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WHAT DO CONSUMERS CARE ABOUT WHEN PURCHASING EXPERIENTIAL PACKAGING?

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Keywords:	Consumer experience, Experiential packaging, Purchase intention, Food, Branding, Engagement

WHAT DO CONSUMERS CARE ABOUT WHEN PURCHASING EXPERIENTIAL PACKAGING?

Abstract:

*** Purpose:**

The importance of packaging attributes for purchase decisions has generated interest in the research and food industry. As a matter of fact, innovation in packaging is constantly searching for new solutions that generate customer experience. The aim of this study is to analyse the effect of packaging attributes (protection, convenience, portability and storage, information, sustainability, branding and engagement) on consumer purchase intention of experiential packaging especially designed to provide an extraordinary sensory or interactive communicational experience, and the influence of potential moderators.

*** Design/methodology/approach:**

We used a quantitative methodology based on the Partial Least Squares (PLS) technique to estimate the structural model proposed. A purposely developed questionnaire was administered to a non-probabilistic sample of 1,489 European consumers. The questionnaire included questions related to consumers' perception of packaging attributes and purchase intention of different experiential packages.

*** Findings:**

The results indicate that packaging attributes are related to consumer purchase intention of experiential packaging. Engagement attributes show the strongest positive influence followed by branding and economy. However, attributes such as sustainability showed a negative effect on the purchase intention of these packages. Our results also show the influence of gender, family structure and residential background as moderators of the relationships.

*** Originality/value:**

Customers' decision-making processes are strongly influenced by product packaging. However, little is known about how new technologies and design in packaging influence consumers' responses. This research provides evidence of the influence of packaging attributes on consumer purchase intention for experiential packaging, a proliferating area of research.

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3 **Keywords:** consumer experience, experiential packaging, purchase intention, food,
4 branding, engagement
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7 8 **1. Introduction** 9

10
11 Highly competitive business environments coupled with changing customer needs and
12 wants have influenced the need for strategic use of packaging to increase sales and market
13 share in the food industry (Elkhattat and Medhat, 2022; Symmank, 2019). When
14 customers are buying food products, they do not think about cereals, biscuits or cocoa
15 but, rather, consider the holistic consumption experience of ‘enjoying a good breakfast’.
16 They search for a gratifying customer experience, placing value not only on the usefulness
17 and functional benefits of the products and services but also on hedonic and experiential
18 elements surrounding them (Brakus *et al.*, 2014; Schmitt, 1999; Schmitt and
19 Zarantonello, 2013; Verhoef *et al.*, 2009). In such a situation, it is important that the
20 products and brands include ‘experience providers’ to offer a unique experience for
21 customers (Schmitt, 1999; Schmitt and Zarantonello, 2013; De Rezende and Silva, 2014).
22 The experiential providers of products can appear in product design, logos, ads or in
23 shopping environments but also in packaging (Brakus *et al.*, 2009, 2014; Schifferstein *et*
24 *al.*, 2013). Being aware of this, the food industry has the opportunity for the development
25 of innovative solutions that consider packaging as an experience provider (Spence, 2016).
26 Thus arises the experiential packaging especially designed to generate an extraordinary
27 sensory or interactive communicational experience for the consumer (Elkhattat and
28 Medhat, 2022; Joutsela *et al.*, 2017; Lydekaityte and Tambo, 2020).
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31 Although there is a lot of literature related to innovative packaging, such as active and
32 intelligent packaging (Tiekstra *et al.*, 2021) or smart packaging (Biji *et al.*, 2015;
33 Lydekaityte and Tambo, 2020; Young *et al.*, 2020), the concept of experiential packaging
34 as such is not referred to. To mitigate this gap and in order to contribute to a better
35 theoretical understanding of the concept, a definition of experiential packaging based on
36 customer experience from a stimulus perspective is proposed.
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39 Moreover, from an empirical standpoint, it is of great interest to study factors affecting
40 consumers’ responses to packaging and to experiential attributes (Liao *et al.*, 2015). The
41 relationship between packaging and customer response has generated research interest,
42 however, it has certain limitations. Most of these refer to a limited set of predefined
43 packaging-related aspects, normally visual properties such as images, shapes and colours
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(Chitturi *et al.*, 2022; De Sousa *et al.*, 2020; Schifferstein *et al.*, 2013; Simmonds and Spence, 2017; Spence and Velasco, 2018) or environmental features (Donato *et al.*, 2021; Donato and D'Aniello, 2021; Ketelsen *et al.*, 2020), but 'research on packaging including the full range of possible features, has been neglected so far' (Symmank, 2019: 62). From a methodological perspective, such research analyses consumers' emotional responses usually through qualitative studies (Liao *et al.*, 2015; Rundh, 2013; Silayoi and Speece, 2004), by using experimental designs based on focus groups and conjoint analysis (Chitturi *et al.*, 2022; Elkhattat and Medhat, 2022; Eldesouky *et al.*, 2016; Fernqvist *et al.*, 2015; Kobayashi and Benassi, 2015; Schuch *et al.*, 2018; Steenis *et al.*, 2017). Quantitatively, analyses have been limited to the study of frequencies or correlations (D'Astous, and Labrecque; 2021; O'Callaghan and Kerry, 2016) and researchers have used small samples and/or referred to a single country (Aday and Yener, 2015; O'Callaghan and Kerry, 2016; Schuch *et al.*, 2018; Steenis *et al.*, 2017). Furthermore, to our knowledge, the relationship between packaging attributes and intention to purchase experiential packages has not yet been sufficiently studied.

In order to address this gap, we propose a model to explain whether and how the attributes of a package contribute to the intention to purchase experiential packaging. For this purpose, we use a quantitative methodology based on the Partial Least Squares (PLS) technique to estimate the structural model proposed using a sample of 1,489 European consumers from 16 European countries.

The results will provide product designers and marketing managers with insights on how to use packaging attributes to generate better consumer experiences and consequently, to gain consumer preference and influence final purchase intentions (Elkhattat and Medhat, 2022).

The remainder of the paper is structured as follows. After this introduction, we describe the theoretical framework. We then describe the methodology used, the proposed model and the main results obtained. Finally, we draw conclusions.

2. Conceptual framework

2.1. Customer experience and experiential packaging

The literature suggests that experiential consumption can lead to greater consumer happiness and life satisfaction (Brakus *et al.*, 2022). Customer experience refers to a dynamic process of response to management stimuli (e.g. cues, thematic content, sensory stimuli) that shape the experience as an economic offering (Pine and Gilmore 1998). In a

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3 food shopping scenario, this process involves five stages: 1) choosing the product in the
4 supermarket; (2) opening the package; (3) preparing the food; (4) eating the food; (5)
5 repurchasing (Brakus *et al.*, 2009).
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8 Packaging provides a customer experience as a type of offering that engages the consumer
9 in a personal way. At the buying stage, visual aspects of packaging are fundamental for
10 consumers to identify the category and brand to which the product belongs, to confer
11 meaning to it or to reinforce existing associations with the product (Chitturi *et al.*, 2022).
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13 At the consumption stage, tactile packaging properties are fundamental, as its physical
14 interaction between the container and consumer (Velasco and Spence, 2019).
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17 As previous literature suggests, to create customer experiences, managers can use five
18 experiential dimensions: sensorial, affective, cognitive, physical and social responses
19 (Becker and Jaakkola, 2020; Lemon and Verhoef, 2016; Schmitt 1999; Verhoef *et al.*,
20 2009). Packaging has the capacity to stimulate the five senses using lights, sounds, smells,
21 tastes and/or textures (Krishna *et al.*, 2017). Food products are exceptional in this because
22 sensory experiences typically involve all five senses and support the process of
23 multisensory development and sensory characteristics of a container may transfer aspects
24 of the packaging experience directly to its contents (Elkhattat and Medhat, 2022; Spence,
25 2016; Spence and Velasco, 2018). Even more, senses' stimulation, especially touch, smell
26 and taste, is strongly associated with emotions and associated with feelings (Clark *et al.*,
27 2021; Schifferstein *et al.*, 2013). In this regard, experimental research suggests that some
28 food packaging elements such as images can generate an emotional response from
29 consumers (Clark *et al.*, 2021; Liao *et al.*, 2015). Additionally, senses such as vision and
30 hearing are closely connected to rational thinking (Clark *et al.*, 2021; Goodale and
31 Humphrey, 1998). Related to the physical dimension, packaging and consumption are
32 interconnected; physical interaction emerges as part of the consumer's everyday routines
33 and practices (Joutsela *et al.*, 2017). Finally, packaging allows the building of a
34 relationship between the brand and its audience and considering individuals' desires to
35 be part of a social context (Schmitt, 1999; Schmitt and Zarantonello, 2013).
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38 Being aware of this, the packaging and food industries have been introducing packaging
39 into the markets especially designed as experiential providers seeking to intensify the
40 above-mentioned experiential responses (Elkhattat and Medhat, 2022). We called them
41 experiential packaging and they are defined, in this research, as innovative packaging
42 solutions that aim to provide a unique experience to customers through a sensory or
43 interactive communicational process including new technologies as AI, AR, VR,
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conductive ink, QR, etc, or just a creative design. They can provide leisure and entertainment to consumers allowing the establishment of a strong link between product and consumer and the consumer and his/her social context. This can happen both at the point of sale and in the usage environment.

