MILLENNIALS' PURCHASING BEHAVIOUR IN PACKAGED FOOD INDUSTRY: DO BUZZWORDS MATTER? RESULTS OF A PILOT STUDY

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The Millennial generation is inclined to evaluate products according to their nutritional contents and environmental impact; thus, Millennials tend to search for claims on food labels to determine the health of a product and consequently decide whether to engage in the purchase or not. This research investigates to which extent is Millennials' food shopping behaviour influenced by health buzzwords on food packaging. To serve this purpose, graduates and students of the international study program MIEX – Master in International Management, University of Bologna have been asked to respond to a structured online survey. The main findings suggest that Millennials rely on nutritional labels, ingredient lists and buzzwords. Buzzwords are a requirement Millennials look up for their buying decision making at the supermarket, but they also influence the choice of consumption of a commodity rather than another.

consumer behaviour, food packaging, health buzzwords, Millennials, detox, fat-free

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INTRODUCTION

Walking through an aisle of a supermarket, Carmen, 23 years old, buys a low-fat, sugar-free, all-natural cereal bar. Carmen is one of the 1.8 billion of Millennials in the world (Tilford, 2018) whose attention has been successfully seized by health-related marketing buzzwords. Why was she driven to pick that bar in the first place? Would her decision be the same without those words plastered on the packaging? Does Carmen know what is the true meaning of those labels? To answer all these questions, it is necessary to define Millennials' purchasing behaviour.

Millennials generation is defined as a group of people born between 1979 and 2000 (Myers, Sadaghiani, 2010; Gursoy et al., 2013; Stewart et al., 2017; Hayes et al., 2018; Dimock, 2019) representing almost a quarter of the world's population. Nowadays, this generation is considered the largest and most influential generation of consumers (Lantos, 2014). All consumers are at varying degrees affected by advertising and negatively react to poor service and underperforming products. However, Millennials tend to start or cease the engagement with brands due to personal motives mainly related to the company's social impact and ethics and, thus, tend to buy products or services that positively impact the environment, society, or both (Deloitte, 2019). Millennials are focused on wellness and care about their overall health (Baum et al., 2016; Sanchez et al., 2021). Health and wellness are becoming an increasingly relevant driver of behaviour among consumers (Hemmerling et al., 2015; Massey et al., 2018; Nafees et al., 2022). Consequently, the Millennial generation is inclined to evaluate a product according to its nutritional contents, the number of additives and whether it is organic or all-natural (Nguyen, 2019) and eco-friendly produced (Janssen, 2018; Molinillo et al., 2020; Nafees et al., 2022). When consulting food packaging, indeed, consumers

search for information and cues indicators of product quality (Kuster et al., 2019), health claims like low calories or sugar-free (Baum et al., 2016) among other phrases known as nutritional information or buzzwords. These are statements used to emphasize some characteristics, properties, or messages about products (Duffy et al., 2021), that become popular in a period of time.

Millennials look for brands which can pair their personality, lifestyle, social and community values (Carreon et al., 2017). Since Millennials possess extensive knowledge about the latest trends, brands, and retailers' reputations, they aim at being considered as leaders or experts of the issue among peers. Due to the attitude of Millennial consumers in selecting and consuming products, which helps them express who they are (Ordun, 2015), brands are using more and more storytelling to create an emotional bond with consumers (Northrup, 2014). Regarding eating behaviour, it has been suggested that the degree of healthy perceptions can affect the kind of food that Millennials choose to eat (Chan et al., 2011); in this sense buzzwords play an important role. In fact, consumers search for claims on food labels to evaluate the degree of product health safety (Northrup, 2014; Hemmerling et al., 2015) and consequently decide whether to engage in the purchase or not.

For the sake of this research, health-related buzzwords are defined as popular words exploited by marketers in the food industry more to impress potential consumers than to give a real clue of their true meaning and benefit delivered (Parker, Penfield, 2005). Food labels produce the so-called health halo effect according to which 'the labels can lead consumers to form favourable overall evaluations and then use these overall evaluations to guide inferences about specific missing or unknown attributes' (Sundar, Kardes, 2015) and lead the consumers to perceive those foods as healthier or with more nutrients and fewer health risks than may be true (Breen et al., 2020). For example, the halo effect may lead the consumer to infer that a product has fewer calories than an equivalent commodity just because marked as organic or fat-free (Schuldt et al., 2012). Nonetheless, fat-free does not mean healthy; it may be that despite the lack of fat, the product in truth contains sizeable quantities of sugars and other additives (O'Connor, 2017). There is then a misunderstanding among customers of the true purpose of certain words widely exploited by marketers, which ultimately lead consumers to draw biased conclusions (Huffman, McFadden, 2017). By way of explanation, a product marked as organic is perceived as healthier, safer, and more environmentally friendly than others conventional products alternatives (Schleenbecker, Hamm, 2013) consequently increasing the likelihood to be purchased in the end (Coderoni, Perito, 2021).

