

WOMEN'S PREFERENCES TO DIGITALIZATION OF RESTAURANTS' SERVICES: A FOCAL POINT OF EDUCATIONAL AND FUNCTIONAL BENEFITS OF ELECTRONIC WINE LIST

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Abstract: *The aim of this paper is to examine and analyze the perceptions and reactions of women regarding digital services and electronic wine lists in restaurants while making wine ordering decisions. Women make up a significant proportion of population, and that is why is important to comprehend their reactions and impressions of digital services and electronic wine lists in restaurants. The research was conducted with a specially designed questionnaire, involved the participation of 182 women from Croatia and Serbia who used digital services and electronic wine lists in restaurants. Collected answers were processed and analyzed using the Statistical Software for Social Sciences (SPSS) version 21.0. and applying Kolmogorov-Smirnov test, Levene's test and Kruskal-Wallis H-test. Research results indicated differences among various demographic groups of women in terms of their perceptions of the educational and functional benefits of using electronic wine list in restaurants. Results showed that younger women, those who frequently visit restaurants and those with less knowledge of wine perceived greater benefits of using electronic wine list in restaurants. This paper enriches the relatively sparse literature on women's preferences to digital services and wine purchasing behavior, providing valuable insights for restaurant managers and decision-makers regarding women's preferences for electronic wine lists.*

Keywords: *Electronic wine list, Restaurants, Women's preferences, Digital services, Organizational behavior*

JEL classification: *O33.*

INTRODUCTION

Whilst traditionally the world of wine has been perceived as male-dominated, recent trends are painting a more balanced picture. A spotlight is being cast on women, as they not only become notable consumers but also influencers within the wine indus-

try. This observation is supported by Payini et al. (2022), who highlighted the growing prominence of women in wine consumption, particularly in India. Women are now proprietors of wineries, wine manufacturers, promoters of viticulture and enology, educators of wine consumers, and global wine marketers (Matasar, 2006). Furthermore, there is a surge of organizations like Women in Wine, Wonder Women in Wine, and Women of the Vine & Spirits dedicated solely to women with knowledge of wine. These groups host events, conferences, and exhibitions, providing platforms for women to actively participate and showcase their wine expertise.

Thomson (2007) highlighted that women are purchasing more wine than men, a claim corroborated by later studies indicating that women spend disproportionately more on wine in relation to men (Lai, 2019). Considering that women comprise large part of the global population, this might predict an increase in overall wine consumption (Rodríguez-Donate et al., 2020). As such, understanding their reactions and impressions of electronic wine lists and their wine ordering decisions in restaurants becomes crucial. The focus of this paper, therefore, is to investigate the educational and functional benefits of electronic wine lists from a women's perspective.

The developments of technologies such as Internet of Things, Big Data, Real-Time Analytics, Cloud Computing, Data Science, Machine Learning, Robotics, Robotic Process Automation, Artificial Intelligence, Blockchain, Virtual Reality, Augmented Reality, and many others enabled significant changes in the operating and functioning of any organization (Lukić Nikolić et al., 2022). As in every other sector, organizations from the service sector want to retain existing clients, as well as to attract new ones through various technological solutions and tools (Koyluoglu & Acar, 2023). New digital technologies can influence not only the way organizations in tourism sector operate, but also the customer's behaviour (Baiocco & Paniccia, 2022/2023). Restaurants are not an exception. They are becoming increasingly oriented towards digitalization of their processes and services. Electronic menus and wine lists have become integral components of the restaurant digitalization process (Labus & Jelovac, 2022; Labus & Lukić Nikolić, 2023a). Wine consumers used to base their decisions on the information on the wine bottle and other sources, such as retail personnel, paper-based wine lists, periodicals, and newsletters, before the invention and widespread usage of electronic wine lists (Malik et al., 2023). Due to the widespread usage and deployment of new digital tools and technologies, the situation has changed.

