

# Indian women consumers' wine choice: a study based on conjoint analysis

Indian women consumers' wine choice

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## Abstract

**Purpose** – Wine consumption among women in India is gradually increasing on the back of several factors such as increased urbanization, higher disposable income, rising affluence of the people, exposure to new cultures and a gradually changing perception about wine being a healthy beverage. Eventually, this offers tremendous opportunities for wine marketers to design appropriate strategies to target Indian women consumers. However, along with this growth, there is growing need to identify the attributes that the women desire in the wines of their choice. Toward this, the current study aims to identify the wine attributes that influence the purchasing behavior of Indian women consumers.

**Design/methodology/approach** – In-depth interviews of 27 women wine consumers, aged between 25 to 46 years, were conducted to identify the topmost essential wine attributes. Later, a conjoint analysis using 1000minds, an Internet-based software implementing Potentially All Pairwise Rankings of all Possible Alternatives (PAPRIKA), was used to collect data from the participants. The total number of responses received was 271.

**Findings** – The type of wine, taste, price, familiarity and country of origin emerged as the five most crucial wine attributes in wine choice after the in-depth interview. Conjoint analysis results revealed that sweet red wine priced between Rs 600 to Rs 1,200 is the most preferred wine by Indian women consumers.

**Research limitations/implications** – The study provides valuable and actionable insights for both domestic and international wine marketers and manufacturers in the identification of wine attributes that predominantly influence women consumers' choice of wine in India.

**Originality/value** – The study contributes to wine consumers' literature by identifying wine attributes favored by women consumers in India. Our findings will be of great use to wine marketers who can leverage the insights to design appropriate marketing and advertising strategies, develop new products and make more informed branding and pricing decisions.

**Keywords** India, Conceptual/ Theoretical, Wines, Individual perception, Consumer behavior, Survey research, Conjoint/Discrete choice, Brand familiarity, Price, Country of origin, Taste, Type of wine

**Paper type** Research paper

## Introduction

Wine consumption among women has increased significantly, opening up a new area in wine market segmentation (Nassivera *et al.*, 2020). About 80% of the shoppers purchasing wine on

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the retail shelves in the USA are women (Hunt, 2005). According to the recent survey (Statista, 2019) conducted in the USA, 43.2% of women respondents chose wine as their favorite alcoholic beverage. A similar study with 2,000 adults in the UK showed that wine was a favorite beverage for 39% of the respondents. The wine consumer literature further suggests that men and women consumers differ in their preferences and attitude toward wine. For example, there are differences in the keywords they use for wine information search on the Internet (Atkin *et al.*, 2007; Barber *et al.*, 2006), their response to a wine advertisement (Barber *et al.*, 2006; Le Bel, 2005), their consumption behavior (Bruwer and McCutcheon, 2017), wine drinking occasions (Thach, 2012), wine consumption (Lanfranchi *et al.*, 2020; Pappalardo *et al.*, 2019) and pricing (Atkin *et al.*, 2007). However, one of the key areas that is yet to be explored is the wine attributes that women consider when selecting a wine. Since the perceived importance of attributes varies across customers and segments, marketers need to explore the specific product attributes that are relevant to their target market (Yen, 2014).

Understanding of women's preferred wine attributes is relevant and important for the wine industry and wine marketers for several reasons. Women are expected to control \$43 trillion of global consumer spending by 2020. There will be 100 million more women in the worldwide labor force by 2030, and this segment is expected to control or influence over 85% of all products and services (Valente, 2020). Research shows that when it comes to consumer goods, women control the purse strings; however, many businesses ignore this fact and behave as if they have no say over the purchasing decisions when it comes to wines (Silverstein *et al.*, 2018). Global advertising generally portrays women as domestic, obsessive and selfless nurturers, largely ignoring their role in the wine purchase decision. Research shows that women decide on the purchases of 94% of home furnishings, 92% of vacations, 91% of homes, 60% of automobiles and 51% of consumer electronics. Further, women consumers are increasingly resisting the stereotyped, segmented only by age or income, and lumped together into an "all women" characterization (Silverstein *et al.*, 2018). As against this stereotyped image, women actually have more buying power than before, and they are now the primary shoppers purchasing for themselves and others, whether it is family or friends (Brenenna, 2020).

Several studies, outside India, have investigated the role of gender in moderating the preferences for wine attributes. For example, Atkin and Sutanonpaiboon (2007) find that in the USA, women have a greater tendency to extrinsic cues such as medals and price; Australian women favor label style (Remaud *et al.*, 2008); and image, picture, logo and colors are the main attributes among women in New Zealand (Thomas and Pickering, 2003). Gender is also seen to moderate and influence other aspects of wine selection, for example, its intrinsic attributes (Thomson, 2007). For instance, Australian women showed a preference for sparkling and white wine (Hoffman, 2004), and women in the US exhibited a preference for white wine (Barber *et al.*, 2006).

Extant studies have identified several factors that influence a consumer's wine selection (Chaney, 2000; Cobelli *et al.*, 2021; Cobelli and Wilkinson, 2020; Hollebeek *et al.*, 2007; Duhan *et al.*, 2019; Lategan *et al.*, 2017; Quintal *et al.*, 2017). However, most of these studies have been conducted in countries where the wine market has already reached the mature stage. In contrast, very few studies have been conducted in the Indian context (Deodhar *et al.*, 2019; Mehta and Bhanja, 2018). Research conducted in India, based on the conjoint analysis (Mehta and Bhanja, 2018), reveals that price is the most imperative attribute followed by the type of wine. However, other attributes (brand, the origin of country and taste) have no significant impact. More recently, Deodhar *et al.* (2019) conclude that factors including the types of wines such as old-world wines, new-world wine, champagne, reserve wines and the percentage of alcohol content significantly impact wine purchase decisions. Further, the club-shaped bottles had a considerable effect on their wine choice. However, both these

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studies failed to provide a perspective on how wine attributes differ across gender. Therefore, it remains unclear whether the preferred attributes are the same across both genders. Another limitation of both these studies is the small sample size they use to base their findings.