Millennial consumers are more conscious of their purchasing power and are prone to spend money as soon as they earn it (Ordun, 2015). However, Millennials buying behaviour differs from that of Generation X (born between 1965 and 1980) (Gursoy et al., 2013; Stewart et al., 2017; Hayes et al., 2018; Dimock, 2019). The latter indeed, present a different perspective on marketing tactics and purchasing preferences. The most striking difference is that Generation X is inclined to shop more conservatively than Millennials. Hence, Generation Xers are less responsive to marketing tactics than the Millennial generation. From a manufacturer's point of view, it means that heavy advertising does not work unless it is paired with proof of credibility (Salesfloor, 2019).

Considering Millennials' population size, their purchasing power and their singular shopping behaviour, companies cannot avoid developing marketing strategies capable of wooing this market segment (Carreon et al., 2017). Segmenting markets according to a specific generational cohort is a powerful tool since the members of the cohort share values, preferences and are more likely to respond homogeneously to external inputs (Parment, 2013). In particular, the food industry is more and more dependent on Millennials' buying preferences as they are the largest group purchasing and preparing their food (Ordun, 2015). For developing a good relationship with Millennial consumers, companies need to focus on the offering of product portfolios characterized by inclusiveness. In specific, incorporating nutritionally dense ingredients or superfoods in food formulations can generate attractive products that are likely to succeed among the Millennial customer segment (Rajan, 2018).

The purpose of this study is to investigate Millennials' shopping patterns when buying packaged food products. In particular, this research focused on the extent to which Millennials are influenced by health buzzwords on packaging when buying or consuming food according to their intrinsic characteristics, such as age, gender and income level. In other words, the research will provide a deeper understanding of the degree of influence and bias created on Millennials' mindset and their consequent evaluation of a product as healthy due to the health halo effect triggered by certain terms.

MATERIAL AND METHODS

The sample and data

The present research has been carried out following a quantitative approach focused on primary data collection and statistical analysis, which allowed us to identify social trends and evaluate the general features of the sample population that is Millennials.

To assess the extent to which Millennials' food shopping behaviour is influenced by health buzzwords on packaging, a structured online survey was conducted. Since Millennials are considered the 'history's first 'always connected' generation' (K u r i a n , 2017), a web-based data collection was considered as appropriate for the sample population.

In order to get an international perspective about the purchasing behaviour of Millennials, the survey is based on responses from students and graduates of the international study program MIEX – Master in International Management (www.mastermiex.com). Altogether, the sample comprised 481 current and historical international students of MIEX aged between 23 and 38 years. That specific age range was a constraint for the sample to follow the Millennial cohort analyzed. To construct a 95% confidence interval with a margin of error of 5 %, we should obtain a sample of at least $N = 214$.

Although the program started in 2002, it has been possible to retrieve the contacts only of those students enrolled from the academic year 2012 onwards. Disposition of the e-mail contacts was a preliminary requirement to be able to distribute the questionnaire via private e-mail and obtain responses in the fastest way. The participants had 18 days (from October 11th till October 28th, 2019) to respond to the survey, which included 15 questions. The valid responses retrieved at the end of the period totaled 101 (20.99 %) due to incomplete surveys or answers not received. A sample size of 10–20 % is generally acceptable and considered reasonable for conducting a pilot study (B a k e r , 1994), and it can still be used to draw relationships among the analyzed variables (C o d e r o n i , P e r i t o , 2021).

The present sample included a total of 48 female (47.52 %) and 53 male (52.47 %) respondents. One of the reasons of choosing the MIEX program was its international outreach engaging students of different nationalities. The nationalities of the participants have been grouped conventionally in five groups: Italian (38.61 %), French (17.82 %), Mexican (7.92 %), Russian (6.93 %), and rest of the world (20.79 %). Considering the sample size and the nationality distribution of the participants, the national differences in consumers' behaviour were not analyzed due to low statistical significance.