Structured in several parts, this paper first presents a review of the literature, focusing on the importance and role of electronic wine lists within the restaurant industry. This is followed by a detailed overview of the applied research methodology, research results, and by a thorough discussion of the research findings. The paper concludes by highlighting key research implications, acknowledging its limitations, and suggesting potential avenues for future studies in this field.

KEY CHARACTERISTICS OF WINE AND ELECTRONIC WINE LIST

Wine is an alcoholic beverage which is easily accessible, affordable and consumed openly throughout the world (Labus, 2023). It is a complex product because it incorporates culture, history, a sociability aspect, and a tourism activity (Lai, 2019). It represents an extensively traded product that is increasingly marketed because of its distinctive identity and the fact that the majority of consumers are not knowledgeable

enough about wine (Malik et al., 2023). The diversity of wine types reflects the complexity of this product, with classifications based on several factors. These include the sensory experience they offer, such as the efferve scence of sparkling, pearl, and carbonated wines; the visual appeal from red, pink, and white color variations; the varying degrees of sweetness from dry to semi-dry, and sweet to semi-sweet profiles; and distinct categories that cater to specific preferences, like dessert wines, aromatic wines, and liqueurs, as detailed in Table 1.

Table 1. Wine's type according to different classifications

| Classification | Type of wine |
|---------------------------|----------------------------------|
| By its basic sense | sparkling, pearl, carbonated |
| By color | red, pink, white |
| By residual sugar content | dry, semi-dry, sweet, semi-sweet |
| By its speciality | dessert, aromated, liqueur |

Source: Ružić, 2011

Wine relies on the creation, re-creation, and marketing of a specific type of history and heritage. Years, vintages, droughts, frosts, and named producers are all bottled with the wine (Brabazon et al., 2014). That is why wine is a singular product by nature, and the overall impression it creates is largely subjective (Brand et al., 2020). To help navigate this subjectivity, California chemist and scientist Ann Noble developed the Wine Aroma Wheel in 1984. Her goal was to provide wine consumers with a common language for sharing thoughts and experiences using reliable and consistent terminology (Noble et al., 1987). Wine aroma, shaped by grape varieties, regional factors, and diverse winemaking methods, encompasses various compounds, such as higher alcohols, terpenoids, esters, fatty acids, and aldehydes. These compounds are influenced by elements like grape variety, terroir, wine production techniques, and aging. Wine aroma narratives are frequently utilized to capture the complexity and diversity of wines (Jin et al., 2022).

The Wine Aroma Wheel, divided into categories and subcategories, aids in classifying and describing wine aroma (Shapin, 2016). Its inner circle features basic descriptors like fruity, spicy, nutty, and vegetal. The second layer breaks these terms into subgroups - for instance, 'vegetal' subdivides into fresh, canned, and dried. The third layer offers more precise descriptions (e.g., the 'vegetative/fresh' group includes stems, bell pepper, mint, and so on) (Martin Poole et al., 2021). Several authors have explored wine aroma descriptions and phrases in depth, with Croijmans et al. (2020) establishing three broad wine description categories: (1) aromas (fruit, spices, food, non-food); (2) flavor/texture (technical tasting, proper taste, texture); (3) technical vocabulary (grape types, modifiers, occasion, vinification, other). The wine aroma wheel serves as a valuable tool for describing wine comprehensibly and comparing different wine types, thereby enabling wine enthusiasts to better grasp the chemical composition of wine and pair it with suitable food.

In the context of dining, the wine list plays a pivotal role in informing restaurant guests about available wines and guiding their ordering decisions. A wine list is essentially a document that presents crucial information about the restaurant's wine offerings. Con-

sequently, it is imperative for a wine list to encompass as many different varieties of wine as possible, thereby providing guests with a wide selection to choose from (Labus, 2023). Increasing wine sales, a key aim for any restaurant, can be effectively achieved through an exceptional wine list that is suitable to guests' needs (Livat et al., 2023). The customer is frequently interested not only in the consumption of wine after purchase, but also in its history - the grape type, the vineyard, the winemaker and winery, and the process the wine went through before it came in front of the consumer (Brabazon et al., 2014).