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Although, to the best of our knowledge, there is no previous literature on the concept of experiential packaging, it is true that its predecessor, smart packaging, has already been abundantly discussed in the literature (Biji *et al.*, 2015; Fernández *et al.*, 2022). Smart packaging shares with experiential packaging the use of the latest generation technologies (Elkhattat and Medhat, 2022; Lydekaityte and Tambo, 2020) but these are not essential in experiential packaging. Their properties can come from other areas such as design (Joutsela *et al.*, 2017). What really differentiates the two types of packaging is the functionality pursued. While the former seeks to enhance traditional functions of packaging such as delivering safer and quality products (Biji *et al.*, 2015), the latter adds new functionalities to the product centred on the principle of emotional experience marketing. Its objective is to enhance the consumer's experience and/or engagement (Elkhattat and Medhat, 2022).

32 33 34 35 **2.2. Experiential packaging and consumer intention. Hypothesis development**

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Following Cue Utilisation Theory (Olson and Jacoby, 1972), consumers identify and evaluate multiple cues before forming a judgement of a product or packaging and making a purchasing decision. Purchase intention is defined as the preference to buy a specific product or service. There is a discrepancy between purchase intention and actual purchase, but although intentions do not entirely explain future behaviour, the literature suggests that they are its principal predictor (Fishbein and Ajzen, 1975). Purchase intention depends on numerous extrinsic and intrinsic factors. Of all the factors involved, packaging attributes, that is, the prominent characteristics of the packaging that enable it to fulfil its functions (Steenis *et al.*, 2017), are critical in the purchase of food products and beverages (Kobayashi and Benassi, 2015; Menger-Ogle and Graham, 2018; Schuch *et al.*, 2018).

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Experiential packaging, such as traditional packaging, should have attributes to provide the basic functions expected by consumers: protection, convenience, storage and transport, information, sustainability and economy. However, new attributes have to be

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3 added to give value to the customer experience, namely, branding and engagement
4 (Dopico *et al.*, 2021; Lydekaityte and Tambo, 2020).

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6 On the above basis, we developed hypotheses linking the essential attributes of a
7 packaging to the intention to purchase experiential packaging.
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10 11 *Protection*

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13 One of the primary functions of packaging is the physical protection of the product
14 (Saha *et al.*, 2022). Recent technological innovations enable more efficient packaging,
15 which affords better protection from damage, and greater quality and safety (Dopico *et*
16 *al.*, 2021). It has been shown that such aspects of packaging influence consumers'
17 intention to purchase. For example, Menger-Ogle and Graham (2018) suggest that safety
18 is a priority in the purchase of food packaging. Additionally, the type and quality of the
19 material from which the packaging is made (Raheem *et al.*, 2014; Saha *et al.*, 2022) and
20 how it affects durability (Fernqvist *et al.*, 2015) may attract the consumer and influence
21 intention to purchase. Consequently, it is reasonable to hypothesise that this relationship
22 is also true for experiential packaging. Formally:
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30 H1: Perception of protection attributes is positively related to purchase intention of
31 experiential packaging.
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34 *Convenience*

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36 The desirability of packaging depends on its convenience (Manchanda, 2022; Silayoi
37 and Speece, 2004). Features such as ease of opening/closing, handling, access and use
38 have been identified as important factors when making a choice (Deliya and Parmar,
39 2012; Fernqvist *et al.*, 2015; Manchanda, 2022; Silayoi and Speece, 2004). Package size
40 and shape also affect consumer's evaluations and decisions (Fernqvist *et al.*, 2015; Silayoi
41 and Speece, 2004; Spence, 2016). As Deliya and Parmar (2012) indicate, these elements
42 help capture consumers' attention and interest and may influence their purchase decision.
43 Therefore, we assume that the convenience attributes of the package will also be
44 important in the purchasing intention of experiential packaging. Formally:
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51 H2: Perception of convenience attributes is positively related to purchase intention of
52 experiential packaging.
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55 *Portability and storage*

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57 In terms of product packaging, the consumer's response depends to a large extent on
58 the benefits expected. One of these is portability. A package is considered a source of
59 value for the consumer when it is 'easy to carry', 'easy to store' and 'easy to consume'
60

(Dopico *et al.*, 2021; Sehrawet and Kundu, 2007). As highlighted by Lindh *et al.* (2016), consumers frequently state that, in the purchase of food products, they are influenced by ease of transport and of storage in the home. Consequently, it is reasonable to expect that consumers will also be influenced by portability and storage-related attributes for experiential packaging. Formally:

H3: Perception of portability and storage attributes is positively related to purchase intention of experiential packaging.

Information

Written information on the packaging referring to the content of product, price, benefits or brand can influence consumer behaviour and perceptions (Kumar and Kapoor, 2017; Silayoi and Speece, 2004). Empirical evidence points to its importance. For example, Menger-Ogle and Graham (2018) suggest that package labelling is a priority in the purchase of food packages. Therefore, it is reasonable to expect that consumers also rely on label information for their purchase decision related to experiential packaging. Formally:

H4: Perception of informational attributes is positively related to purchase intention of experiential packaging.

Sustainability

The value of the package for the consumer should include sustainable solutions relating to the rational use of resources, environmental impact and social considerations (Dopico *et al.*, 2021). Previous literature shows that sustainable features such as packaging material (Ketelsen *et al.*, 2020), au naturel colours (Marozzo *et al.*, 2020) or the presence of eco-labels (Donato and D'Aniello, 2021) can influence consumers' perceptions and behaviour (D'astous and Labrecque, 2021). Especially in food packaging, literature shows that the environmental status of the package influences the purchase choice (Ketelsen *et al.*, 2020; Lindh *et al.*, 2016). Consequently, it is reasonable to assume that perception of sustainability will also influence the customer response to experiential packaging. We therefore propose that:

H5: Perception of sustainability attributes is positively related to purchase intention of experiential packaging.

Economy

Price is a relevant factor in the process of food choice, so purchase intention depends, among other factors, on price (Kobayashi and Benassi, 2015; Schuch *et al.*, 2018). Previous research suggests that this relationship also exists for food packaging, where

monetary consideration is a priority (Chitturi et al., 2022; Menger-Ogle and Graham, 2018). We therefore assume that this is also true for experiential packaging. Formally:

H6: Perception of economy attributes is positively related to purchase intention of experiential packaging.

Branding

Packaging functionalities in relation to branding can be a promising way to influence consumer perceptions and behaviours (Fernqvist et al., 2015; Silayoi and Speece, 2004; Spence, 2016). A package may attract consumers' attention and communicate its attributes by means of design and aesthetic appearance (graphics, colours, transparency) (Chitturi et al., 2022; De Sousa et al., 2020; Marozzo et al., 2020; Simmonds and Spence, 2017) and/or packaging innovation (Deliya and Parmar, 2012; Rundh, 2013). Literature suggests that these attributes can contribute to a positive shopping experience and impact the acceptance of food products (De Sousa et al., 2020; Spence, 2016). Therefore, it is reasonable to assume that they will have an important influence on consumers' purchase intention of experiential packaging. Formally:

H7: Perception of branding attributes is positively related to purchase intention of experiential packaging.

Engagement

Packaging can also provide sensory characteristics that influence purchase decisions (Krishna et al., 2017; Spence, 2016). The use of innovative packaging that generates consumer engagement while not affecting product quality or security is important for purchase intention. For example, following Spence (2016), the use of packaging features that encourage consumers to touch or pick up the package, such as tactile paint, olfactory/aroma cues, sounds, digital data, augmented reality, gamified packages, etc., will increase the probability of purchase by influencing the consumer's multisensory experience (Atighi-Lorestani and Khalili, 2020; Lydekaityte and Tambo, 2020; Spence, 2016). Given that the objective of experiential packaging is create a strong link between product and consumer, we therefore propose:

H8: Perception of engagement attributes is positively related to purchase intention of experiential packaging.