Methodology

The present survey entitled 'Purchasing behaviour of Millennials in the packaged food industry: Do health food buzzwords matter?' was created using Google Forms. The questionnaire included open questions and multiple-choice questions using two types of Likert scale questions, where 1 meant extremely unlikely or not at all important, 2 – unlikely or slightly important, 3 – neutral, 4 – likely or important and 5 – very likely or very important. In the first section, the participants have been asked questions leading to respondents' socio-economic profile delineation. Parameters such as age, gender, nationality, and income were collected. This allowed us sorting the respondents into groups. In the second section, the questions were formulated specifically to dig the Millennials' shopping behaviour. It was defined as the purchase decision-making process and purchase intention of consumers based on their degree of sensitivity with respect to health and environmental buzzwords, when grocery shopping.

The health buzzwords were further classified in environmental and personal; fifteen nutrition buzzwords were considered throughout the research: *all-natural, antioxidant, detox, eco-friendly, fat-free, gluten-free, green, high in protein, light, locally grown, low-fat, organic, sugar-free, superfood, wholegrain* (M o o r e , 2017; G u n n a r s , 2018). Along with the impact created by these terms, the research seeked to collect information to shed light on Millennials' other shopping patterns. Firstly, their willingness to switch to a product due to the presence of a certain word on the packaging. Secondly, do health claims lead Millennials to overuse the consumption of a product?

To serve the purpose of the research, the hypotheses (H) tested are as follows:

H1: There is no difference between Millennials' age, gender, and income and the influence of the health and environmental buzzwords on their purchasing behaviour.

H2: There is no difference between Millennials' age, gender, and income and the willingness to switch to products which claim to be all-natural, antioxidant, detox, eco-friendly, fat-free, gluten-free, green, high in protein, light, locally grown, low-fat, organic, sugar-free, superfood or wholegrain.

H3: Millennials' age, gender, and income have no impact on the propensity to consume more of a product which is claimed to be all-natural, antioxidant, detox, eco-friendly, fat-free, gluten-free, green, high in protein, light, locally grown, low-fat, organic, sugar-free, superfood or wholegrain.

The variables age, gender and income have been sub-grouped in practical sets. The sample was categorized by age (23–27, 28–33, and 34–38 years), according to the range of the current and historical international students of the MIEX program. Regarding the gender, the group was assorted in female or male. Finally, the variable income comprised five monthly salary ranges (in Euro): 0–500, 501–1 000, 1 001–1 500, 1 501–2 000, and 2 000+. Euro was selected as it is an international currency, most of the students came from the European Union and each student spent at least 2 semesters in France and Italy, which secures the understanding about the Euro value/exchange rate.

Data analysis

Data analyses were performed using IBM SPSS Statistics, Version 25.0. Categorical variables are presented as relative frequencies (percentages). Inferential statistics have been employed to draw inferences from the sample population and generalize those inferences to the Millennial population. The two-variables Chi-Square Test of Independence (χ^2) (determining whether two categorical variables in a single sample are independent from each other) was used in this study to assess the independence between the categorical variables in the sample population and the purchasing behaviour (Christie et al., 2012).

More precisely, the Chi-Square statistical method evaluates whether an association exists between two variables by comparing the observed frequency and the frequency that would be expected if the variables are independent of each other. If a categorical variable X (in this case age, gender, and income) has m subcategories, then the corresponding cross tabulation is as follows (Table 1).

The formula for Chi-Square is the following:

$$\chi^2 = \sum_{i,j} \frac{(O_{ij} - E_{ij})^2}{E_{ij}}, \; E_{ij} = R_i C_j / N$$

where:
E_{ij} = expected frequency
N = number of individuals in the sample

In this case the degree of freedom is $4(m - 1)$ The rejection rule we use to determine the significance of the relationship between two variables is the P-value method. Thus, to determine significance we compare the P-value and the α-level (Dahiru, 2008). Statistical significance of the results will be evaluated taking $\alpha = 0.1$.

RESULTS

The influence of buzzwords on Millennials' purchasing behaviour

H1: There is no difference between Millennials' age, gender, and income and the influence of the health and environmental buzzwords on their purchasing behaviour.

Age. Overall, the Chi-Square test performed on the variable age and the fifteen buzzwords accounted for in the research did not report statistically significant results except for the buzzwords *green* ($P = 0.098$), *organic* ($P = 0.057$), *detox* ($P = 0.076$) and *low-fat* ($P = 0.079$). Therefore, in this case the hypothesis is rejected and it can be concluded that there is a statistical difference between the age groups considered and the influence *green*, *organic*, *detox* and *low-fat* exert on their shopping patterns. More precisely, 74 % of the Millennials aged between 29–33 presented an inclination towards considering the *green* buzzword neutral or important when shopping at the supermarket. The *organic* variable was evaluated by 68.9 % as neutral or important. *Detox* and *low-fat* (50 %) were valued from the majority as important or very important variables when shopping packaged food at the supermarket.