In the digital age, many restaurants are digitalizing their services, including their menus and wine lists (Labus & Lukić Nikolić, 2023b). The menu significantly influences a guest's overall restaurant experience (Suarez et al., 2019), and an electronic wine list can not only boost sales but also impact a restaurant's overall success or failure (Oliveira-Brochado & Vinhas da Silva, 2014). Electronic menus allow interactive suggestions for pairing wines and other beverages with customer's meal selections, enhancing the ordering experience and customer satisfaction (Beldona et al., 2014; Şahin, 2020). Electronic wine list can provide detailed wine information, such as origin, brand, producer, grape varieties/vintage, flavor description, and price (Ruiz-Molina et al., 2010; Staub & Siegrist, 2021). Apart from the name, color, quantity, price, origin, vineyard, and year of production, the wine list might also indicate alcohol content, acidity, tannin content, flavor characteristics, and the overall quality level (Terblanche & Pentz, 2019). Consequently, electronic wine list is a unique communication tool that have the ability to influence guests' selection of wine (Labus & Lukić Nikolić, 2023a), especially in situations where guests wish to try something new, to pair wine with their food, and/or the sommelier has limited knowledge and experience (Labus & Lukić Nikolić, 2023b).

RESEARCH METHODOLOGY

This paper aims to explore and analyze women's perceptions of digital services in restaurants, with special emphasis on the educational and functional benefits associated with the use of electronic wine lists. For that purpose, three hypotheses were investigated.

Hypothesis 1: Younger women perceive greater educational and functional benefits when using electronic wine lists in restaurants.

Hypothesis 2: Women who frequently visit restaurants perceive greater educational and functional benefits when using electronic wine lists.

Hypothesis 3: Women without extensive knowledge of wine perceive greater educational and functional benefits when using electronic wine lists in restaurants.

The empirical research was conducted with the use of a specially designed questionnaire. The initial section included few profile questions pertaining to the respondents' age, education, marital status, employment status, frequency of restaurant visits, and level of wine knowledge. Subsequent to this, respondents were asked to evaluate statements concerning their perceptions of the educational and functional benefits of electronic wine lists in restaurants. Twelve statements pertaining to "Educational and Functional Benefits Towards Electronic Wine List in Restaurants" were assessed by respondents on a five-point Likert scale, ranging from 1 - strongly disagree to 5 - strongly agree.

During 2020-2021, the questionnaire was distributed in hotel restaurants in Croatia and Serbia and completed by 182 women who used electronic wine lists in restau-

rants. All responses were analyzed using the Statistical Software for Social Sciences (SPSS) version 21.0.

The Cronbach's Alpha coefficient for the scale "Educational and Functional Benefits Towards Electronic Wine Lists in Restaurants" was 0.844, suggesting high reliability (Taber, 2018). The normality of the data distribution was examined using the Kolmogorov-Smirnov test, histograms, skewness, kurtosis, the normal probability curve, and the boxplot. The results for the scale, Sig. = 0.000, indicated that the assumption of normal data distribution was not met. Consequently, non-parametric statistical techniques were employed for statistical analyses within the measurement scales. The Kruskal-Wallis H test was utilized to compare differences between three or more groups, with a 95% confidence interval. Levene's test for equality of variances was used in all tests comparing differences between groups and the assumption of variance homogeneity was met in all cases ($p > 0.05$).

RESEARCH FINDINGS

Table 2 provides key characteristics of women participated in the research. The age group with the largest representation (34.1%) ranged from 26 to 35 years, followed by those between the ages of 36 and 45 (25.3%). The majority of women (50.5%) were married, with the rest being single, divorced, or widowed (49.5%). A significant majority (85.7%) had completed bachelor's or master's studies. In terms of restaurant visits, just under a third of women (31.9%) visited restaurants a few times per month, followed closely by women visiting restaurants at least once a week (29.7%). Basic wine knowledge was reported by the majority of women (38.4%), with the next largest group having solid wine knowledge (36.3%).

