). Consumer experience and experiential marketing: A critical review. *Review of marketing Research*. In Review of Marketing Research (Review of Marketing Research, Vol. 10), Malhotra, N.K. (Ed.) Emerald Group Publishing Limited, Bingley. https://doi.org/10.1108/S1548-6435(2013)0000010006

Stanton, R., To, Q. G., Khalesi, S., Williams, S. L., Alley, S. J., Thwaite, T. L., ... & Vandelanotte, C. (2020). Depression, anxiety and stress during COVID-19: associations with changes in physical activity, sleep, tobacco and alcohol use in Australian adults. *International Journal of Environmental Research and Public Health*, *17*(11), 4065. https://doi.org/10.3390/ijerph17114065

Stimson, G., Grant, M., Choquet, M., & Garrison, P. (2013). *Drinking in context: Patterns, interventions, and partnerships*. Routledge. https://doi.org/10.4324/9780203943717

Tinniswood, A. (2019). *The House Party: A Short History of Leisure, Pleasure and the Country House Weekend*. Faber & Faber.

Van Rheenen, T. E., Meyer, D., Neill, E., Phillipou, A., Tan, E. J., Toh, W. L., & Rossell, S. L. (2020). Mental health status of individuals with a mood-disorder during the COVID-19 pandemic in Australia: Initial results from the COLLATE project. *Journal of affective disorders, 275*, 69-77. https://doi.org/10.1016/j.jad.2020.06.037

Wadley, G. (2016). How psychoactive drugs shape human culture: A multi-disciplinary perspective. *Brain research bulletin*, *126*, 138-151. https://doi.org/10.1016/j.brainresbull.2016.04.008

Warell, A. (2008). Multi-modal visual experience of brand-specific automobile design. *The TQM Journal*, *20*, 356-371. https://doi.org/10.1108/17542730810881348

Wilsnack, R. W., & Wilsnack, S. C. (1997). Sex and alcohol. *Individual and social perspectives. New Brunswick: Rutgers Center of Alcohol Studies*.