The Millennials aged between 29–33 showed a general attitude towards rating *organic* (80 %) and *green* (65 %) as important or very important in their decision-making process at the supermarket. Regarding the variable *detox* instead, the respondents spread around the valuations not at all important (25 %), and neutral (45 %). Finally, 60 % considered *low-fat* as important or neutral.

Although 70.3 % of the respondents esteemed the variable *green* as neutral or important, the 34–38-year-old respondents rated *green* as not at all important (50 %) or neutral (50 %) in their buying process. Conversely, the group showed a propensity towards rating *detox* as not at all important (50 %), neutral (25 %) or important (25 %) in their shopping decision-making patterns and did not consider *low-fat* as relevant in their shopping decision making process. Finally, 44 % of the 34–38-year-old respondents valued *organic* as important in their shopping decision making. Nonetheless, the three age groups presented singular attitudes towards each buzzword. By carefully studying the results obtained for the variable age, it has been observed that the 23–28 and 29–33 age groups tended to be more influenced by most of the buzzwords. Conversely, the 34–38-year-old respondents

Table 1. Cross Tabulation of Categorical Variable X by Subcategories

X	Very likely or very important	Likely or important	Neutral	Unlikely or slightly important	Extremely unlikely or not at all important	Total
X_1	O_{11}	O_{12}	O_{13}	O_{14}	O_{15}	R_1
⋮	⋮	⋮	⋮	⋮	⋮	⋮
X_m	O_{m1}	O_{m2}	O_{m3}	O_{m4}	O_{m5}	R_{m1}
Total	C_1	C_2	C_3	C_4	C_5	$N = 101$

X = categorical variable (age/gender/income)
$O_{i,j}$ = observed frequency
$R_i = \sum_{j=1}^{5} O_{ij}, \; i = 1, \ldots, m$
$C_j = \sum_{i=1}^{m} O_{ij}, \; j = 1, 2, 3, 4, 5$

were most often found neutral or not influenced by buzzwords on packaging.

Gender. No statistically significant differences in the buzzwords' influencing the shopping behaviour were found according to gender. However, the following pattern emerged: females and males overall tended to rate the buzzwords either neutral important or very important, except for *sugar-free* (female 59.3 % very important; male 70 % not at all important) and *superfood* (female 75 % very important; male 62 % not at all important) for which they had opposite responses.

Income. Several differences were found when considering the 15 buzzwords and the participants' income, namely concerning *detox* ($P < 0.001$), *fat-free* ($P = 0.011$), *light* ($P = 0.036$), *low-fat* ($P = 0.052$), and *superfood* ($P = 0.001$). Therefore, in this case, the hypothesis is rejected and it can be concluded that there is an association between the respondents' income ranges and the influence those health and environmental buzzwords exert on their purchasing behaviour.

In particular, *fat-free* was found to overall impact positively the decision-making process. In addition, 62.5 % of the 0–500 Euro income group respondents were found to be more likely to value it positively, while the 2 000+ income group respondents valued it not at all important (60 % – more than expected) and slightly important (25 %). Similar were the outcomes for *light* and *low-fat.* Regarding *detox*, overall, the ranges concentrated around the neutral (36.6 %) and important (30.7 %) valuation with nonspecify trends elsewhere. Finally, the variable *superfood* was mostly evaluated as neutral (37.6 %), although 20.7 % of 1 001–1 500, and 34.5 % of 2 000+ respondents valued it not at all important.

The test performed on the leftover buzzwords reported *P*-values greater than the chosen statistical significance level ($\alpha = 0{,}1$). As the hypothesis is not rejected, there is no difference in the influence exerted on respondents' behaviour when buying packaged food between the variable income and the remaining buzzwords. Overall, with reference to the variable income, a propensity of the 0–500 income group was most often inclined towards being influenced by all the buzzwords; conversely, the group with an income of 2 000+ more often than the other income ranges declared buzzwords slightly or not at all important.

Willingness to switch to products labelled with buzzwords

H2: There is no difference between Millennials' age, gender, and income and the willingness to switch to products which claim to be all-natural, antioxidant, detox, eco-friendly, fat-free, gluten-free, green, high in protein, light, locally grown, low-fat, organic, sugar-free, superfood or wholegrain.