Table 2. Statistics pertaining to key characteristics of women participating in the research

| Answers | N | % | |
|---------------------------------------|-------------------------------|-----|------|
| Age | From 18 to 25 | 20 | 11.0 |
| | From 26 to 35 | 62 | 34.1 |
| | From 36 to 45 | 46 | 25.3 |
| | From 46 to 55 | 27 | 14.8 |
| | From 56 to 65 | 19 | 10.4 |
| | Above 65 | 8 | 4.4 |
| Marital status | Married | 92 | 50.5 |
| | Single (divorced, widowed) | 90 | 49.5 |
| Education | Secondary school | 20 | 11.0 |
| | Faculty (bachelor and master) | 156 | 85.7 |
| | Faculty (PhD) | 6 | 3.3 |
| Frequency of restaurants visit | Every week | 54 | 29.7 |
| | A few times a month | 58 | 31.9 |
| | One or two times a month | 40 | 22.0 |
| | One in three months | 17 | 9.3 |
| | Rarely | 13 | 7.1 |

| | | | |
|-----------------------|---------------------|----|------|
| Wine knowledge | No knowledge at all | 26 | 14.3 |
| | Basic | 70 | 38.4 |
| | Solid | 66 | 36.3 |
| | Expert | 20 | 11.0 |

Source: Authors

Table 3 presents the mean and standard deviation for the responses to each statement on the “Educational and Functional Benefits Towards Electronic Wine Lists in Restaurants” scale. Of all the statements, the one receiving the highest mean value (4.27) was “The ordering was correct,” indicating strong agreement among participants. The second highest mean value (3.86) was linked to the statement “It was easy to use the electronic wine list.” The third-ranking statement, with a mean value of 3.82, was “I prefer restaurants with an electronic wine list.”

Table 3. Mean (M) and standard deviation (SD) for statements on the scale “Educational and Functional Benefits Towards Electronic Wine List in Restaurants”

| Statements | M | SD |
|--|----------|-----------|
| The electronic wine list assisted me in learning more about wine. | 2.49 | 1.444 |
| I have a better understanding of the wines thanks to the electronic wine list. | 3.51 | 1.444 |
| The digital service is ideally suited to the needs of visitors. | 3.59 | 1.464 |
| The ordering was correct. | 4.27 | 1.041 |
| It was easy to use the electronic wine list. | 3.86 | 1.266 |
| The electronic wine list elegantly displays all important information. | 3.19 | 1.040 |
| Using an electronic wine list allowed me to get to what I wanted faster. | 3.58 | 1.199 |
| I am glad I had the opportunity to learn more about the restaurant's electronic wine list. | 3.29 | 1.290 |
| When I used the electronic wine list, it met all of my expectations. | 3.64 | 1.239 |
| I had an enjoyable feeling after using the electronic wine list. | 3.29 | 1.273 |
| In my perspective, the electronic wine list has improved the level of service. | 2.41 | 1.464 |
| I prefer the restaurants which have electronic wine list. | 3.82 | 1.446 |

Source: Authors

Table 4 categorizes responses to each item on the Likert scale into three groups: agree, neutral, and disagree, facilitating more manageable analysis. Slightly more than half of the women surveyed (52.75%) believe that the electronic wine list enhanced their understanding of wines. Interestingly, a considerable number of women felt that the electronic wine list did not provide them with new information about wine, indicating that while the content did not add novel educational value, it assisted them in better understanding the current wine offerings. Moreover, 57.15% of women feel the digital service is well-suited to guests' needs, 81.32% consider the ordering process appropriate, and 65.93% find using the electronic wine list straightforward. About two-thirds of women felt the electronic wine list enabled them to receive what they needed faster (60.44%) and met their expectations (64.84%). Consequently, 65.94% of women expressed a preference for restaurants with electronic wine lists. However, more than half disagreed that the electronic wine list improved the overall level of restaurant

service, suggesting that other service aspects must also meet standards for a positive overall impression.