The literature indicates that the impact of packaging attributes on purchase intention should be evaluated in line with consumer characteristics (Kumar and Kapoor, 2017) such as sociodemographic variables. O'Callaghan and Kerry (2016) and Young et al. (2020), for example, indicate that age is an important factor behind variability in the acceptance

of, or intention to buy, smart packaging. Aday and Yener (2015) also found that gender is related to the adoption of smart packaging. Tiekstra *et al.* (2021) suggest that the residential background of consumers (rural or urban) has a varying influence on their buying intentions related to active and smart packaging. Other studies find that family size and family structure also affect purchase intention. For example, Eldesouky *et al.* (2016) suggest that family size is key in the purchase intention of food packaging. Atighi-Lorestani and Khalili (2020) suggest that gamified packaging may influence purchase intention, especially for families with children. However, little is known about the mechanisms and relations that explain this variability with experiential packaging. Based on this evidence, we analyse variability in the relationship between the perception of packaging attributes and intention to purchase experiential packaging by means of a moderation analysis for the purpose of gaining new theoretical insights (Memon *et al.*, 2019). We therefore propose that:

H9: There is a significant, categorical moderating effect of a) age, b) gender, c) family structure and d) residential background on the model relationships proposed.

Based on the above hypotheses, we propose the following model (Figure 1):

[Insert Figure 1 about here]

3. Research Methodology

3.1 Research design

This study is aimed to investigate whether and how the attributes of a package influence customers' responses through their intention to purchase experiential packaging. For this purpose, data were collected through a structured self-administered online questionnaire. Through a snowball sampling procedure, participants in the COST Action 'Active and intelligent fibre-based packaging-innovation and market introduction' from 34 European countries were asked to collaborate in the dissemination. Data were analysed using the PLS statistical package (Ringle *et al.*, 2015). Partial least squares structural equation modelling (PLS-SEM) was implemented instead of covariance-based (CB) due to its suitability for the predictive purpose of the research, the type of variables in the model (the independent variables are formative and reflective and the dependent variable is non-metric) and the non-requirement of normality and independence of the data (Hair *et al.*, 2019; Hair *et al.*, 2021). Analysis included two stages. We first validated

the scales for measuring the variables included in the model. Secondly, we estimated the model proposed using SEM.

3.2 Research instrument

The questionnaire included questions related to consumers' evaluation of eight packaging attributes and customer purchase intention of experiential packages defined in this research. All variables were measured using a seven-point Likert scale. All were reflective, except for purchase intention, which was formative. For all the variables, we first identified the appropriate set of indicators, considering the breadth of the concept and adapted them to the applicable context. The scales to measure packaging attributes were adapted from those developed by Dopico *et al.* (2021), which have had good results. Experiential packaging purchase intention was based on studies by Joutsela *et al.* (2017) and Spence (2016). This variable was measured through four items defined by a text and accompanied, each one of them, by a representative image of the characteristic to be evaluated. The initial selection of items was checked by a group of five experts with the aim of avoiding redundancy, ambiguity or double arguments (Hardesty and Bearden, 2004). This guaranteed the content validity of the scales. The number and description of the initial items for each scale are given in Table 1.

[Insert Table 1 about here]

4. Data Analysis and Results

4.1. Sample

After data cleansing, the sample used in the study involved 1,489 individuals from 16 European countries belonging to four sub-regions of Europe, in line with the EuroVoc classification. By gender, 37.68% were men and 62.32% were women. According to the classification by Dimock (2018), 11.22% belonged to generation Z, 68.97% to generation Y, 15.31% to generation X, 4.37% were Boomers and the rest were Silent. Overall, 30.83% of households comprised up to two people, 11.69% comprised more than four and 21.83% had children. Furthermore, 27.45% received a monthly wage of up to 900 euros, 23.68% from 901 to 1,500 euros, 32.42% from 1,501 to 3,000 euros and the remainder, over 3,000 euros.

4.2. Measuring scales

Data analysis of reflective variables considered the recommendations given by Wright *et al.* (2017) and the guidelines suggested by Churchill (1979). First, dimensionality of the scales was assessed. The results (Table 2) confirmed that the information scale was two-dimensional (basic information and extra information) while the others were one-dimensional. Then, reliability and convergent validity of the scales were assessed through Cronbach's alpha, composite reliability (CR) and average variance extracted (AVE). To confirm the results, we performed a bootstrap analysis following the recommendations of Hair *et al.* (2019). As shown in Table 2, all the Cronbach's alphas and CRs were higher than .7 and the AVEs were all higher than .5 (Hair *et al.*, 2019). The discriminant validity was assessed using the Fornell and Larcker criterion and the heterotrait-monotrait ratio of correlations (HTMT) (Henseler *et al.*, 2015). As shown in Table 2, the values of the AVE between each pair of factors exceeded the square of the correlation between the factors (Fornell and Larcker, 1981) and the HTMT were all lower than .85 (Hair *et al.*, 2019). Taken together, these validity tests show that the measurement items were both valid and reliable.

The formative variable was evaluated based on the absence of collinearity (Hair *et al.*, 2019). Tolerance values fluctuated between .056 and .444 and variance inflation factor (VIF) values fluctuated between 1.756 and 2.254, indicating that there were no problems of collinearity.

[Insert Table 2 about here]

4.3. Descriptive analysis

In relation to the descriptive results of the validated scales, on a seven-point scale, sustainability, protection and economy had the highest average scores (5.900, 5.803 and 5.790, respectively) followed, with similar values, by convenience and information (5.343 and 5.370, respectively) and branding and portability and storage (4.780 and 4.597, respectively). Purchase intention (3.615) and engagement (3.067) had the lowest averages.

4.4. Estimation of the model

After validating the scales, we tested the hypotheses following Hair *et al.* (2019). First, VIF coefficients were used to evaluate multicollinearity problems of the model. All values were lower than three indicating that there were no problems of multicollinearity (Hair *et al.* 2019). Secondly, the coefficient of determination (R^2) was calculated to assess the predictive power of the structural model. Results showed an R^2 of .385 well above the .1 recommended by Falk and Miller (1992). Thirdly, we analysed the predictive power of the model outside the sample using two tests following Shmueli *et al.* (2016). The first was Stone-Geisser's Q^2 , obtained using the blindfolding procedure, and the second was the Predict Q^2 , derived from PLSPredict. The results of these tests (.250 and .374, respectively), both above zero (Hair *et al.*, 2019), confirmed the predictive value of the model irrespective of the sample. The results therefore indicated that the model was good (Hair *et al.*, 2019).

We then tested the model hypotheses, analysing the size and significance of the β between the variables (Table 3). To guarantee the results, we performed bootstrapping (5,000 samples and 95% confidence level). The results suggest that hypotheses H5, H6 and H8 were accepted. By order of importance, engagement (.473) attributes were positively related to purchase intention of experiential packaging, followed by branding (.211) and economy (.093). Hypotheses H2, H4 and H7 related to convenience (-.052), information (-.129) and sustainability (-.102) were confirmed, but with the opposite sign to that expected. Finally, hypotheses H1 and H3, related to packaging protection and portability and storage, were not supported (Figure 2).

[Insert Table 3 about here]

[Insert Figure 2 about here]

4.5. Moderation

Moderation analysis allowed us to test Hypothesis 9 (Figure 2). We used the product-indicator approach with standardised data for the metric variable of age. Our results show that there was no moderating effects of age as all relationships were non-significant (H9a).

For the non-metric variables of gender (men, women), family structure (with or without children) and residential background (rural/urban), we performed a multi-group analysis (PLSPM-MGA) using a non-parametric approach (Henseler *et al.*, 2009). Our results

(Table 4) show that the relationships between branding, engagement and informational attributes and consumer intention were moderated by gender, supporting H9b. The relation between branding and purchase intention was stronger for women than for men (.250 as opposed to .154), whereas for engagement, this attribute was more important for men (.562 as opposed to .408). The relationship between information and purchase intention was only significant in the case of women.

The family structure (H9c) moderated the relation between engagement and purchase intention. The results show that this relation was stronger in families with children (.615 as opposed to .447).

The residential background (H9d) moderated the relations between convenience and sustainability and purchase intention. In both cases, the relations were negative. In the case of convenience, this relation was significant for consumers living in rural areas. In the case of sustainability, the relation was more intense for rural consumers than for urban ones (-.191 as opposed to -.085).