In India, wine is seen as a healthy, classy, empowering drink and a socially accepted drink for women (Holland, 2017). Rising affluence, aspirations, societal pressure and exposure to new lifestyles have attributed to the rise in alcohol consumption among Indian women. Dissolving social taboos and cultural inhibitions in the context of alcohol, especially for women, and the perception of wine as a healthy drink, are factors that have made wine a preferred beverage among Indian women. Meanwhile, India is known for its hard-liquor consumption, registering a significant growth rate of 23.8% of alcohol consumption between 2011 and 2015 (Research and Markets, 2016). Correspondingly, wine consumption also witnessed a similar rise in proportion, reaching a consumption of 31.7 million liters in 2015. It is also seen that an equal number of women are purchasing wine as men in India (both on-trade and off-trade). Further, previous research shows that 70% of the footfall at the wineries in India are of women consumers (Holland, 2017). Interestingly, they are willing to pay more money than men on all occasions. The higher education enrollment rate in women matches that of men and their disposable income too has increased by 63% (Eakins, 2019). Therefore, it is unwise for any industry to ignore or underestimate women consumers including the food and beverage industry. In this direction, a women-centered wine consumer study is vital for better marketing and advertising. Though some researchers have pointed to the need for a study in this direction, research remains limited. The current study aims to address this gap in literature, by investigating the wine attributes critical to Indian wine women consumers. It also examines the relative significance and preferred levels of various wine attributes among Indian women consumers. A better understanding of this would help Indian and international winemakers and retailers to design appropriate product development and marketing strategies for women wine market segment.

## Literature review

### *Gender and wine consumption*

The differences in wine consumption based on gender can be attributed to many factors and they exhibit different global patterns (Rodríguez-Donate *et al.*, 2019). Though wine consumption is fundamentally associated with men in traditional wine-producing countries, this trend seems to be the opposite in emerging wine-producing countries. Women are now increasingly consuming wine, even to a greater degree than men (Velikova *et al.*, 2013). So far, the studies on wine consumer behavior have focused on gender from different perspectives.

Morey *et al.* (2002) conducted one of the earliest studies in Australia and found that gender did not have any significant impact on wine attributes and wine consumption. This notion further found support in another study conducted in Australia with similar results (Brown and O'Cass, 2006). However, a recent study (Bruwer and McCutcheon, 2017) found a significant difference in the consumption of wine type, which, in turn, was moderated by other socio-demographical variables. Younger Australian women consumers placed more importance on external cues while buying wine.

While label design and bottle closure were important to both men and women in case of the US wine consumers, and self-confidence was a significant factor across gender and age (Barber *et al.*, 2006). Further, labels, medals, awards and shelf tags were also found significant to the US women wine consumers (Atkin *et al.*, 2007). However, there was no significant difference across gender with regard to product involvement level and

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consumption frequency (Bruwer and Johnson, 2010). Furthermore, findings in the USA also indicate that men were more interested in discussing the technical aspects and exhibiting their knowledge on the subject. In contrast, women preferred to simply relax and socialize with friends over wine (Thach, 2012).

A study conducted in Spain (Bernabéu *et al.*, 2012) reveals that women preferred to choose their wine depending on its region of origin while men based their choice on prior experience. Gender emerged as a significant factor in wine sensory attributes among Chinese wine consumers. Except for color, gender significantly impacted sensory attributes, such as sparkling property, aroma degree, aroma type, sweetness, mouthful and flavor (Chu *et al.*, 2019). Another study conducted among Portugal wine consumers reveals that women frequently associate it with context consumption, whereas men associate it with convivial and sensorial pleasure (Ferreira *et al.*, 2019). While prior knowledge and country of origin were important to men, women seemed to focus on wine brands, front label information and awards. A recent study conducted in India (Mehta and Bhanja, 2018) to identify the important attributes for young wine drinkers reveals that women consumers exhibited preference for white wine over red and sparkling wine.

Thus, the above literature review shows that the role of gender has been studied from different perspectives. However, as Bruwer *et al.* (2012) and Villanueva *et al.* (2015, 2017) highlight, it is still necessary to study consumers' wine choice more thoroughly from the gender perspective, particularly in new world wine countries such as India. This is because gender is considered as a salient basis for segmenting the wine market.

## **Theoretical background**

### *Cue-utilization theory*

According to the cue-utilization theory, consumers depend on the product attributes to minimize the risk involved during product purchase (Cox *et al.*, 2006). This theory has been widely recognized as a rationale for explaining the consumer's evaluation of products and product quality. According to this theory, consumers rely on both extrinsic and intrinsic cues to choose a product. Meanwhile, wine choice is a complex process (Lockshin and Corsi, 2012) involving both extrinsic and intrinsic attributes (Duhan *et al.*, 2019; Higgins *et al.*, 2015). Extrinsic factors include variables that do not directly alter the product quality, such as price, brand, packaging and size. On the other hand, intrinsic factors are directly associated with wine and include taste, smell and flavor. Several studies on wine literature suggests that brand, size and design of the wine bottle, label, types of wine, country origin, content of sulfites and percentage of alcohol are some of the other attributes that influence wine consumption (Carsana and Jolibert, 2017; Chamorro *et al.*, 2020; Chu *et al.*, 2019; Fernandes Ferreira Madureira and Simões de Sousa Nunes, 2013; Hu and Baldin, 2018; Iazzi *et al.*, 2019; Lunardo and Rickard, 2019; Migliore *et al.*, 2020). Therefore, our study integrates the cue-utilization theory as the theoretical framework to investigate the wine attributes (extrinsic and intrinsic) preferred by women consumers in India. A detailed summary of previous studies, wine attributes and findings are provided in Appendix 1.

## **Extrinsic and intrinsic attributes**

### *Brand familiarity*

A brand sometime can play as a substitute attribute, for example, quality (Lockshin and Rasmussen, 2000). A study conducted among US wine consumers suggests that when they don't have an opportunity to taste wine, they use brand name as a cue to interpret its quality (Kelley *et al.*, 2015). Further, when consumers' purchase behavior is influenced by perceived risk (Spawton, 1990), they are more likely to depend on extrinsic cues, such as brand

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familiarity and country of origin (Atkin and Johnson, 2010). A study conducted among US women wine consumers revealed that they had a stronger tendency to decide based upon secondary wine attributes, such as medals won by the brand, price and brand visibility and its strength (Atkin *et al.*, 2007). However, the brand name alone is not often a strong predictor of wine choice (Kelley *et al.*, 2015), and other extrinsic attributes, such as price, and country of origin also play a significant role in selection (Lockshin *et al.*, 2017). Thus, we propose the following hypothesis:

*H1.* Indian women consumers prefer known brands over unknown brands.