Table 4. Frequency (N) and percentage (%) of responses to the “Educational and Functional Benefits Towards Electronic Wine List in Restaurants” statements

| Statements | Answers | N | % |
|--|----------|-----|-------|
| The electronic wine list assisted me in learning more about wine. | Agree | 40 | 21.98 |
| | Neutral | 46 | 25.27 |
| | Disagree | 96 | 52.75 |
| I have a better understanding of the wines thanks to the electronic wine list. | Agree | 96 | 52.75 |
| | Neutral | 46 | 25.27 |
| | Disagree | 40 | 21.98 |
| The digital service is ideally suited to the needs of visitors. | Agree | 104 | 57.15 |
| | Neutral | 30 | 16.48 |
| | Disagree | 48 | 26.37 |
| The ordering was correct. | Agree | 148 | 81.32 |
| | Neutral | 20 | 10.99 |
| | Disagree | 14 | 7.69 |
| It was easy to use the electronic wine list. | Agree | 120 | 65.94 |
| | Neutral | 28 | 15.38 |
| | Disagree | 34 | 18.68 |
| The electronic wine list elegantly displays all important information. | Agree | 66 | 36.26 |
| | Neutral | 82 | 45.05 |
| | Disagree | 34 | 18.68 |
| Using an electronic wine list allowed me to get to what I wanted faster. | Agree | 110 | 60.44 |
| | Neutral | 40 | 21.98 |
| | Disagree | 32 | 17.58 |
| I am glad I had the opportunity to learn more about the restaurant's electronic wine list. | Agree | 84 | 46.16 |
| | Neutral | 52 | 28.57 |
| | Disagree | 46 | 25.27 |
| When I used the electronic wine list, it met all of my expectations. | Agree | 118 | 64.84 |
| | Neutral | 28 | 15.38 |
| | Disagree | 36 | 19.78 |
| I had an enjoyable feeling after using the electronic wine list. | Agree | 86 | 47.25 |
| | Neutral | 60 | 32.97 |
| | Disagree | 36 | 19.78 |
| In my perspective, the electronic wine list has improved the level of service. | Agree | 48 | 26.37 |
| | Neutral | 30 | 16.48 |
| | Disagree | 104 | 57.15 |
| I prefer the restaurants which have electronic wine list. | Agree | 120 | 65.93 |
| | Neutral | 22 | 12.09 |
| | Disagree | 40 | 21.98 |

Source: Authors

To test the proposed hypotheses, a Kruskal-Wallis H-test was conducted in this research. The results are presented in Table 5.

Table 5. The results of Kruskal-Wallis H-test

| Answers | N | Mean | Md | χ^2 | df | p |
|----------------------------|----|--------|------|----------|----|-------|
| Age | | | | | | |
| From 18 to 25 | 20 | 115.90 | 3.73 | 22.361 | 5 | 0.000 |
| From 26 to 35 | 62 | 99.31 | 3.54 | | | |
| From 36 to 45 | 46 | 96.24 | 3.54 | | | |
| From 46 to 55 | 27 | 77.91 | 3.23 | | | |
| From 56 to 65 | 19 | 76.29 | 2.69 | | | |
| Above 65 | 8 | 24.75 | 2.31 | | | |
| Frequency of visits | | | | | | |
| Almost every week | 54 | 90.52 | 3.54 | 21.521 | 4 | 0.000 |
| Few times a month | 58 | 106.91 | 3.65 | | | |
| Once or twice a month | 40 | 81.80 | 3.27 | | | |
| Once in 3 months | 17 | 106.26 | 3.61 | | | |
| I rarely visit restaurants | 13 | 37.35 | 2.54 | | | |
| Knowledge of wine | | | | | | |
| None | 26 | 121.81 | 3.73 | 11.057 | 3 | 0.011 |
| Basic | 70 | 87.10 | 3.46 | | | |
| Solid | 66 | 88.95 | 3.42 | | | |
| Expert | 20 | 75.90 | 3.38 | | | |

Source: Authors

The results of the Kruskal-Wallis H-test indicated statistically significant differences in responses based on the respondent's age. $\chi^2(df=5, n=182) = 22.361, p=0.000$. Women aged 18 to 25 exhibited the highest median response ($Md=3.73$). These findings confirm *Hypothesis 1* that younger women perceive greater educational and functional benefits from using electronic wine lists in restaurants.