[Insert Table 4 about here]

5. Discussion and Conclusion

In today's changing environment, packaging has become a strategic tool where the introduction of experiential attributes is key for the success of many products, including food (Elkhattat and Medhat, 2022; Spence, 2016).

Through implementing new technologies or by using creative design ideas to support sensory or interactive communicational experience (Schmitt and Zarantonello, 2013), experiential packages emerge to offer consumers a unique and memorable experience. In that context, the study of experiential packages and the factors that affect their consumers' purchase intentions is key. However, to the best of our knowledge, previous theoretical and empirical research on experiential packaging is limited.

At the theoretical level, this paper provides a definition of experiential packages while at the empirical level, it contributes to a better understanding of the role of packaging as an experiential tool. The main findings of the empirical analysis help explain which packaging attributes are positively or negatively related, or unrelated, to the intention to purchase experiential packaging, and also point to any possible influence of moderating variables.

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3 Firstly, regarding positive influences, engagement attributes are strongly related to the
4 intention to purchase experiential packaging. As previous literature suggests, the use of
5 engagement features in packages influences customers' intentions (Spence, 2016;
6 Elkhattat and Medhat, 2022). This is especially true for experiential packaging that, in
7 line with the definition, allows brands to interact with consumers in novel and
8 revolutionary ways (Lydekaityte and Tambo, 2020). This relationship is stronger in men
9 than in women and in consumers who have children. This might be because female
10 consumers are generally more cautious regarding new packaging technologies and
11 innovations (Aday and Yener, 2015) and because the existence of children in the
12 household may have a greater influence on the intention to purchase certain types of
13 packaging (Atighi and Khalili, 2020).

14
15 We also found that perception of branding attributes is positively related to the
16 intention to purchase. This result is in line with previous research on interactive
17 packaging, which shows that the inclusion of smart communication technologies may
18 become one of the most effective marketing assets for attracting attention, communicating
19 brand cues and improving consumer experience (Elkhattat and Medhat, 2022;
20 Lydekaityte and Tambo, 2020). The effect of branding attributes on the intention to
21 purchase experiential packaging was shown to be stronger for women than for men. This
22 result is in line with previous research which suggests that the gender of the consumer
23 may modulate the effect of a product's extrinsic cues on perception. Women are generally
24 more involved in the purchase of food products and may be more sensitive to the sensory
25 attributes of packaging, so the effect of such attributes is greater in women than in men
26 (Lidón *et al.*, 2018).

27
28 The results also confirm that the economy of the packaging has a positive effect on
29 the intention to purchase experiential packaging. The importance of price has been shown
30 for the purchase of packs of chicken nuggets (Schuch *et al.*, 2018) or coffee (Kobayashi
31 and Benassi, 2015).

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33 Secondly, our analysis indicates that information on the package, sustainability and
34 convenience were significantly related to the intention to purchase experiential packaging
35 but the sign of the relationship was negative.

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37 The negative relation between information and intention appears in women but not in
38 men. This result supports previous research that indicates that women usually pay greater
39 attention to food labels and the information displayed on food packaging than men
40 (Kumar and Kapoor, 2017; Lidón *et al.*, 2018). On experiential packaging, the
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3 information is usually more related to promotions, games and other visual cues than to
4 basic information or extra content information (Krishna *et al.*, 2017) so, since women give
5 greater priority to the latter type of information, they are unlikely to buy such packaging.
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8 The relationship between sustainability and consumer attitudes and buying intentions
9 for packages has been evidenced in the literature (D'Astous, and Labrecque; 2021;
10 Ketelsen *et al.*, 2020). According to our results, this relationship is negative for
11 experiential packaging. This may be due to such packages could be perceived as non-
12 sustainable because they contain non-essential materials and procedures such as QR
13 labels or design innovations, with games such as the possibility of doing origami (Dopico
14 *et al.*, 2021). In a context where consumers are more conscious and concerned about
15 sustainability issues (Donato and D'Aniello, 2021; Ketelsen *et al.*, 2020), the inclusion
16 of innovations on packaging still has to overcome the challenge of sustainability
17 (Lydekaityte and Tambo, 2020). This negative relation is stronger for people living in
18 rural areas than in urban areas. This result is in line with previous research that suggests
19 that consumers living in rural areas are, overall, more behaviourally responsible with
20 regard to the environment than those living in cities (Berenguer *et al.*, 2005) so they are
21 less likely to show an intention to purchase this type of packaging.
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24 Although previous research indicates that desirability of packaging increases with
25 convenience attributes such as being easy to open and close or handle (Manchanda, 2022),
26 our results show that valuation of package convenience is negatively related to intention
27 to purchase experiential packages. This negative relationship is found for rural consumers
28 but not for those in urban environments. As indicated by Sehwet and Kundu (2007),
29 rural consumers need packages that are strong and easy to handle and store but it is
30 possible that such consumers are unable to see how experiential packaging can improve
31 the convenience of the package, whereas this can be perceived, for example, in smart
32 packages (Lydekaityte and Tambo, 2020).
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35 Thirdly, contrary to expectations, it was not possible to prove the relation between the
36 attributes of protection and portability and storage and intention to purchase experiential
37 packaging. This may be because, as with smart packages, the function of such packages
38 is not to improve product preservation or protection or to facilitate transport but to
39 optimise the consumer experience (Lydekaityte and Tambo, 2020).
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42 At the practical level, our research provides useful recommendations in terms of the
43 design of experiential packaging which can provide a key competitive advantage for food
44 companies. Based on the reported results, successful commercialisation of experiential
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3 packaging for foods could be expected if the packaging offers the following functions:
4 engagement, branding and economy. Thus, experiential packaging must not only have the
5 functions of engagement and branding but must also do so at a cost-effective price.
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7 Marketing managers should take this into consideration to adapt this innovative
8 packaging, gain consumer preference and minimise marketing rejection.
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13 Considering that the key to the development of experiential packaging is the
14 application of disruptive innovations in design and technologies, some of which are still
15 at development stage (e.g. AI, AR, VR, etc.), the relationship between packaging
16 attributes and customer response becomes an interesting topic for future research. Our
17 results focus on recent experiential packages used in the food industry. However, given
18 the speed at which new technologies and creations in packaging are emerging, further
19 studies should confirm our results on future experiential packages and in real
20 marketplaces. Moreover, it might be interesting to analyse the transfer of products, brands
21 and packaging to virtual spaces where individuals can interact virtually with other people
22 and/or objects (Metaverse). This would be a huge challenge for researchers. Analysis of
23 different sample characteristics could also improve the validity of our results considering
24 other demographic (e.g. nationality) and non-demographic variables (e.g. lifestyles,
25 cultural differences, occasion-based and need states) that might be relevant for future
26 acceptance of experiential packaging.
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45
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Table 1. Initial packaging items proposed for each scale

Scale/ Dimension	Item
Protection	PROT1: It prevents deterioration of the product
	PROT2: It resists bumps
	PROT3: It ensures the safety of ingredients and the product
	PROT4: It provides greater freshness of the product
Convenience	CONVE1: It facilitates the opening and closing of the product
	CONVE2: It facilitates handling of the product
	CONVE3: Its size suits consumption needs
Portability & Storage	PORT&STOR1: It facilitates storage in the pantry, reducing the need for space
	PORT&STOR2: It makes the “best before date” very visible in your pantry or in your fridge
	PORT&STOR3: It decreases in size after partial consumption of the product
	PORT&STOR4: It makes the product easy to carry
Information	INFO1: It reports rigorously on its content
	INFO2: It indicates the benefits obtained after consumption of the product
	INFO3: It contains information on prices
	INFO4: It informs about legal regulations
	INFO5: It transmits the ethical values of the brand
Branding	BRAND1: It is aesthetically appropriate for the content
	BRAND2: It contains information that helps the consumer pick a product at the point of sale
	BRAND3: It is innovative or different from other packaging
	BRAND4: You want to keep or collect it
Engagement	ENGAG1: It stimulates the senses: emitting lights, sounds, voices, smells, etc.
	ENGAG2: It provides leisure experiences
	ENGAG3: It provides entertainment and fun
Sustainability	SUST1: The environment is not contaminated by its manufacturing process
	SUST2: Resources are not wasted in its manufacturing process
	SUST3: It makes the product accessible and easy to handle for people with visual impairment
	SUST4: It is biodegradable
	SUST5: It reusable, recyclable, or returnable
	SUST6: Its use of resources is rational, avoiding waste
Economy	ECON1: It is economical
	ECON2: It offers good value
	ECON3: It does not increase the product price too much
Purchase intention	PURC INT1: You would buy packaging that emits lights and / or sounds
	PURC INT2: You would buy packaging that gives out aromas
	PURC INT3: You would buy packaging that incorporates new technologies to improve product experience
	PURC INT4: You would buy packaging that leads to greater interaction with the brand and the product