### *Price*

Contemporary studies on wine consumption suggest that price is a critical factor for both knowledgeable and novice consumers (Lockshin and Corsi, 2012; Zelený, 2017). It is also sometimes the primary determinant of wine choice (Escobar *et al.*, 2018; Ritchie *et al.*, 2010). Specifically, when consumers have more knowledge about the product, they tend to depend on extrinsic variables such as price (Gergaud and Livat, 2007; Veale and Quester, 2009). Contrary to this, Lockshin *et al.* (2017) propose that consumers with less product knowledge place even greater importance on price. In a study comprising 6,000 European wine consumers, both connoisseurs and nonconnoisseurs, it was found that consumers use a set of available signals such as price, brand, good will and past consumption to assess the quality of wine. Interestingly, price emerged as the main source of information on quality (Gergaud and Livat, 2007). However, it was also found that connoisseurs use this signal less intensively than nonconnoisseurs. Price is used as signals of quality (Schnabel and Storchmann, 2010) and holds greater importance for the inexperienced consumers (Mastrobuoni *et al.*, 2014). However, with regard to the gender role, an experimental design study conducted in Australia suggests that it has no significant influence on wine selection when respondents are provided with extrinsic cues, i.e. price, brand, country of origin and awards (Morey *et al.*, 2002). According to a study conducted among Portuguese wine consumers (Ferreira *et al.*, 2019), women show higher purchase tendency for higher-priced wines as a risk reduction strategy. Therefore, we propose the following hypothesis:

*H2.* Price is the most preferred attribute for Indian women wine consumers.

### *Country of origin*

Another essential attribute that influences wine purchase is its country of origin (COO) (Espejel *et al.*, 2011; Nallaperuma *et al.*, 2017). Studies conducted in the US (Mueller Loose and Szolnoki, 2012), China (Balestrini and Gamble, 2006; Hu and Baldin, 2018; Hu *et al.*, 2008) and Europe (Cohen, 2009; Dimara and Skuras, 2005; Martínez-Carrasco Martínez *et al.*, 2006) suggest that COO is a crucial attribute of wine purchase. The inclusion of information about the COO enhances consumers' confidence in wine quality (Bruwer and Johnson, 2010). While few consumers choose a wine of foreign origin, others exhibit greater tendency toward domestic wine (Brown and O'Cass, 2006). For example, a study conducted in India (Mehta and Bhanja, 2018) reveals that Indian wine consumers, particularly generation Y, preferred domestic wine over international wine. However, the COO is seen to be the most important wine choosing attribute for Spanish women (Bernabéu *et al.*, 2012). Based on the discussion, the following hypothesis is proposed:

*H3.* Indian women wine consumers prefer domestic wine over international wine.

*Taste*

Studies based in Italy and the USA find taste to be an essential wine choice criterion (Casini *et al.*, 2009; Higgins *et al.*, 2015). Wine consumers are likely to prefer the wine they have already tasted and developed a liking (Lockshin and Corsi, 2012). Taste is, therefore, an essential predictor of repeat purchase (Sarkar *et al.*, 2016). Taste is found to be the most crucial factor in purchasing wine for all three generations of South Africans and Californians (Lategan *et al.*, 2017; Qenani-Petrela *et al.*, 2007). However, the young Indian millennial consumers who have just begun experimenting with wine are more likely to prefer sweeter wines over dry ones (Mehta and Bhanja, 2018). Women are stereotyped in terms of the common notion that they prefer sweeter wine (Miller and Bruwer, 2006), a fact which finds resonance in a study conducted with a smaller sample of women in Australia and which suggests that they are indeed attracted to sweeter, soft and less structured wine (Lewis, 2004). This finding is echoed in the survey conducted by the Beringer Wine Company in the USA. However, they also found that fondness for sweet wine was equally found among men and women (Fuhrman *et al.*, 2001). Conversely, in the UK, women are seen to be more attracted to dry wine (Low, 2001). Based on these findings, we propose the following hypothesis:

*H4.* Sweet wine is the most preferred wine among Indian women consumers.

*Types of wine*

It is suggested that women have a greater capacity to choose quality wine because of their greater ability to distinguish different smells than men (Wenzel, 2005). Because of this, women are found to prefer white wines with blatant acidity and lower tannins. Contrary to this, men are likely to go for massive red wines (Juergens, 2005). However, the study conducted among wine consumers from 12 countries by Goodman *et al.* (2008) suggests no significant difference in wine choice among men and women for most wine varieties except Shiraz. It seems that men prefer dry wines while women prefer white semi-dry wines. In another study Atkin and Sutanonpaiboon (2007), both men and women are seen to prefer dry red wines ranking them as the highest and blush red as the lowest. The study also reveals that the mean statistical average for men was significantly higher than women. Meanwhile, the focus group study (Mehta and Bhanja, 2018) in India suggests that women wine consumers prefer white wine over red and sparkling wine. Red wine is seen as the healthiest, whereas sparkling wine is seen as expensive and meant for celebrations.

*H5.* White wine is the preferred wine of choice for Indian women consumers

**Materials and methods**

As wine purchase behavior is considered complex, and very little is known about the Indian women wine consumers' buying behavior; an exploratory study was initially conducted to understand the attributes that influence its selection. The study involved in-depth interviews of 27 women wine consumers of the age group between 25 to 46 years. The research team approached the consumers who had purchased and consumed wine at least once in the past three months. All participants were assured anonymity for their responses. Initially, they were asked about their overall wine consumption experience, and the discussion then gradually shifted to wine attributes. The critical debate revolved around how consumers choose their wine. At the end of the interview, the participants were asked to rate the top five most essential wine attributes identified from the literature. The ranking

was in the following order: taste, price, brand, country of origin and types of wine. Twenty-three participants found these five attributes to be crucial to their wine selection.

The 1000minds software (Hansen and Omblor, 2008), which adapts PAPRIKA (Potentially All Pairwise Rankings of all possible Alternatives) method, is a full factorial DCE that is widely used in research (Baggott *et al.*, 2019; Miroso *et al.*, 2020) and was used to collect the data from the respondents. Also known as conjoint analysis (McFadden, 1974), it is an extensively used technique to find consumers' choices involving trade-offs between alternative product attributes of interest. In DCE, typically, the participants are presented with a series of alternative hypothetical scenarios containing several attributes. Each of these scenarios consists of a combination of attributes and levels. In the context of this research, the participants were shown a pair of hypothetical options, each of which had two attributes at different levels (Figure 1). They were asked which of these two hypothetical options they preferred (with all else being equal). The 1000minds software recognized all other hypothetical product attributes that could be ranked pairwise via transitivity and eliminated them from the survey. In other words, if participants prioritized option A over option B, and then prioritized option B over C, by transitivity, the software prioritizes A over C and automatically eliminates the question ranking the last pair (between A and C). This procedure ensures that participants are asked the minimal number of trade-off questions possible (Hansen and Omblor, 2008).