Further, the Kruskal-Wallis H-test indicated statistically significant differences in responses concerning the frequency of restaurant visits. $\chi^2(df=4, n=182) = 21.521, p=0.000$. Women who visit restaurants a few times per month had the highest median response ($Md=3.65$). This result confirms *Hypothesis 2*, which asserts that women who frequent visit restaurants perceive greater educational and functional benefits when using electronic wine lists.

Finally, the Kruskal-Wallis H-test indicated statistically significant differences in responses in relation to the participants' wine knowledge. $\chi^2(df=3, n=182) = 11.057, p=0.011$. Women with no wine knowledge exhibited the highest median response ($Md=3.73$). These results confirm *Hypothesis 3* that women lacking wine knowledge perceive greater educational and functional benefits from using electronic wine lists in restaurants.

Table 6 provides the mean values for responses regarding wine knowledge level. An examination of the mean values yields some valuable insights.

Table 6. Mean values on the “Educational and Functional Benefits Towards Electronic Wine List in Restaurants” scale grouped by wine knowledge level

| Statements | Wine knowledge level | | | |
|--|----------------------|-------|-------|--------|
| | No | Basic | Solid | Expert |
| The electronic wine list assisted me in learning more about wine. | 1.73 | 2.57 | 2.56 | 3.00 |
| I have a better understanding of the wines thanks to the electronic wine list. | 4.27 | 3.43 | 3.44 | 3.00 |
| The digital service is ideally suited to the needs of visitors. | 4.58 | 3.40 | 3.35 | 3.80 |
| The ordering was correct. | 4.85 | 4.03 | 4.27 | 4.40 |
| It was easy to use the electronic wine list. | 4.58 | 3.74 | 3.74 | 3.70 |
| The electronic wine list elegantly displays all important information. | 3.54 | 3.16 | 3.14 | 3.00 |
| Using an electronic wine list allowed me to get to what I wanted faster. | 3.96 | 3.59 | 3.52 | 3.30 |
| I am glad I had the opportunity to learn more about the restaurant's electronic wine list. | 3.96 | 3.17 | 3.29 | 2.80 |
| When I used the electronic wine list, it met all of my expectations. | 4.12 | 3.51 | 3.59 | 3.60 |
| I had an enjoyable feeling after using the electronic wine list. | 3.81 | 3.26 | 3.29 | 2.70 |
| In my perspective, the electronic wine list has improved the level of service. | 1.42 | 2.60 | 2.65 | 2.20 |
| I prefer the restaurants which have electronic wine list. | 4.42 | 3.73 | 3.91 | 3.10 |

Source: Authors

Apart from two statements, the results indicate that mean values for almost all statements are notably higher among women without prior knowledge of wine. The two exceptions relate to the statements that the electronic wine list helped them learn more about wine and that it improved the level of service. For these two statements, women with no prior wine knowledge reported the lowest mean values. For all other statements, these women reported the highest mean values regarding the educational and functional benefits of the electronic wine lists. That points out the importance of educational and functional benefits of electronic wine lists in restaurants in decision making process of women without wine knowledge.

DISCUSSION OF RESEARCH FINDINGS

This research affirmed the existence of variation in perceptions of the educational and functional benefits of electronic wine list in restaurants, depending on certain characteristics of the women. Results indicated that younger women, those who frequently visit restaurants and women with limited wine knowledge derive greater benefits from electronic wine lists. The research implies that these women appreciate being able to make well-informed decisions about their wine orders, seeking detailed information about wine’s characteristics.