Age. A statistically significant difference has been found for willingness to switch to products which are labelled as *detox* ($P = 0.023$), *fat-free* ($P = 0.011$), *low-fat* ($P = 0.063$), and *sugar-free* ($P = 0.064$), according to age. The hypothesis is thus rejected in case of these buzzwords. On the other hand, the hypothesis is not rejected for the remaining buzzwords.

All the age groups mainly consider *detox* as neutral and likely to switch to goods marked as such (64.3 %). Worth mentioning is that none of the 29–33 and 34–38 age groups respondents valued the terms as very likely to be influencing their willingness to switch to *detox* products while instead more counted respondents than expected were found in the valuation extremely unlikely and unlikely. Neutral or likely (59.4 %) is the willingness to switch to *fat-free* products: 50 % of the 34–38 age group though asserted to be unlikely. The likelihood to switch to *low-fat* and *sugar-free* labelled goods was high for 23–28 and 29–33 age groups respondents while the age group 34–28 (50 %) favoured the extreme unlikelihood.

Overall, the Millennials aged 23–28 were likely to switch to products with buzzwords. The other two groups, on the contrary, very often were found to be neutral but anyway always with more respondents in the likelihood than in the negative valuations, except for the *low-fat,* a variable for which the age group 34–38 was extremely unlikely to switch to.

Gender. The Chi-Square test performed on the variable gender and the fifteen buzzwords considered in the research did not report statistically significant results except for the buzzword *fat-free* ($P = 0.062$). Consequently, the hypothesis can be rejected concluding that there is enough evidence to suggest an association between gender and the willingness to switch soon to commodities labelled *fat-free*. In particular, 62.6 % of females responded to likely or very likely perform the switch while the majority of males (37.7 %) stated to be neutral to the buzzword. Also, although representing a small percentage of the total males (15.1 %), more counted males than expected were extremely unlikely towards the switch.

Regarding the leftover buzzwords which were not statistically significant, gender was found to be always aligned with respect to the buzzwords: that is, with very slight differences, the majority of both females and males evaluated the likelihood to switch neutral or very likely to happen. The exceptions were with *antioxidant* and *detox,* for which males had significant percentages in the extremely unlikelihood, 17 % and 18.9 %, respectively. Also, in general, males had more often slightly greater number of respondents in the neutral valuation.

Income. The Chi-Square test performed on the variable income and the fifteen buzzwords considered throughout the research reported statistically significant results for the buzzwords *detox* ($P < 0.001$), *fat-free* ($P = 0.006$), *light* ($P = 0.039$), *organic* ($P = 0.046$), and *superfood* ($P = 0.095$). Hence, the hypothesis is rejected, and it can be concluded that there is a sta-

tistically significant association between income and willingness to switch to a product labelled as *detox, fat-free, light, organic* or *superfood*. Overall, *detox* and *fat-free* were valuated as neutral and likely, but while the 0–500 income group tended more than expected for the likelihood to switch, the 2 000+ income respondents tended towards an extreme unlikelihood. The 5 income ranges reacted similarly neutral, likely, or very likely to switch to a *light*-labelled (88.2 % of the total) or *organic*-marked (94.1 % of the total) product. About *superfood*, 44.6 % of the survey participants were neutral; however, compared to all the other significant buzzwords, each range extremely presented unlikelihood and unlikelihood in switching to products claimed *superfood* (a total of 17.8 %).

For the residual ten buzzwords, the hypothesis is retained thus inferring that there is not enough evidence to prove an association between income and the willingness to switch to a product which is branded with one of the remaining terms. Overall, all the income groups were mainly found to be neutral or likely to perform the switch. However, few striking trends were found with reference to the income variable; there has been noticed a tendency of the majority to being neutral or likely to switch to a product with the tested buzzwords with no relevant divergencies from one group more than another.

The influence of buzzwords on the consumption of products

H3: Millennials' age, gender, and income have no impact on the propensity to consume more of a product which is claimed to be all-natural, antioxidant, detox, eco-friendly, fat-free, gluten-free, green, high in protein, light, locally grown, low-fat, organic, sugar-free, superfood or wholegrain.

Age. According to the Chi-Square test executed on the variable age and the 15 buzzwords, there is an association between the age groups and the propensity to consume more of a product which is claimed to be *detox* ($P = 0.051$), *eco-friendly* ($P = 0.021$), or *fat-free* ($P = 0.043$). While the hypothesis is for these three words consequently rejected, the buzzwords *all-natural, antioxidant, gluten-free, green, high in protein, light, locally grown, low-fat, organic, sugar-free, superfood* or *wholegrain* resulted in not statistically significant for the research, thus the hypothesis was for them retained indicating no association between age and the twelve remaining terms.