The 1000mind software, which adapts the PAPRIKA, is preferred over other DCE applications considering its ease to respond. Most importantly, one of the advantages of the PAPRIKA method is the process of transitivity and elimination. The software minimizes the number of choices given while ensuring that they rank all possible pair-wise ranking of wine attributes (Hansen and Omblor, 2008). Specifically, the part-worth utility values are obtained from the process of pairwise ranking using linear programming (Norman, 2018).

#### Data collection

The data for the study was collected through an online survey. A link for 1000minds software, which facilitates the ranking of wine attributes, was shared on the social media pages dedicated to creating awareness, providing knowledge on wines and promoting wine consumption in India. The eligibility criteria to fill the survey stated that participants had to be minimum of

**Survey on preference towards wine attributes**

**Which of these (hypothetical) wine do you prefer?**

<p>Type of wine <b>White</b></p> <hr/> <p>Price <b>₹ 1800</b></p> <p style="text-align: center;"><b>THIS ONE</b></p>	<p>Type of wine <b>Red</b></p> <hr/> <p>Price <b>₹ 1200</b></p> <p style="text-align: center;"><b>THIS ONE</b></p>
<p><b>THEY ARE EQUAL</b></p>	

**Figure 1.**  
Example of a pairwise ranking question

18 years of age, as this is the statutory age of alcohol consumption in India, and that they must have consumed wine or champagne at least once in the past six months. They were informed that their participation was voluntary, confidential and involved no incentives.

The quality of participants' response to pairwise ranking was assessed in several ways using the in-build criterion in the 1000minds software. First, the processes were developed with the objective of identifying and excluding low quality data from the final dataset. Second, the consistency in the choice of attributes was evaluated by repeating same pair of choices of attributes previously answered. Third, the process recorded the response time of each participant and those who answered implausibly quick with a median time of less than 5 s per ranking of choice were excluded from the final dataset.

The current survey was completed by 398 participants and totally, response of 126 were excluded from the analysis, as they had not consumed wine or champagne in the past six months. The breakdown of the exclusions are as follows: sixty-seven responses were excluded for inconsistent response. Fourteen participants were excluded, as they had ranked the attributes implausibly quickly. Forty-five responses were removed, as they were filled by men. Thus, only 271 responses were considered for the final analysis, resulting in a 68% response rate. The snow ball sampling technique was used to collect data for this study over a period of three months (6 Dec 2020 to 23 March 2021).

The 12 levels of the five selected wine attributes, intrinsically ranked from lowest to highest in terms of their relative value to the wine consumers, are listed in [Table 1](#). These levels were established based on existing literature review.

## Results

### *Demographic profile of the participants*

Participants in the study were Indian women aged between 24 to 60 years. The majority of the participants were young and belonged to the age group of 21 to 30 years. About 5% had education higher than postgraduation, whereas 53% were graduates, and 42% were postgraduates. Slightly more than half of the participants reported a monthly income of less than 50,000. Thirty percent had an income between Rs 50,000 to 1 lakh. Close to 14% had an income of more than Rs 1 lakh. The demographic profile of the participants is presented in [Table 2](#).

### *Conjoint analysis*

The central idea of the conjoint analysis is its unique ability to model individual consumers' preferences into utility scores, also known as a part-worth utility. They are aggregated to

Wine attribute	Levels
Type of wine	White Sparkling Red
Taste	Dry Sweet
Price (in Rs)	1,800 1,200 600
Country of origin	Domestic Imported
Familiarity	Unknown Known

**Table 1.**  
Attributes and levels  
of wine purchase



represent the relative importance or weights assigned to product attributes and their respective levels. To further explain end of conjoint analysis, there are two scores obtained from the conjoint analysis: relative importance by attributes known as attribute part-worth and level part-worth. The attribute part-worth, generally explained in percentage, helps the researchers or marketers understand the importance of each attribute over the others. Level part-worth allows the researcher to dive deep to analyze the specific levels within the attributes that determine customers' choice (Orme, 2010). The estimated relative utility value and the average of all five wine attributes are presented in Table 3. Other than the part-worth utilities, the normalized attribute weights, an alternative, though equivalent, mean utility value, is also shown in Table 3. The relative importance of each wine attribute is determined by the highest rank of its preference level, and the total of all the highest preference levels are equal to 100%.

#### *Part-worth utility*

The part-worth utilities are also called attribute importance scores and level values. They are expressed in numerical terms, reflecting the importance of each feature that influences the customer's decision while choosing wine. The most preferred level within each wine attribute is those levels with large part-worth utilities. The mean part-worth utility score and the relative importance of the wine attribute obtained in the study indicate that participants considered the type of wine "Red" as the most preferred attribute with the relative importance of 24.3% when deciding their choice of wine. This finding is in line with Market Intelligence Report (2017). According to the report, Indian consumers have higher preferences for red wine followed by fortified, white and sparkling wines.

The second most preferred attribute is the taste of wine "sweet" with a relative importance score of 22.4%. While the price of wine Rs 600 has been ranked three (20.5%), the relative importance of brand familiarity (17.8%) and country of origin (14.3%) have been ranked four and five, respectively. This finding is also in line with Wine intelligence (2017). Price is the primary driver of wine choice for consumers (for both men and women) followed by brand familiarity and the COO. However, while Indian wine consumers are price-

Demographic profile	Frequency	(%)
<i>Age (years)</i>		
21–30	141	52.0
31–40	74	27.3
41–50	33	12.1
51–60	23	8.5
<i>Education</i>		
Metric	4	1.5
Graduation	144	53.1
Postgraduation	114	42.1
Others	9	3.3
<i>Monthly income (in Rs)</i>		
20,000 to 49,999	150	55.4
50,000 to 99,999	83	30.6
1 lakh to 1.49 lakhs	20	7.4
1.5 to 1.99 lakhs	15	5.5
More than 2 lakhs	3	1.1

**Table 2.**  
Demographic profile  
of the participants

sensitive, women consumers are willing to spend more money on wine (Holland, 2017). Further, the report also highlights that the growth in wine consumption is driven by young adults between the age group 20 and 35 years.