These findings align with results from other studies. For instance, a survey involving 497 males and 877 females in the United States found that when unsure about a wine selection, women are more likely to seek additional information about the wine than men. They pay close attention to wine label details and any mention of awards or

recognition (Atkin et al., 2007). Women also show a greater interest in price points and discounts when choosing a wine, suggesting a higher likelihood of cost consideration during the purchasing process compared to men (Forbes et al., 2010).

Further, a study of 399 wine consumers from New Zealand, Australia, the United Kingdom, and the United States identified that the key factors influencing women's consumption choices include price, type of wine, prior tasting experiences, discounts, variety, and brand (Forbes, 2012). Women aim to be well-informed about these factors before making a decision. Moreover, an eye-tracking study conducted in a simulated supermarket setting at Javeriana University in Cali, Colombia, provided insight into consumers' behavior when selecting wine. The research revealed that women tend to carefully read the labels and place a high value on nutritional information, country of origin, and health information (Escandon-Barbosa & Rialp-Criado, 2018).

A separate study involving focus groups from four Portuguese wine regions found that the context of wine consumption and prior experience significantly influence women's wine decisions. Women paid special attention to the brand, region, and awards associated with the wine (Ferreira et al., 2019). According to various studies, factors influencing women's wine choices include flavor, previous tasting experiences, brand, recommendations, price, wine region, in-store promotions, medals, and awards (De Oliveira Dornelles et al., 2022). Furthermore, health benefits, bottle design, label information, and wine's price are among the main factors influencing wine consumption, according to a study conducted in India in which participated 646 consumers of wine (Malik et al., 2023).

Considering above mentioned studies, it is apparent that women value comprehensive information about wine for informed decision-making. Consequently, electronic wine lists should incorporate all this information.

CONCLUSION

This research delved into exploring the educational and functional benefits of electronic wine lists in restaurants from the perspective of women. With a growing trend towards digital technologies, many restaurants are adopting electronic menus and wine lists to meet the needs of their guests. Such digital innovations hold the potential to improve overall restaurant operations and enhance wine sales.

The findings from the research, which involved 182 women from Croatia and Serbia, revealed significant educational and functional benefits associated with using electronic wine lists in restaurants. Statistical analysis indicated that younger women, those who frequently visit restaurants and those with limited wine knowledge found higher benefits in utilizing electronic wine lists. It became evident that women seek to make well-informed decisions when choosing wines and desire detailed information about the wine's characteristics. The educational and functional aspects of electronic wine lists hold tremendous importance for women, as about two-thirds of the participants expressed a preference for restaurants that offer this digital feature.

The significance of this research lies in shedding light on the differences within this diverse group of women consumers, enabling decision-makers to design wine lists that cater to these varying preferences. As women constitute a significant portion of wine sales, understanding their perceptions and feelings towards electronic wine lists can aid designers in developing more effective and customer-centric wine lists.

The paper makes a notable contribution by presenting important findings that

address the existing, otherwise scarce literature on wine purchasing behavior. Its practical implications are evident, providing valuable insights to managers and decision-makers in restaurants regarding women's preferences for electronic wine lists. Restaurants can enhance their offerings by providing an electronic wine list, offering valuable information that empowers guests, especially women, to make well-informed decisions about their wine choices.

While this research provides significant insights, it does come with certain limitations. The study involved a relatively small sample of 182 women from only two countries, Croatia and Serbia, potentially limiting the generalizability of the findings to other countries or demographics. Moreover, the use of a restricted number of closed-ended questions in the questionnaire may have hindered respondents from fully expressing their unique experiences and emotions. Additionally, the reliance on self-reported data may have introduced subjectivity to the results.

To address these limitations and further enhance knowledge in this field, future research should aim to involve more diverse participant samples from various countries. Utilizing different research methodologies, such as open-ended questionnaires or interviews, can provide a more comprehensive understanding of women's experiences and perspectives regarding the educational and functional benefits of electronic wine lists. By delving deeper into these aspects, researchers can contribute to the continuous improvement of electronic wine lists and the overall wine dining experience for women in restaurants.

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