A majority of respondents of the three age ranges voted *detox* neutral but, while 85.8 % of the 23–28 age group were neutral, likely, or very likely, the respondents of age groups 29–33 (80 %) and 34–38 (100 %) were neutral, unlikely, or extremely unlikely. The three ranges obtained the same response with most of the answers in neutral and likely: to be mentioned is that while no one of the age groups 29–33 and 34–38 expressed an extreme unlikelihood, 11.7 % of 23–28-aged claimed to be extremely unlikely to overeat an *eco-friendly* product. The ranges in consideration had the same pattern about *fat-free* with the majority voting neutral, likely or very likely.

In hypothesis 3, the variable age, against which the hypothesis is tested, behaved similarly as in the other hypotheses with the exceptions of *superfood* (21.8 %) and *wholegrain* (11.9 %), which overall had the highest responses in extremely unlikely.

Gender. For *eco-friendly* ($P = 0.093$), *fat free* ($P = 0.099$), and *high in protein* ($P = 0.048$), there was enough evidence to reject the hypothesis and state that there is a statistically significant association between gender and consuming more of a product labelled with these claims.

Females were equally neutral (33.3 %) or very likely (33.3 %) to the possibility to over consume an *eco-friendly* product, while male responses were mainly neutral (30.7 %) or likely (31.7 %). The likelihood of indulging more in a *fat-free* product was high for both the genders, the majority of which stated to be likely (33.7 %) and very likely (25.7 %) to fall in the indulgence. Although most females (33.3 %) and males (41.5 %) responded to be neutral to *high in protein* commodities, the second highest trend for number of respondents was likely (female 27.1 %, male 26.4 %) and very likely (female 16.7 %, male 26.4 %) indicating a propensity towards actually consuming more of a *high in protein* product.

Regarding the remaining buzzwords, the Chi-Square test did not suggest a statistically significant association between gender and the propensity to consume more of a product labelled as being *all-natural*, *antioxidant*, *detox*, *gluten-free*, *green*, *light*, *locally grown*, low-*fat, organic*, *sugar-free*, *superfood* or *wholegrain*. Both genders arranged almost equally around the neutrality, likelihood and very likelihood apart from *antioxidant,* for which more males than expected (15.1 %) expressed the consumption of a greater amount of an *antioxidant* good to be extremely unlikely. Also, *antioxidant* (13.9 %) had the highest extremely unlikely percentage followed by g*reen* (12.9 %).

Income. When considering income and the buzzwords, the hypothesis is rejected because of a statistically significant relationship between income and the propensity to consume more of a good claimed to be *eco-friendly* ($P = 0.053$), *fat-free* ($P = 0.024$), *light* ($P = 0.005$), *low-fat* ($P = 0.022$), or *wholegrain* ($P = 0.052$).

The responses to *eco-friendly* were equally neutral and likely, in the income groups 0–500 (37.5 %) and 1 501–2 000 (33.3 %) very likely; these percentages were higher than expected. Totally 33.7 % of the respondents were found to likely overconsume a *fat-free* product, followed by very likely (25.7 %) and neutral (24.8 %). It is worth mentioning that considering the income group 2 000+, significantly more responses

(21.7 %) than expected were extremely unlikely to overconsume such labelled goods. The five income ranges spread around neutral, likely and very likely for the *light* buzzwords. More respondents than expected (40 %) from the 0–500 income group presented to very likely consume a *light* product, from the 501–1 000 income group 50 % gave likely, and finally from the 2 000+ respondents more than expected (47.8 %) gave neutral valuation. Regarding *low-fat,* 30.7 % expressed the very likelihood, 28.7 % likelihood, and 27.7 % neutral valuation with more (47.8 %) 2 000+ income group respondents expressing neutral, 0–500 (42.5 %) very likely, and 501–1 000 (57.1 %) likely valuation. *Wholegrain* was assessed by almost 42 % of the respondents as neutral followed by the 29.7 % in likely. The ranges then almost equally dispersed around the remaining valuations revealing no striking patterns.

Also, there was no difference between income and the willingness to increase the consumption of products labelled as *all-natural, antioxidant, detox, gluten-free, green, high in protein, locally grown, organic, sugar-free,* or *superfood.* Like in the previous hypothesis, the respondents' tendency to be neutral or likely to overconsume a packaged product with the buzzwords resulted as statistically insignificant.