The country of origin is the least essential attribute for Indian women. The part-worth utilities of medium levels, including “sparkling wine” (15.5%) and wine that is priced Rs 1,200 (10.6) indicates that it is considered acceptable to the participants. Attributes such as “White”, “Dry”, “Domestic”, “Unknown” and the wine priced at “Rs 1,800” are considered disfavored given that they have zero utility in wine selection by Indian women consumers. When comparing the mean weight of various levels of individual wine attributes, red wine had the highest preference after the sparkling wine with a score of 63.6. Medium level pricing of Rs 1,200 has the second-highest level of the score of 51.4. The mean weight of wine attributes in Table 3 indicates that red wine and the price of Rs 1,200 are highly preferred after the sparkling wine, which is priced at Rs 600. The preference value of wine attributes is presented in Figure 2.

#### *Discrete choice experiment*

In terms of the most preferred combination of wine attributes, also called a concept in the discrete choice experiment, the ranking in Table 4 indicates that sparkling wine, imported, sweet in taste, known brand and priced at Rs 600 is the most preferred choice of wine. The same combination or concept with the price of Rs 1,200 is ranked as the second most preferred combination. White wine, tasting dry, manufactured in India, unknown brand with the price of Rs 1,800 is the least preferred wine concept. The top five ranked combinations of wine attributes by the current study participants are presented in Table 4.

### **Discussion**

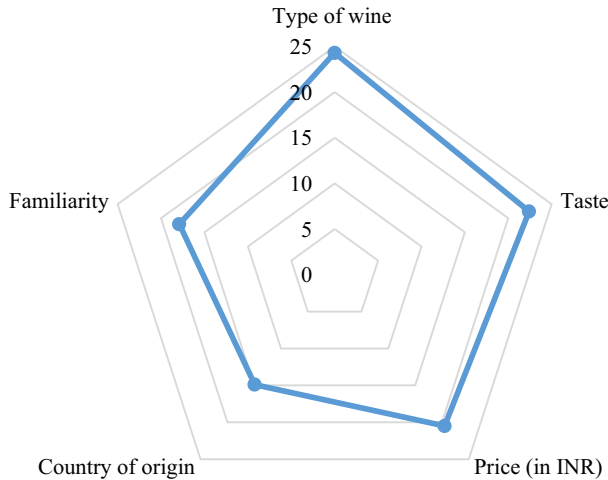
The current study aims to provide novel insights into consumption preference for Indian women in terms of wine attributes. The findings will have significant implications for wine manufacturers, marketers and importers. India is a high growth wine consumption market on the back of factors such as increased urbanization, changing demographics and exposure to new culture. The changing perception about wine amongst Indian women as a healthy and civilized drink provides a sustainable and long-term opportunity for winemakers (Holland, 2017).

**Table 3.**  
Normalized attribute weights and single criterion scores (means)

Wine attribute	Levels	Mean part-worth utility	Single attribute score (0–100)	Attribute weight (sum = 1)	Rank
Type of wine	White	0.0	0.0	<b>0.243</b>	<b>1</b>
	Sparkling	15.5	63.6		
	Red	<b>24.3</b>	100.0		
Taste	Dry	0.0	0.0	<b>0.224</b>	<b>2</b>
	Sweet	<b>22.4</b>	100.0		
Price (in Rs)	1,800	0.0	0.0	<b>0.205</b>	<b>3</b>
	1,200	10.6	51.4		
	600	<b>20.5</b>	100.0		
Country of origin	Domestic	0.0	0.0	<b>0.149</b>	<b>5</b>
	Imported	<b>14.9</b>	100.0		
Familiarity	Unknown	0.0	0.0	<b>0.178</b>	<b>4</b>
	Known	<b>17.9</b>	100.0		

## Wine Attributes and Preference Value (in %)

Indian women consumers' wine choice



**Figure 2.** Polar chart on wine attribute and its preference values

Concepts	Type of wine	Taste	Country of origin	Brand	Price (Rs)	Rank
1.	Sparkling	Sweet	Imported	Known	600	1
2.	Sparkling	Sweet	Imported	Known	1,200	2
3.	Red	Sweet	Imported	Known	600	3
4.	Sparkling	Sweet	Imported	Unknown	600	4
5.	Sparkling	Sweet	Domestic	Known	600	5

**Table 4.** Top five combination of wine attributes preferred by the participants

Our findings suggest that Indian women wine consumers prefer known brands over unknown brands, as hypothesized (*H1*). This result is in line with other studies that also demonstrate that known brands tend to reduce perceived risk in consumers (Mehta and Bhanja, 2018). Our findings also align with the claims made by Atkin and Johnson (2010) who state that women rely more on extrinsic or secondary attributes like known brand and price. Additionally, previous research reveals that brand familiarity acts as an essential wine choice element (Kelley *et al.*, 2015; Lockshin and Rasmussen, 2000; Mehta and Bhanja, 2018). Meanwhile, a study (Sherman and Tuten, 2011) on wine-purchasing behavior reveals that brand familiarity and price are the most critical factors determining consumer choice. However, brand familiarity has been ranked as the second least essential wine attribute by women wine consumers in India.

Price emerged as the third most crucial attribute for the target group. Thus, the second hypothesis (*H2*) that proposes that price is the most preferred attribute is not supported. It is ranked lower than the type and taste of the wine. However, the participants were a little flexible about the wine price and more willing to go for any wine priced low to moderate, and ranging between Rs 600 to Rs 1,200. The results indicate that women consumers evaluate the alternatives keeping a specific budget in mind (Qenani-Petrela *et al.*, 2007). This

finding is partially consistent with previous research (Mehta and Bhanja, 2018), with the most preferred price being Rs 600. However, our study participants were willing to pay up to Rs 1,200. The results also reveal that unlike millennials, women consumers prefer to buy wines priced low to moderate in order to reduce perceived risk (Ferreira *et al.*, 2019). According to Holland (2017), women wine consumers in India are willing to pay more than men for wines on almost all occasions.

Though COO has emerged as the least preferred attribute when purchasing wine, it is seen that Indian women wine consumers prefer imported over domestic wine. Therefore, the third hypotheses (H3), the Indian women consumers prefer domestic wine is not supported. This finding is somewhat similar to a review study on the importance of geographical cues from old and new wine countries which suggests COO is not critical factor in a purchase decision (Giacomarra *et al.*, 2020). Therefore, depending on the consumers' profile, such as age and gender, practitioners should rethink on the other extrinsic cues such as label, text and also on images on the wine bottle (Giacomarra *et al.*, 2020). However, our finding contradicts Mehta and Bhanja (2018), Espejel *et al.* (2011) and Nallaperuma *et al.* (2017) who find that the country of origin is an essential determinant for wine purchase.