Table 2. Dimensionality, reliability, and convergent validity (Bootstrap results)

	Items	Bootstrap		CA	CR	AVE
		β	Confidence intervals			
Protection	3	(.676-.886)***	(.235-.970)	.770	.835	.631
Convenience	6	(.725-.914)***	(.617-.950)	.785	.873	.699
Portability & Storage	3	(.728-.854)***	(.631-.899)	.742	.848	.651
Information	4	(.886-.897)***	(.873-.907)	.798	.869	.623
Basic information	2	(.888-903)***	(.873-.913)	.753	.890	.802
Extra information	2	(.873-.878)***	(.857-.891)	.695	.868	.766
Branding	3	(.658-.924)***	(.591-.946)	.701	.806	.586
Engagement	3	(.869-.937)***	(.852-.945)	.886	.930	.815
Sustainability	6	(.771-907)***	(.601-.944)	.916	.936	.746
Economy	3	(.825-.920)***	(.733-.965)	.837	.898	.746

Note. CA: Cronbach's alpha; CR: Composite reliability; AVE: Average Variance Extracted

*** p<.01

Table 3. Path analysis

Path	VIF	Bootstrap		Results
		β (t value)	Confidence interval	
H1: Protection -> PI	1.767	-.015 n.s.	((-.060)-.042)	Not supported
H2: Convenience -> PI	1.877	-.052 *	((-.108)-(-.003))	Supported
H3: Portability & Storage -> PI	1.539	.037 n.s.	((-.015)-.088)	Not supported
H4: Information -> PI	1.870	-.129 ***	((-.185)-(-.072))	Supported
H5: Branding -> PI	2.017	.211 ***	(.148-.276)	Supported
H6: Engagement -> PI	1.662	.473 ***	(.413-.529)	Supported
H7: Sustainability -> PI	1.800	-.102 ***	((-.163)-(-.046))	Supported
H8: Economy -> PI	1.581	.093 ***	(.042-.144)	Supported

PI= Purchase intention.

R2 (PI) = .385; Stone-Geisser's (PI) = .250; Predict Q² (PI): .374

*** p < .01; **p<.05; *p<.1; n.s: not significant

Table 4. Results of Multi-group Analysis (PLS-MGA) (Bootstrap). Effect of gender, family structure and residential background.

Path	β	Confidence interval	Loads	Confidence interval
	(t value)		(t value)	
	Men		Women	
Information -> PI	-.053 n.s (1.171)	((-.140)-.039)	-.179 *** (5.034)	((-.248)-(-.107))
Branding -> PI	.154 *** (3.262)	(.066-.250)	.250 *** (5.606)	(.160-.338)
Engagement -> PI	.562 *** (12.756)	(.472-.641)	.408 *** (9.998)	(.331-0.488)
	Without children		With children	
Engagement -> PI	.447 *** (13.329)	(.380-.515)	.615 *** (9.490)	(.501-.745)
	Rural		Urban	
Convenience -> PI	-.116 ** (2.088)	((-.228)-(-.009))	-.030 n.s. (0.897)	((-.094)-.036)
Sustainability -> PI	-.191 ** (2.082)	((-.295)-(-.137))	-.085 ** (2.457)	((-.140)-(-.007))

PI= Purchase intention

*** p < .01; **p<.05; *p<.1; n.s: not significant

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Figure 1: Theoretical model proposed

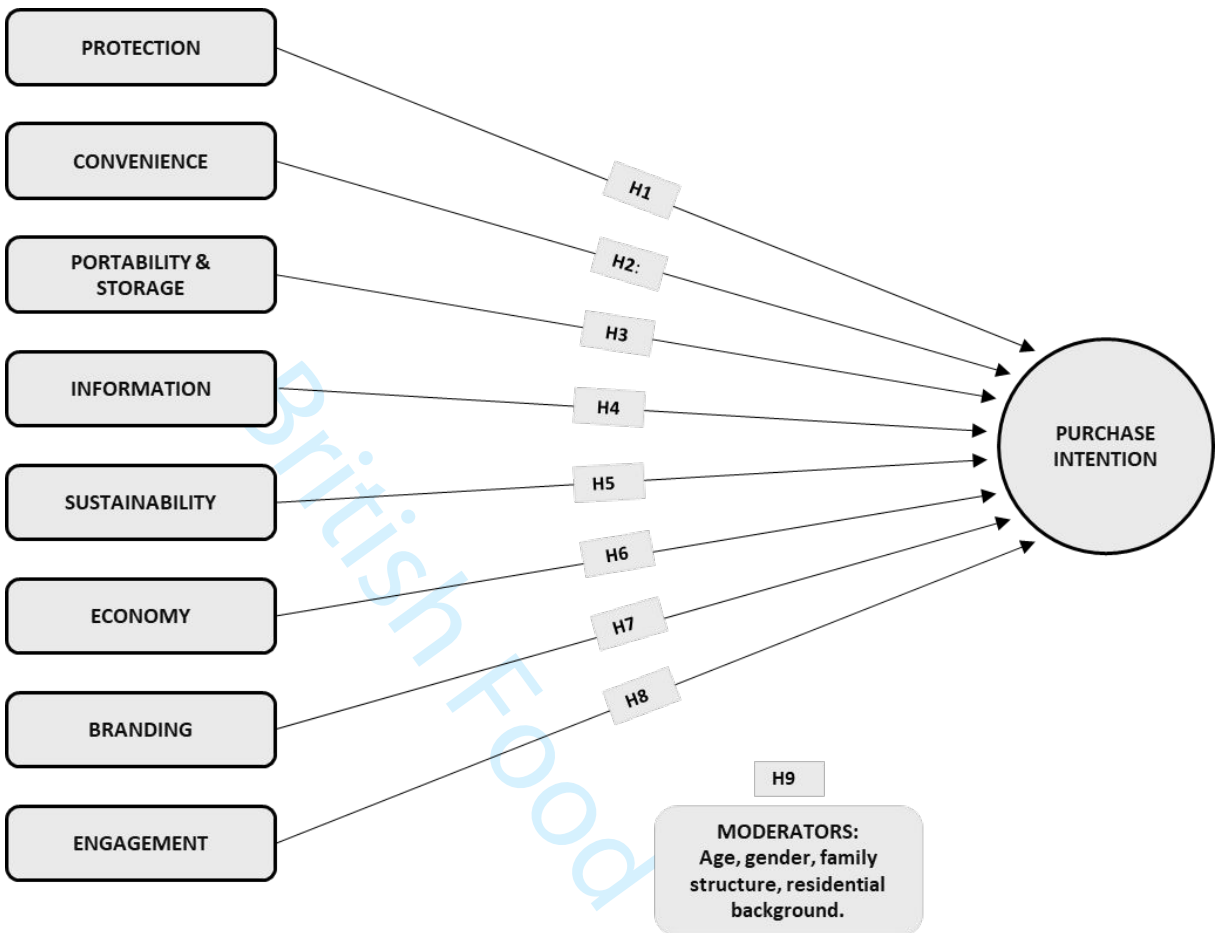
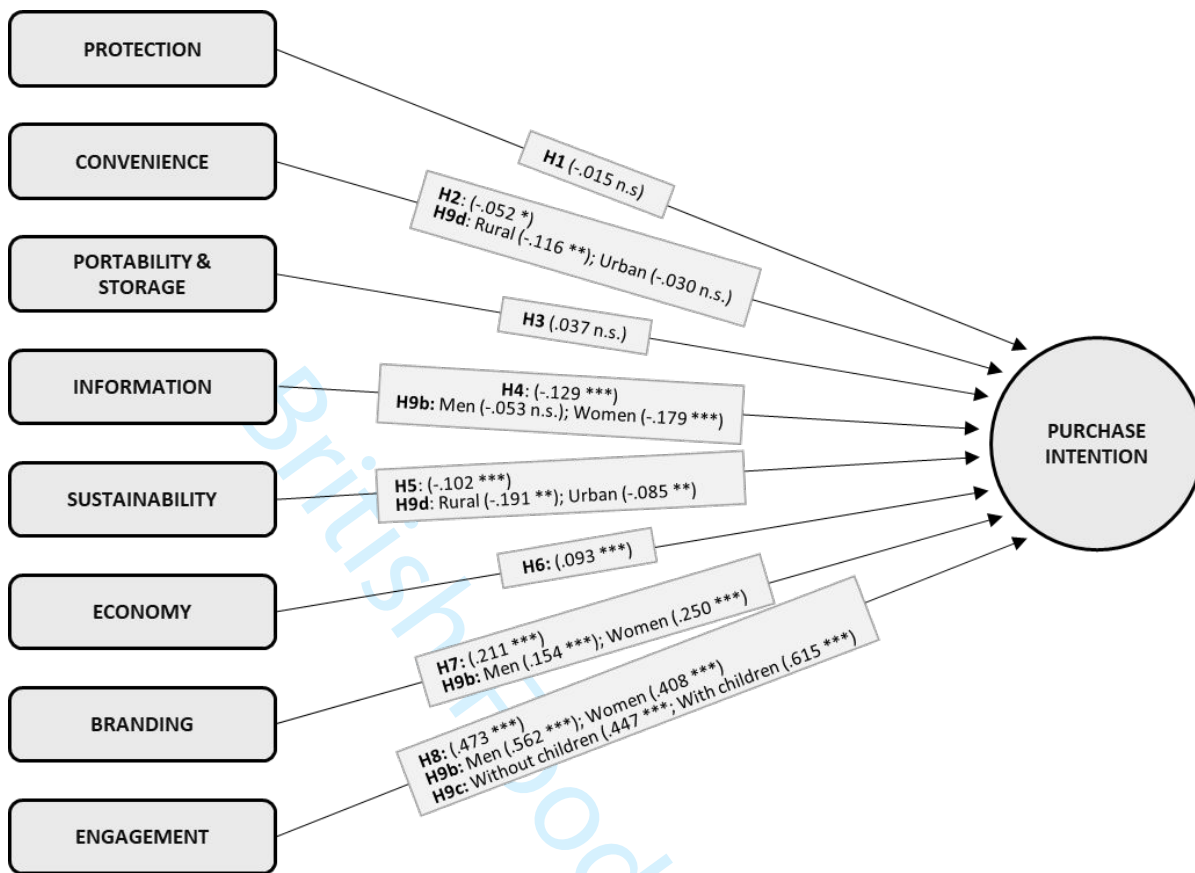