To be mentioned though, are the responses for *antioxidant* and *detox* for which almost 50 % of the respondents reacted to be neutral. Also, the buzzword *green,* for which the likelihood was overall found to be 28.6 %, registered extreme unlikelihood for the income ranges 0–500, 501–1 000, 1 001–1 500 and 2 000+ totalizing 12.9 %.

Lastly, with respect to hypothesis 3, the present analysis found the buzzwords *eco-friendly* and *fat-free* to be statistically significant for all the variables (age, gender and income).

DISCUSSION

When looking at food packages, Millennials tend to consider many attributes simultaneously and seek for trending buzzwords (Mitchell, 2013). In particular, the research outlined a tendency to rely on nutritional labels, ingredient lists and health claims on packaging when evaluating the healthfulness of a product, probably because of the ease of interpreting written information (Kaur et al., 2017). These results confirm the increasing interest of consumers in nutrition, and in the environmental impact of conventional agriculture (Huffman, McFadden, 2017; Nguyen, 2019; Oravecz et al., 2020; Nafees et al., 2022).

Despite there are some reports aimed at determining which products characteristics consumers value as important or could motivate their consumption, this is the first study with an international focus, in which taken all the results together, some facts emerged: the age groups 23–28 and 29–33 resulted more influenceable by buzzwords on food packaging. The presence of the word can thus potentially prevent those shoppers from buying. Also, the two age groups were more likely to switch to a product labelled with buzzwords and overall resulted to be prone to overconsume a product with cues on the package, suggesting a deliberate behaviour aimed to select healthier products in order to improve lifestyle, health and wellbeing (Anastasiou et al., 2019; Kuster et al., 2019). Conversely, the age group 34–38 resulted to be mainly neutral in each hypothesis tested. Hence, it can be suggested that the older Millennials have a purchasing shopping behaviour and an attitude towards buzzwords more like the immediate subsequent Generation X, probably due to younger consumers are more engaged to product information (Kuster et al., 2019). The latter indeed is less responsive to marketing tactics than the Millennial generation. With regard to the variable gender, males indeed, more often responded to the inputs in a negative or neutral way, suggesting that female are more aware of food labels, which is consistent with Anastasiou et al. (2019). On the other hand, it has been observed that the Millennials earning between 0 and 500 Euro were more influenced by buzzwords in their shopping decision making, overall, they were more likely to switch and tended to overconsume products characterized by certain buzzwords. On the contrary, the income group 2 000+ on several occasions resulted more neutral or negative to the buzzwords. Considering the price of the packaged products labelled with buzzwords in our survey would have led to more exhaustive insights into the Millennials' shopping behaviour, however this variable was not taken into consideration. The positive effect of the product price and consumers' level of income on the consumption was proven for example by Rumankova et al. (2019), whereas Molinillo et al. (2020) proved the relationship between the willingness to pay a price premium and the purchasing frequency.

Although all the 15 buzzwords resulted, at different extents, to influence Millennials, only the statistically relevant buzzwords will be hereby further discussed. Regarding the first hypothesis, *detox* and *low-fat* resulted statistically significant for age and income while gender did not provide any statistically significant result. This is partially in line with previous research according to which consumers tend to overeat foods labelled as *low-fat* and can increase food intake by up to 50 % during a single consumption occasion (Chandon, Wansink, 2006) leading to an overconsumption (Anastasiou et al., 2019). The research brought to light the likelihood of the sample to switch to products which contain on the package front the buzzword *fat-free*. Testing the third hypothesis against the variables income, age and gender suggested that Millennials tend to overeat products with

eco-friendly and *fat-free* nutritional claims. *Fat-free* has been the only variable which was found to have an association with age, gender, and income in both the second and third hypothesis. The three age groups similarly responded to be neutral or likely to switch. Females though were overall more likely to swap to a *fat-free* good than males. High was also the likelihood for each income range, with a small expectation at the 2 000+ income group respondents who abnormally tended towards the extreme unlikelihood.

Although buzzwords do not provide information about the actual ingredient or the healthfulness of the product (Sundar, Kardes, 2015; Breen et al., 2020), the results confirm that buzzwords can provide positive inference to customers about the benefits delivered by consuming a product. Given what just mentioned together with the tendency of Millennials to rely on health claims and labels on packaging to judge a product as healthy, suggest that including the word *fat-free*, for instance, can make consumers view or evaluate the product as healthier. This research provides some insights into the Millennials' preferences with respect to trending buzzwords. Possessing and strategically exploiting the knowledge on Millennials' shopping behaviour is strategical for companies and food manufacturers given the generation's likelihood to increase the consumption of a product due to the presence of a certain term. Consequently, being aware of exactly which terms will more likely draw Millennials' attention and exert a greater influence on them can significantly increase profits.