The taste of the wine is ranked the second most crucial attribute influencing women's choice. Thus, hypothesis four (H4) which states sweet wine is the most preferred by Indian women wine consumers is supported. This result is consistent with previous research (Casini *et al.*, 2009; Higgins and Llanos, 2015; Miller and Bruwer, 2006). Our findings reinforce Mehta and Bhanja (2018) who also find that Indian consumers prefer sweeter wines. The choice of sweet wine can be attributed to the spicy nature of Indian food – it helps to counterbalance the burning sensation of spices. Our results are also in line with the study (Qenani-Petrela *et al.*, 2007) that taste is an important attribute influencing wine choice among consumers belonging to different generations. However, this study contradicts Low (2001) who finds that Australian women are more attracted to dry wine. The contradicting results between various studies indicate that culture and stage of wine market development is an essential determinant in consumers' choice of wine attributes.

This study shows that the type of wine is the most prominent attribute when it comes to wine choice among women in India, and this is inconsistent with previous studies conducted in different cultural contexts (Atkin *et al.*, 2007; Wenzel, 2005). The part-worth utility value for levels within the type of wine indicates that sweet red wine is the most preferred choice over white wine, rejecting our fourth hypothesis which states that Indian women wine consumers prefer white wine. Our findings also contradict the study conducted in India (Mehta and Bhanja, 2018) among millennials, mostly postgraduate students in a premier management institution. According to this study, white wine is the most preferred wine among women consumers. However, it is important to note the number of women participants in this study was very small.

## Conclusions, implications, limitations and future research

### Conclusions

In a highly competitive market, the success of marketing depends on the knowledge that a firm has about its consumers. This knowledge helps the marketers to uniquely design the product, and distinguish it in terms of branding, packaging, pricing, distribution and promotion. Based on our findings, it can be concluded that both domestic and international wine marketers need to reach the women wine consumers in Tier I and Tier II cities (Ahmadabad, Kanpur, Chandigarh, Patna, Dehradun, Pondicherry and Pune) to benefit from

India's market potential. Currently, 80% of the consumption is confined to very few cities, such as Mumbai, Delhi, Goa and Bangalore (Sood, 2019). Though the current market environment is more conducive for domestic than international wine marketers, Indian wine consumers show preference towards international brands for its quality and image (Business Wire, 2021). Currently, unfavorable, stringent and regressive government rules, licensing process, poor handling and storage options, limited options for promotions and different taxations across various state governments act as barrier for international wine marketers. Few state governments do support the domestic wine marketers with measures like reduction of excise tax for wines produced in the state, easing of restriction for distribution and fiscal incentives to establish wineries and vineyards. Some states have extended support in the form of promotional activities through its wine boards to organize wine festivals, wine tasting sessions and certification programs (Sood, 2019). According to the recent report by India Wine Insider (2017), Indian consumers' understanding of wine is limited. Since consumers' awareness and consumption are positively related, it is important for wine marketers to address this gap. This can be achieved by conducting wine festivals, wine tasting workshops and sommelier training programs.

### *Implications*

Our study provides two important findings with implications for the wine industry in India. First, the focus group discussion conducted among 27 wine consumers reveal that the top five attributes dictating their choice of wine are taste, price, brand, COO and types of wine. Second, this study findings suggest that sweet red wine is the most preferred wine among Indian wine consumers.

In terms of contribution to the existing literature, the current study provides novel insights into the most and least important attributes that Indian women consider while making a wine purchase decision. Given the relatively recent growth in wine consumption in emerging economies like India, little research is available on women consumer preference and behavior towards wine consumption. The current study makes a valuable contribution to the pursuit of a more evidence-based evaluation of women's wine consumer preference in India (Mehta and Bhanja, 2017). Unlike the other two studies conducted in the same cultural context (Deodhar *et al.*, 2019; Mehta and Bhanja, 2018), the current study is unique and the first to identify the wine attributes on which Indian women consumers base their purchase decision. The concepts identified in the study, based on the participants' ranks, may help wine manufacturers in developing prototypes that can be tested in the selected market. The current study also unveils specific wine attributes that are in line or in contrast with previous studies in both International and Indian contexts. Our findings will provide wine manufacturers and marketers wider attributes to consider while designing their product development and marketing strategies for different cultural contexts.

The insights will also have implications for wine marketers. The results indicate that type of wine, taste and price are the essential attributes, which together contribute about 67.2% of the part-worth utility in Indian women's wine selection. Our results show that Indian women consumers prefer sweet red wine. This has important implications for the wine manufacturers in that they may consider avoiding grape varieties that are high in tannin and give the wine a bitter taste. Sparkling wine needs further promotion at a higher price, as it is valued next to red wine. When it comes to pricing, wine products may be priced between Rs 600 to Rs 1,200. The higher-priced variant may be positioned as a premium offering within the brand. Both domestic and international winemakers need to emphasize these attributes in their manufacturing and communication activities. Since alcoholic beverage advertisement is not legally permitted in India, wine marketers must find avenues

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such as food festivals, wine festivals, carnivals, exhibitions and other meeting platforms to create awareness and promote the wine brands among consumers.

Branding and country of origin will become significant over a while as the market moves toward maturity and consumers become more familiar with the nuances of different wines. While the results offer great impetus for foreign winemakers, they also give a direction to the Indian winemakers in overcoming the threat posed by women's preference for imported wines over the domestic ones. Domestic winemakers must build strong brands to counter the appeal of the imported wine brands. Further, women consumers in India prefer sweet wine over dry wine, implying that they can make a dent in this segment of the market with sparkling wine and sweet wines. Creating awareness on food pairing and provision of information handouts will encourage wine consumption. Our results emphasize that Indian women consumers' preferences are unique compared to the European, US and other Asian markets. Accordingly, foreign brands need to customize their marketing and promotional activities in a way to appeal to the Indian women customers.

From a managerial perspective, this research work brings to light the top attributes that govern Indian women's choice in wine and which were hitherto unknown. It is also essential for the different international wine suppliers to come together on a common platform and work together to promote and improve awareness about international wine. This will help them overcome the hurdles of regional trade restrictions. Given that consumers are more attracted by price, both domestic and international wine makers need to research on Indian women consumers' engagement in buying high-end wine where price is considered as cue for quality. They also need to develop a strategy that would help to reduce the perceived risk with wine consumption. This study will help the marketers to gain a deeper understanding of the unique needs of the Indian women and the factors they consider while choosing a wine. Marketers can use the findings to support their decision-making with regard to marketing their products in the Indian subcontinent. The research also brings to light a valuable insight and helps to narrow down on the attributes that act as significant determinants in wine choice among women in India. This potential high growth market is a magnet for both Indian and international winemakers.