Figure 2. Path analysis result



*** p < .01; **p<.05; *p<.1; n.s: not significant

Submission to BRITISH FOOD JOURNAL

Manuscript: WHAT DO CONSUMERS CARE ABOUT WHEN PURCHASING EXPERIENTIAL PACKAGING?

ID: BFJ-07-2022-0579

Dear Reviewers,

We are pleased to have the opportunity to revise our paper for further consideration in British Food Journal. We provide a detailed response to each reviewer's comments.

We hope that you will find our revised paper much improved and satisfactory. Please note that we highlight all of the major changes and amendments in the revised paper **IN BLUE**.

We believe that we have been able to address and justify our responses to all review comments appropriately. In some cases, the length concerns of the journal requirements do not allow us to go further in the new version of the paper.

The new version of the paper has been submitted to ProofReading-Service.com for editing and proofreading in order to correct the document, ensured consistency of the spelling, grammar and punctuation.

Best regards,

The authors

Submission to BRITISH FOOD JOURNAL

Manuscript: WHAT DO CONSUMERS CARE ABOUT WHEN PURCHASING EXPERIENTIAL PACKAGING?

ID: BFJ-07-2022-0579

Letter to reviewer 1

Dear referee,

Thank you for the opportunity to revise and resubmit our manuscript. We summarize your comments below (*Italics*) then briefly explain our reactions.

1. Originality: Does the paper contain new and significant information adequate to justify publication?: The concept of experimental packaging is a great idea. Justification has to be supported with stronger literature which is missing. The introduction sections talks about many dimensions and lack focus on the concept of 'experimental packaging'.

The introduction needs to be extensively revised. I recommend reviewing the introduction as follows:

- 1- Make a framework for the reader*
- 2- Problems of the topic under analysis*
- 3- Evidencing the GAP of the literature based on the literature*
- 4- Purpose of the study*
- 5- Originality of the study*
- 6- Main results and contributions (to captivate the reader)*
- 7- The last paragraph should briefly describe what the reader can read in the following sections.*

The extended abstract is hastily written. Rewrite it.

Response:

Thanks for the encouraging comment. As suggested the introduction section has been completely revised and reformulated following the proposed structure. We believe the new way of presenting the introduction enhances the readability and value of the information presented.

The abstract has also been rewritten.

2. *Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: I recommend citing more studies published in 2020,2021 and 2022.It is not clear how the hypotheses are formulated. What is the significance of the variables used in the study? Why are they used? and how are they derived? How does it strongly support the concept of 'Experimental packaging' completely? I suggest that the authors dig deeper into the literature. The variables seem to appear less supported by the literature. The literature section lacks an adequate understanding of the concept of experimental packaging.*

Response:

Firstly, we have reinforced the literature sections. Updated references include studies published in the last three years.

Secondly, hypotheses are made considering the impact of the main functions of packaging on the intention of purchasing experiential packaging, that is, protection, convenience, portability and storage, information, sustainability, economy, branding and engagement. The choice of these variables is based on previous research about packaging and packaging features. Although experiential packaging seeks to generate a sensory experience, such packaging must also provide the aforementioned main functions that consumers expect. To clarify this, the concept of experiential packaging has been reformulated in the new version of the paper.

3. *Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: The methodology section is poorly written. I recommend starting the methodology section by reminding the reader of the purpose of the study. They must justify the methodology used. Indicate advantages and substantiate with literature. Why did they use this methodology and not another?*

Response:

Thanks for the suggestions. According to your comments, the Method section has been changed. Now the section begins with the purpose of the study and incorporate arguments and cites to justify the methodology used.

It needs to be clarified when how and where the data was collected. The rationale for using the sample size, type of research design used and process of execution of the sampling, and so on.

Response:

With regard to data collection, we would like to begin by explaining that this research is part of the European project Action COST "Active and intelligent fibre-based packaging-innovation and market introduction" which aims to develop interactive packaging solutions based on renewable fibres with potential success in the market. Within the framework of the development of this study, we have requested the collaboration of the partners of the action from the 34 European countries participants. We sent them the questionnaire by e-mail and requested the dissemination of the same through their professional and personal contacts. These contacts were then asked to forward the questionnaire to their contacts. This non-probabilistic sampling technique known as "snowball sampling" is convenient when a list of the population under study is not available or the individuals who make up the population are difficult to access, as it is the case in our study. The main disadvantage of this type of non-probabilistic sampling is the possible sampling bias that may difficult the generalization of the results. In order to solve this, we carefully selected an initial group of participants knowledgeable about the subject. It was also requested that the dissemination be done by different means: for example, e-mail and social networks, and not only to professional contacts but also to personal contacts, encouraging them to share the questionnaire in turn in the same way. Finally, we have tried to achieve a much larger sample than would be necessary in the case of probability sampling (for a confidence level of 95%, a margin of error of 5% and under the conditions of $p=q=0.5$, the necessary sample would be 385 sampling units, our sample includes 1489 units). This has been explained in the "Design of the research" section.

Include a separate section for 'measures' (scales used). I recommend developing 'Measures of the variables. I also recommend making a table (3 columns) with the variables, having a definition, and a column with studies that applied the variables.

Response:

According to your suggestion, the structure of the Method section has been changed, including a specific section on the measures used. As recommended, a table with the requested detail regarding these variables has also been created. Journal length requirements make difficult to include it in the new version of the paper, however, it could be included if journal deems it relevant.