Considering the Millennial population, their purchasing power and their peculiar shopping behaviour, companies cannot fail to target this large population of consumers to stay competitive. Package cues can improve the communication with this population segment which is identified by the tendency to share their experiences. As a matter of fact, this social group is characterized by connectivity (Carreon et al., 2017): they thus tend to expose their taste and preferences on the products they use or on the experiences they have. Also, being Millennials users and consumers of technology, this permanent promotion of what wooed them happens in real time. Lastly, Millennials trust each other (Carreon et al., 2017) meaning that they are sensitive to Word of Mouth (WOM) and Electronic Word of Mouth (eWoM) coming from peers. Therefore, Millennials are highly influenced by peers when trying new foods (Coderoni, Perito, 2021).

In conclusion, a successful food marketing campaign directed at the Millennial segment, not only can potentially increase earnings but also work as a further tool for advertisement. Although companies can strategically use labels and healthy claims as they have been found to be significant drivers of purchasing decisions, they should also keep in mind transparency in their marketing strategies (Baum et al., 2016). Millennials indeed research what they eat and have extensive knowledge of what they care the most (Ordun, 2015). Also, this generation cohort demands an authentic relationship with the brand they engage with (Ordun, 2015). Thus, companies run the risk of deceptively market their products failing to gain the trust of their targeted segment. Consequently, transparency requires companies to develop product attributes such as clear labelling, exhaustive and clear ingredient list.

Limitations of the study

The survey conducted and the subsequent analysis of the data presented a few limitations which may have impacted the results. Firstly, the insufficient sample size. The 101 respondents out of the 481-sample population are not representative neither of the population of MIEX program, nor of the Millennial generation. That is why, the presented analysis can be considered as a pilot study. A larger sample size would have led to more precise results. However, as the sample includes Millennials across different countries, the results provide an international overview on the analyzed buzzwords. Secondly, considering that almost half of the respondents to the survey rated the brand name of a product a neutral proxy which determines a packaged food as healthy or not, the usage of stimulus material related to real branded products images could have replicated more accurately the real shopping experience of the consumer. Finally, specificities about the price of the products were left out of the analysis, as it has been suggested that consumers tend to believe that some products with claims such as organic or gluten free are more expensive (Breen et al., 2020). Similarly, a higher price for products labelled with a certain buzzword was not considered to influence the purchasing behavior of the sample with respect to the product. Being Millennials sensitive to prices though (Gasca, 2015), and likely to spend for quality food and responsible sourcing practices (Nguyen, 2019), weighting that factor in the analysis could have influenced the results differently.

CONCLUSION

The purpose of this research was to evaluate Millennials' perceptions and purchasing behaviour about health-related buzzwords present on the package front of food items. It has been found that young Millennials are more influenceable than older Millennials by buzzwords such as *low-fat* and *detox*. Overall, the variable gender failed to reveal important patterns: both genders indeed tended to respond similarly to each hypothesis. Thus, both females and males considered buzzwords relevant in their purchase and consumption decision making, with females tending to be more likely to switch to a product with buzzwords

while males overall being more neutral. The tendency of the sample to overconsume a product which is labelled *fat-free* has emerged. Finally, the respondents with lower income always positively reacted to the hypothesis of the research, while those with the highest salary overall were neutral.

Being Millennials one of the largest consumer segments of the moment, companies cannot fail to target this generation cohort. They are prone to scrutinize nutritional labels, ingredients list and health claims, which are ultimately drivers of Millennials' purchase decisions. Companies need to keep in mind that, although Millennials are found to be influenced by buzzwords, they cannot exploit those terms as a mean of advertisement to deceptively draw those consumers' attention. On the other hand, the importance of packaging and buzzwords can be reinforced not just for marketing reasons, but also as a vehicle to nutritional education, to promote a healthier eating focused on Millennials, which has received little attention.

In conclusion, these results can enhance understanding of how the health and eco-friendly perceptions may guide the purchasing behaviour. The results can be useful for companies to reorient their marketing communication which aims at staying ahead of the competition and eventual acquiring a competitive advantage.

Due to the limitation of the study, the research is by no means exhaustive but remains open to further debate.

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