### *Limitations*

This study has a few limitations. The first limitation is that it limits the choice of attributes to five. The wine attributes are not selected extensively and there are several other attributes that would impact wine choice. For example, it does not include attributes, such as the location, size, shape and color of the bottle, medals awarded to the brands and the highly valued certifications in the western world. The second limitation is that the participants' selection of wine attributes is created hypothetically using an online software, which is very different from a store environment's real atmosphere. The third limitation is that the data is collected through social media platforms and so it may not represent the cross-national population. Past literature highlights that millennial consumers' behavior is very different from Generation X, Y and baby boomers. Therefore, wine attribute preference based on the age cohort was not possible given that the distribution of participants across different age groups was not equal. Fourth is the limitation of the DCE method. DCE can only provide the relative indication of effect rather than exact estimates, and this limits the statistical testability of effect across different markets. The number of choices in the experiment are restricted to a maximum of three levels, which is very small in terms of the number of choices available in the market in real time, for example, the number of international wine brands available in the Indian wine market. Finally, the exploratory nature of this study precludes the generalization of the findings.

### Future research

The limitations of the study may be considered as an opportunity for further research to benefit the marketers of wine. Future research should focus on the generational coherent difference in the wine attributes' choices. Future studies can include other extrinsic and intrinsic attributes that are not included in this study, for example, size, shape and the color of the wine bottle. This study also offers insights on women wine consumers in the Indian cultural context and these can be broadened with further research. There is a paucity of information on Indian consumers' wine buying behavior and decision-making process. Few works have highlighted that the decision and the choice of wine attributes may vary across individuals based on their high and low involvement, health consciousness, perceived risk, type of occasion, location, knowledge and awareness about wine. All these factors provide ample scope for research.

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No.	Authors	Attributes	Findings	Country
1	José M. Gil (1997)	Price, origin and grape vintage year	While origin of the wine, followed by price and grape vintage year, was important for Navarra consumers, Aragón consumers also considered origin as the most important attribute, followed by grape vintage year and price.	Spain
2	Morey <i>et al.</i> (2002)	Grape variety, price, brand recognition, the region of production and awards won	Price, type of wine, the presence of a national award and the purchase context were significant predictors of the decision to purchase a wine.	Australia
3	Thomas and Pickering (2003)	Perceived risk, social benefit, wine knowledge, price and information search strategies	Millennials are more apt to seek information from friend/family and shelf talkers than elders. Elders were more willing to ask questions of store personnel and wine stewards. While brand is very important to both groups. Millennials rely less on geographical cues such as region of origin to determine wine quality and pay more attention to medals won, label imagery and alcohol content.	US
4	Kelley <i>et al.</i> (2015)	Wine back label, food pairing, fictitious contact information, fictitious winery background information	Within the pairing information factor, description of food-wine-pairings and symbols of food-wine-pairings received positive utility values, indicating consumers preferred these options more than having no pairing information present. More females drink wine but the consumption frequency of males is higher.	US
5	Balestrini and Gamble (2006)	Country of origin as signal of quality	COO information is a significantly more important cue than price	China
6	Barber <i>et al.</i> (2006)	Wine packaging, age, gender and income on the wine-buying decision.	Label design and bottle closures were important to respondents.	
	Connecticut, USA		Self-confidence was a significant factor for age and gender, with females and respondents between 31 and 40 years of age more concerned about making a wine-buying decision	

**Table A1**  
Summary of the studies on different wine attributes and their findings across globe

(continued)

Indian women consumers' wine choice

No.	Authors	Attributes	Findings	Country
7	Brown and O'Case (2006)	Ethnocentrism and animosity	Age and gender were found not to directly affect consumer willingness to buy foreign wine.	Australia
8	Martinez-Carrasco Martinez <i>et al.</i> (2006)	Type of wine, designation of origin, price and consumption occasion	Consumers were specially price conscious in restaurants. The higher consumption frequency is, the lower D.O. and relative price importance is. The type of wine acquired greater importance.	Spain
9	Miller and Bruwer (2006)	Wine type, style, taste and aroma aspects.	Females bring significant sensory preference differences. Double the percentage of females than males preferred sweeter wine. Females also preferred lighter wine styles than men, but the overwhelming majority (82%) of females prefer medium- to full-bodied wines. Only a small percentage in each gender group prefer light-bodied wines. More females than males preferred white to red wine, although the females' preference overall was equally divided between white and red wine. Far more males overall preferred red wine and older females preferred red wine more than younger females.	Australia
10	Atkin and Sutanonpaiboon (2007)	Type of wine and wine packaging, consumer's information search behavior and consumer's coping mechanism	The pattern of gender preferences was fairly consistent from country to country. This indicated that gender was a salient basis for segmenting the wine market.	USA, Australia and New Zealand
11	Atkin <i>et al.</i> (2007)	Information seeking	Labels and shelf tags are also significantly more important for women. While winery region is very important to both men and women, women rely on medals and awards more than men.	USA
12	Goodman <i>et al.</i> (2008)	Tasted the wine previously, someone recommended it, grape variety, origin of the wine, brand name, medal/award, I read about it, matching food, information on back label, information on	The key findings are the global importance of influencers such as previous trial and recommendations and the variation from some markets to others of influencers such as brand, grape variety, food matching and medals/awards. There is an almost global ranking of the least influencer on wine choice of low	

(continued)

Table A1

No.	Authors	Attributes	Findings	Country
		the shelf, an attractive front label, promotional display in-store, alcohol level below 13%	alcohol level (<13%) and promotional displays.	
13	Australia, Austria, Brazil, China, France, Germany, Israel, New Zealand, Taiwan, UK, USA and Italy <i>Hu et al. (2008)</i>	Country-of-origin (COO), price and brand	COO as the most important factor. No significant difference in the importance in COO and price as indicators	China
14	<i>Remaud et al. (2008)</i>	Price, regions of origin, environmental claim and organic claim	The results indicate that organic, as an attribute, is valued very little by the average Australian wine consumer.	Australia
15	<i>Casini et al. (2009)</i>	Format, designation and price	The main findings highlight that the format proves to be the attribute which generates the highest loyalty level for Italian consumers	Italy
16	<i>Cohen (2009)</i>	Promotional display in-store, grape variety, origin of the wine, information on the shelf, alcohol level, matching food, information on back label, medal/award, an attractive front label, brand name, someone recommended it, I read about it in a guide and tasted the wine previously	The attribute "tasted wine previously" was most important for consumers from both countries; level of alcohol was least important.	
	Australia, Israel		<i>Veale and Quester (2009)</i>	Price, country of origin
	Price was clearly found to be the most important attribute contributing to perception of Brie quality, followed by fat content. COO also exerted a	Australia		