Variable	Definition	Studies
Protection	Capacity to protect and prevent deterioration of the product and resist the bumps.	Deliya and Parmar, 2012; Fernqvist <i>et al.</i> , 2015; Lindh <i>et al.</i> , 2016; Silayoi and Speece, 2004; Steenis <i>et al.</i> , 2017
Convenience	Quality to facilitate handling and the opening/closing of the product.	Deliya and Parmar, 2012; Eldesouky <i>et al.</i> , 2016; Fernqvist <i>et al.</i> , 2015; Kobayashi and Benassi, 2015; Silayoi and Speece, 2004
Portability & Storage	Quality to facilitate carry, storage and consumption.	Fernqvist <i>et al.</i> , 2015; Lindh <i>et al.</i> , 2016; Sehwret and Kundu, 2007
Information	Description of product content, characteristics, prices, legal regulations and ethical values.	Deliya and Parmar, 2012; Eldesouky <i>et al.</i> , 2016; Fernqvist <i>et al.</i> , 2015; Kobayashi and Benassi, 2015; Kumar and Kapoor, 2017; Lidón <i>et al.</i> , 2018; Menger-Ogle and Graham, 2018; Silayoi and Speece, 2004; Steenis <i>et al.</i> , 2017
Branding	Quality to identify, differentiate the product, attract consumer attention through images, colors, shapes, graphics.	Chitturi <i>et al.</i> , 2022; De Sousa <i>et al.</i> , 2020; Deliya and Parmar, 2012; Eldesouky <i>et al.</i> , 2016; Elkhattat and Medhat, 2022; Kobayashi and Benassi, 2015; Lidón <i>et al.</i> , 2018; Marozzo <i>et al.</i> , 2020; Schuch <i>et al.</i> , 2018; Silayoi and Speece, 2004; Simmonds and Spence, 2017; Spence and Velasco, 2018; Steenis <i>et al.</i> , 2017

Engagement	Quality to stimulate senses; leisure experiences, entertainment and fun.	Elkhattat and Medhat, 2022; Schifferstein et al., 2013; Spence and Velasco, 2018
Sustainability	Quality to be beneficial, safe and healthy throughout its life cycle (Biodegradable, reusable, recyclable, returnable).	D'Astous, and Labrecque; 2021; Donato et al., 2021; Elkhattat and Medhat, 2022; Fernqvist <i>et al.</i> , 2015; Lindh <i>et al.</i> , 2016; Steenis et al., 2017
Economy	Quality to be economical and offer good value.	Chitturi et al., 2022; Fernqvist <i>et al.</i> , 2015; Kobayashi and Benassi, 2015; Schuch et al., 2018;

4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: The PLS-SEM output is missing with the regression weights. Pls include it. You have developed the conceptual model alone. A picture is always better than text! What is the rationale for using the mediation model? Why do you think there are no mediating variables? Why was bootstrapping performed?

Response:

Firstly, the PLS-SEM results are presented in the second column of Table 3. As suggested by other reviewer the nomenclature has been changed to " β " in the current text of the paper.

Secondly, according to your comment, a figure has been included with the results, providing greater clarity in their interpretation.

Thirdly, the moderation of the previous hypotheses has been analyzed on the basis of a set of consumer characteristics that the literature has identified as moderators of the effect that packaging attributes can have on the intention to purchase a product. Since this moderation is not known in the case of experiential packaging, it was tested in our research. Consequently, moderating variables have been included in response to two justifications pointed out by Memon et al. (2019). Thus, these are contextual factors relevant to the field of study and are sought to be tested for the purpose of gaining new theoretical insights. The rationale for moderation is explained in the "Moderation" section.

Finally, the bootstrap has been performed in order to guarantee the data stability at a confidence level of 95%, a bootstrapping analysis was made with 5,000 samples extracted from original data, being the size of these sub-samples equal to the size of the original data sample (Hair et al., 2019a).

5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: I doubt if the purpose written in the extended abstract is met.

I suggest you rewrite the discussion and conclusion sections based on the following criteria.

1. Reinforcing the purpose of the study

2. Main findings

3. Theoretical implications

4. Practical implications

5. Social implications (if applicable)

6. Originality of the study

7. Limitations of the study

8. Future lines of research

Link the discussions /findings to more literature.

Response:

As suggested, we have completely rewritten and restructured the discussion and conclusion section. Consequently, we have reinforced the purpose of the study and complete the findings, implications, limitations and future research. Findings are also link to more recent literature. Moreover, we have incorporated the potential contribution to society of this research.

6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: Ok. English needs to be extensively revised. Many of the ideas are not clearly understood. The idea is to be reviewed by a native speaker.

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3 Response:

4 Following your suggestion, the new version of the paper has been reviewed and edited by a native-
5 English speaking professional editor trying to correct possible typographical and grammatical
6 errors that may exist in order to achieve a better understanding and clarity of the text.
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14 We would like to sincerely thank you for the time devoted to our paper. Your comments have
15 undoubtedly helped us to improve the paper.
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British Food Journal

Submission to BRITISH FOOD JOURNAL

Manuscript: WHAT DO CONSUMERS CARE ABOUT WHEN PURCHASING EXPERIENTIAL PACKAGING?

ID: BFJ-07-2022-0579

Letter to reviewer 2

Dear referee,

Thank you for the opportunity to revise and resubmit our manuscript. We summarize your comments below (*Italics*) then briefly explain our reactions.

A) The reference to food is not made in the title or the abstract. Considering that, however, the author(s) indicated it among the keywords, I would also mention in the abstract, rather than in the title, that the work focuses on food packaging.

Response:

Thanks for your suggestion. As suggested, we have included the mention food in the abstract.

B) Motivation of the paper. In the «Introduction» paragraph, I do not clearly understand and see the paper's theoretical contribution. The author(s) write, "we contribute a definition for the concept of experiential packaging based on Schmitt's marketing approach." I think it is very simplistic as a theoretical contribution to the work's potential. I think the paper, in its present form, partially fails to formulate a research problem that is of interest. We have partial answers on what we know now about the topic and what we do not know. The author(s) should more in detail and in a more systematic way, present answers to these questions, but also what we need to know. Why is this important, for research, for practice? In other words, the «Introduction» paragraph should better stress the identified gap in the literature and why the study is relevant. For example, it is insufficient to say, "the relation between experiential packaging and consumer response has not been studied.". We must also explain why it is important to investigate this relationship. To what and to whom will it be helpful to investigate this relationship? In other words, the "problematization" of the analyzed topic is missing. Going more in-depth with the literature review will help highlight the gap and the theoretical implications of the work. In this sense, the author(s) should anticipate some of them in the «Introduction» and some practitioner-oriented implications of the findings.

Therefore, in the «Introduction» paragraph, I'm aware that the author(s) briefly introduced the study's contribution. However, considering the importance of the analyzed topic, I would suggest extending the significance/relevance of the research in the introduction section by spending a few more words. More specifically: "why examining this relationship is important"; moreover, "for who is important"; finally, "why studying the moderating role of age, gender, family structure, and residential background on the model relationships proposed is important". I think it is important to emphasize the importance, relevance, and originality of the research contribution from the very beginning of the manuscript.

Response:

Thanks for the encouraging comment. As suggested, we have explained in more detail the research problem, its importance, relevance and originality. We believe the new way of presenting the introduction enhances the readability and value of the information presented.

C) Concerning the literature review, I recommend that the author(s) consider the following references to increase references to packaging and the concept of sustainability (Donato, C., Barone, A. M., & Romani, S. (2021). *The satiating power of sustainability: the effect of package sustainability on perceived satiation of healthy food. British Food Journal*); the importance of labels on packaging (Donato, C., & D'Aniello, A. (2021). *Tell me more and make me feel proud: the role of eco-labels and informational cues on consumers' food perceptions. British Food Journal*); and the relevance of packaging colours (Marozzo, V., Raimondo, M. A., Miceli, G. N., & Scopelliti, I. (2020). *Effects of au naturel packaging colors on willingness to pay for healthy food. Psychology & Marketing, 37(7), 913-927.*). Finally, I recommend improving the arguments that lead to hypothesis formulations. They should be strengthened! Additionally, the author(s) should argue why they hypothesize the moderation role of the socio-demographic aspect. The author(s) make references to literature in the discussions. However, it would also be useful if the reference to literature there was also to explain why they hypothesize the various moderations.

Response:

Thank you for your comments and recommendations. As suggested, we have strengthened the literature section with the suggested references as well as with other recent references in the packaging study both in the direct and moderation hypotheses.

The inclusion of moderating variables in the study is based on the research of Memon et al. (2019) who indicate the importance of including relevant contextual factors in the field of study for the

purpose of gaining new theoretical insights. Thus, the moderation analysis includes consumer characteristics that literature in general and on packaging and purchase intention in particular propose as possible moderators. As this moderation is not known in the case of experiential packaging, hence it has been tested in our research. The rationale for moderation is explained in the "hypothesis development" and "Moderation" sections.