Table A1

(continued)

Indian women consumers' wine choice

No.	Authors	Attributes	Findings	Country
18	substantial influence on respondents' evaluation. <a href="#">Atkin and Johnson (2010)</a>	Brand, place of origin	Brand and place of origin such as region, state and country were the most important attributes for choice of wine.	USA
19	<a href="#">Mueller et al. (2010)</a>	Price, history, grape source, production, simple taste, elaborate taste, food pairing, consumption advice, environmental, website, ingredients	Five distinct segments emerged from the overall sample.  Significant differences found for the relative importance of back label price, price sensitivity and the acceptance of an ingredient list. Overall winery history, elaborate taste descriptions and food pairing were found to be the most highly valued back label statements, Ingredient information had a negative impact on one segment in particular.	Australia
21	<a href="#">Bernabéu et al. (2012)</a>	Tasted the wine previously, region of origin, price, recommendations by friends and relatives, grape variety, organic production, matching food, aging, design of the bottle and label, brand name, alcohol level	The two main attributes that condition consumers in choosing wine are previous tasting and region of origin.  The latter attribute is valued mainly by women. The previously tasted attribute, which on many occasions is associated with the price attribute, is valued basically by men.	Spain
22	<a href="#">Fernandes Ferreira Madureira and Simões de Sousa Nunes (2013)</a>	Medals/awards, bottle, brand, price, general image, label, origin, grape variety, reference to producer	The region of origin is the attribute that triggers the process of choosing a wine followed by e label/back label, the price, the bottle, the brand and the wine varieties.	Portugal

(continued)

Table A1

No.	Authors	Attributes	Findings	Country
23	Lategan <i>et al.</i> (2017)	Tasted the wine previously; someone recommended it; an attractive front label; brand name; I read about it; origin of the wine; grape variety; information on the shelf; matches my food; promotional display in-store; information on the back label; medal/award; and alcohol below 13%	Taste was the most important wine attribute followed by someone recommended it. Alcohol level below 13% was least important. Firm controlled information such as information on back label was of little importance. South African Generation Y consumers seem to select wine similarly to those in the USA.	South Africa
24	Nallaperuma <i>et al.</i> (2017)	Wine style, region, volume of production, quality, heritage and taste	Regions having a well-defined taste profile as a regional driver, experts and involved consumers were not significantly different in their perception. The second dimension of wines' distinctiveness, distinctive styles of wine produced in the regions as a driver of regional reputation. Hypothesis H10a was not supported (experts and involved consumers mean scores had a similar perception of distinctiveness as a driver of regionality). However, experts and noninvolved consumers mean scores were significantly different in their views leading to H10b being supported.	Australia
25	Escobar <i>et al.</i> (2018)	Wine origin, grape variety, wine references, price	Consumers' preferences for a Catalan origin were enhanced during the crisis, while price became the most important attribute	Spain
26	L. Hu and Baldin (2018)	Price, alcohol content, reserve, COO, variety, body, protected area of origin, number of reviews	Results show that the COO represents the attribute that most influences wine sales in China. Protected indicators of origin	China
27	Mehta and Bhanja (2018)	Wine type, taste, price, brand and origin	In-depth interviews revealed five factors as important in the choice of wine, namely, price, brand, taste, origin and type of the wine. The results of conjoint analysis showed price as the most important factor, followed by the type of the wine. Red was the most preferred type. Brand, taste and origin follow up in that order of importance with millennials	India

(continued)

Table A1



Indian women consumers' wine choice

No.	Authors	Attributes	Findings	Country
28	Chu <i>et al.</i> , 2019)	Appearance, color, sparkling property, aroma degree, aroma type, sweetness, mouthfeel and flavor	preferring to buy familiar brands, sweet wines and of Indian origin. Wine with the following sensory attributes was the most preferred by Chinese consumers: dry red, refreshing and soft taste, still type, moderate aroma degree and mellow aroma, and sweet wine was also popular	China
29	Ferreira <i>et al.</i> , 2019)	Region of origin, prior knowledge, wine brand, front label information, back label information, Font size, information type	Region of origin and prior knowledge experience seem to be the two main reasons for men to choose a wine; while, women seem to rely more on wine brand and previous experience. Front label information (region of origin, awards and region illustration) seems to be more important for women, while the back-label descriptors (grape variety, world heritage site and wine history) are more relevant for men. The typography (font size) and information type were identified as negative aspects of the back label.	Portugal
30	Iazzi <i>et al.</i> (2019)	Variety, vine, organoleptic and sensory, territorial origin, alcohol content, label, graphical label, packaging, certification, rewards/awards, advertising, suggestions from friends, and positive opinion	The two groups of millennials show different preferences in the purchase of rosé wine. French millennials rarely buy the product, and perhaps only for reasonable prices. Their purchasing process involves no characteristics of particular importance. On the other hand, Italian millennials buy the product with a higher frequency and show a greater propensity to spend. In general, they attribute greater importance (though not a great deal of importance) to the characteristics of the product, paying attention to both its intrinsic aspects and its territorial origin and the quality certifications.	Italy and France
31	Rodríguez-Donate <i>et al.</i> (2019)	Type of wine, frequency, place of consumption, influence of campaigns, influence of experts and influence of availability	Gender is a determining factor when analyzing the frequency of wine consumption	Tenerife, Spain
32				Portugal (continued)

Table A1

No.	Authors	Attributes	Findings	Country
	<a href="#">Chamorro <i>et al.</i> (2020)</a>	Bottle design, price, origin and category of wine	The low importance of bottle design in shaping consumer preferences compared to other attributes (origin, price and category of wine).	
33	<a href="#">Migliore <i>et al.</i> (2020)</a>	Drink occasions, price, wine color, grape variety, organic production, PDO or PGI certification, alcohol content, vintage, sulfite content, wine brand, jury grade, sensorial characteristics	The drink frequency and occasion, organic production method, the content of sulfites, income and the attitudes toward healthy eating and the environment are positively associated with a higher WTP for natural wine.	Italy
34	<a href="#">Nassivera <i>et al.</i> (2020)</a>	Region of origin, winescape certification, carbon footprint claim and price	Italian millennials' attitudes toward wine attributes are characterized by some traditional behavior such as the attention to the origin, the preference for local production and GI certification. In particular, local origin emerges as another important attribute of wine.	Italy

Table A1

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