D) More clarity is needed about what one considers in research work. I try to explain myself better. On the one hand, emphasis is given to the concept of experiential packaging by describing it from line 31 to line 40 (page 4 of 26): "we consider this type of packaging as providing the 5 types of strategic experiential modules described by Schmitt (1999): sensory, emotional, cognitive, physical and relational. We thus define experiential packaging as packaging that establishes a link between product and consumer by means of a sensory or interactive communicational experience, generating entertainment in both the retail and the usage environment.". Additionally, from line 50 to line 59 (page 4 of 26), the author(s) write "experiential packaging may include some of the following functions: (a) sensorial stimulation (sight, hearing, touch, smell) by the use of lights, sounds, smells and/or textures; (b) improved brand and product experience through games or storytelling using new digital technologies (virtual reality, conductive ink, QR, etc.) and/or c) greater physical interaction between the customer and the product by applying creative packaging design ideas". On the other hand, the author(s) write, "Although experiential packaging seeks to generate a sensory experience, such packages also have to provide the basic functions expected by consumers: protection, convenience, storage and transport, information, sustainability and economy. However, new attributes have to be added to give value to the consumer experience, namely, branding and engagement" from line 12 to line 21 (page 5 of 26). It follows that hypotheses are made considering the impact of the essential functions of packaging on the intention of purchasing experiential packaging.

Response:

We have rewritten the theoretical framework trying to clarify the development of the concept of experiential packaging and prepare this section to better link with the empirical analysis.

Finally, looking at the scales used to measure the constructs (summarized in Table 1), it is clear that the items are related to the basic attributes of the packaging considered, while only the items on the purchase intention explicitly refer to experiential packaging. Then, I am not clear how the link in the questionnaire was considered. Respondents first answered

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questions about various packaging attributes (but in general, or were they considering packaging with obvious experiential characteristics?). I would advise the author(s) to be much more detailed about how the questionnaire was designed and administered, what respondents were asked if they saw examples of packaging (since the questions are written as if you were evaluating a specific packaging, for example: It ensures the safety of ingredients and the product; It facilitates the opening and closing of the product). Moreover, the paper refers to food (experiential) packaging. In the questionnaire, were questions made for specific food packaging? Was there a specific reference to food categories? These aspects of the survey should be further clarified.

Response:

As suggested, we have explained in more detail the research design. This study is aimed to investigate whether and how the attributes of a package influence customers' responses through their intention to purchase experiential packaging. For this purpose, data were collected through a structured self-administered online questionnaire.

Firstly, respondents should value in a seven-point likert scale the importance of packaging functions in general. The measures of the variables referring to the main attributes of the packaging consider both those basic characteristics of a package and those that are specific to experiential packaging. In this way, the attributes of an experiential package are considered holistically. Secondly, purchase intention has been measured through 4 items defined by a text and accompanied, each one of them, by a representative image of the characteristic to be evaluated so that they could associate the response by visualizing a typical package for each of the analysed experiential packages.

E) In the «Method» paragraph, the author(s) write "questionnaire sent out by email.". I would ask the author(s) to specify how the sampling of the subjects involved in the survey occurred.

Response:

With regard to data collection, we would like to begin by explaining that this research is part of the European project Action COST "Active and intelligent fibre-based packaging-innovation and market introduction" which aims to develop interactive packaging solutions based on renewable fibres with potential success in the market. Within the framework of the development of this study, we have requested the collaboration of the partners of the action from the 34 European countries participants. We sent them the questionnaire by e-mail and requested the dissemination of the same through their professional and personal contacts. These contacts were then asked to forward the questionnaire to their contacts. This non-probabilistic sampling technique known as

"snowball sampling" is convenient when a list of the population under study is not available or the individuals who make up the population are difficult to access, as it is the case in our study. The main disadvantage of this type of non-probabilistic sampling is the possible sampling bias that may difficult the generalization of the results. In order to solve this, we carefully selected an initial group of participants knowledgeable about the subject. It was also requested that the dissemination be done by different means: for example, e-mail and social networks, and not only to professional contacts but also to personal contacts, encouraging them to share the questionnaire in turn in the same way. Finally, we have tried to achieve a much larger sample than would be necessary in the case of probability sampling (for a confidence level of 95%, a margin of error of 5% and under the conditions of $p=q=0.5$, the necessary sample would be 385 sampling units). This has been explained in the "Research design" section.

F) Concerning the methodology used, I suggest that the author(s) specify why they chose to analyze data with a PLS-SEM rather than a CB-SEM. Additionally, I suggest adding (in the text and summarized in a table, also as an Appendix) the model fit and quality indexes of the analysis.

Response:

Thank you for your comment.

Regarding to the first question, the use of PLS-SEM for the analysis of our data versus CB-SEM is justified for several reasons that are included in the new version of the manuscript. In particular, these reasons are mainly related to: 1) the analysis objective, 2) the assumptions required by each methodology and, 3) the definition of the variables that make up the model.

- 1) In relation to the analysis objective, the underlying research question seeks to develop a theory through the prediction of a dependent variable, which makes PLS-SEM advisable compared to CB-SEM, more useful if the purpose were the confirmation of a theory (Hair et al., 2019a; Hair et al., 2021).
- 2) Regarding the assumptions required of the data, the use of CB-SEM requires normality and independence of the observations, whereas PLS-SEM assumes neither of these assumptions (Cha, 1994), making the use of PLS-SEM plausible.
- 3) The dependent variable in the model is not metric and the independent variables contain formative and reflective indicators, making the use of PLS-SEM recommended (Hair et al., 2019a).

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3 Regarding the second question, according to the predictive purpose of the research developed in
4 this paper, "the R2 value in PLS-SEM is more representative as a predictor of the variance
5 included in the indicators of the endogenous constructs than the R2 value in CB-SEM" (Hair et
6 al., 2021: 49).
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9 Moreover, all model fit indicators have been reported in the text according to Hair et al. (2019b).
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12 *G) In the «Estimation of the model» paragraph, I would suggest that the author(s) use " β ="*
13 *when reporting the Path coefficient.*
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17 Response:

18 Thank you for your comment. As suggested, the β coefficient has been incorporated to denote the
19 Path coefficient, both in the text and in the tables.
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25 *H) A suggestion: considering that the paper is based on a sample of 1,489 European*
26 *consumers, I imagine you have the opportunity to check whether the nationality of the*
27 *respondents can change the hypothesized reports.*
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31 Response:

32 Indeed, as you comment, it is possible to verify the hypotheses formulated for each country and
33 to test possible contextual similarities and differences between countries, for example, using the
34 Hofstede (2016) approach. However, taking into account that the research focuses on the
35 European consumer and that, in total, information has been collected from consumers in a total
36 of 16 countries, this study in detail that you propose per country could be the subject of future
37 work. According to your comment, this proposal is incorporated as future research.
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46 *I) The «Conclusion» paragraph is very weak and should be reviewed. I think that at the current*
47 *status, the author(s) did not properly develop the paper's contribution. I think the author(s)*
48 *need to return to the theory and explain how the present research contributes to the different*
49 *literature streams identified. Moreover, also the managerial implications need to be*
50 *strengthened.*
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55 Response:

56 As suggested, we have completely rewritten and restructured the discussion and conclusion
57 section. Consequently, we have reinforced the purpose of the study and complete the findings,
58 implications, limitations and future research.
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J) In «Table 2. Dimensionality, reliability, and convergent validity (Bootstrap results)», I would suggest inserting the acronyms of the indexes in correspondence with the last three columns.

Response:

Your comment is appreciated. The full text of the acronyms of these three columns has been indicated at the bottom of the table.

K) Finally, I strongly suggest author(s) carefully read the manuscript in order to correct some typos and grammatical errors by assure English accuracy and flow.

Response:

Following your suggestion, the new version of the paper has been reviewed and edited by a native-English speaking professional editor trying to correct possible typographical and grammatical errors that may exist in order to achieve a better understanding and clarity of the text.

Additional Questions:

1. *Originality: Does the paper contain new and significant information adequate to justify publication?: I think the work has a good level of originality, although it needs to be better explained.*

Response:

Thanks for the encouraging comment

2. *Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?: In general, yes, but concerning the literature review, I suggest some integration (cited in the Comments to the author) and recommend improving the arguments that lead to hypothesis formulations.*

Response:

See previous response above.

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3. *Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?: I think that the methodology employed is appropriate, but I would suggest that the author(s) specify why they chose to analyze data with a PLS-SEM rather than a CB-SEM.*

Response:

See previous response above.

4. *Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?: Results are presented clearly and analysed appropriately. However, the conclusions need to be strengthened.*

Response:

Thank you for your comment. We have rewritten the conclusion and discussion sections. See previous response.

5. *Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?: The theoretical and managerial implications need to be strengthened.*

Response:

We have rewritten the conclusion and discussion sections. See previous response.

6. *Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.: In general, the paper is clearly written, but I suggest carefully*

reading the manuscript to correct some typos, and grammatical errors by ensuring English accuracy and flow.

Response:

See previous response.

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We would like to sincerely thank you for the time devoted to our paper. Your comments have undoubtedly helped us to improve the paper.

The authors

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