THE IMPACT OF RAKIJA CULTURAL HERITAGE AND RAKIJA MARKETING ON THE CONSUMER PURCHASING DECISIONS

Slobodan Adžić[1], Marko Pavlović[2], Marijana Milunović[3], Đorđe Pavlović [4], Tijana Savić Tot[5], Pavle Radanov [6]

Corresponding author E-mail: s.adzic@famns.edu.rs

A R T I C L E I N F O	A B S T R A C T
	This is the first study on the tradition and cultural heritage of the rakija market based on consumer behavior analysis. The primary objective is to investigate the impact of cultural tradition on consumer behavior regarding the purchase of rakija, the national alcoholic beverage of Serbia. The secondary objective of this research is to measure the magnitude to which the marketing program of distilleries influences consumers' purchases of rakija. The research data were collected in Serbia from December 2023 to March 2024 utilizing a survey approach. Electronic data collection was carried out through an online questionnaire. The study sample comprised 608 valid respondents (n=608) who were chosen randomly. Traditional cultural heritage affects the purchase of rakija; however, the UNESCO recognition of šljivovica as part of its intangible heritage list does not. Moreover, the marketing program of distilleries affects the purchase of rakija. However, the effect sizes of these phenomena are insignificant.

1   Slobodan Adžić, Ph.D., Full Professor, Faculty of Management FAM, University Union – Nikola Tesla, Address: Njegoševa 1a, 21205 Sremski Karlovci, Serbia, Phone: +38212155051, E-mail: s.adzic@famns.edu.rs, ORCID ID (https://orcid.org/0000-0002-8827-5492)

2   Marko Pavlović, Ph.D., Professor, Academy of Applied Technical Studies, Address: Katarine Ambrozić 3, 11000 Beograd, Serbia, Phone: +38116410990, E-mail: mpavlovic@atssb.edu.rs, ORCID ID (https://orcid.org/0000-0003-1817-9734)

3   Marijana Milunović, Ph.D., Full Professor, Faculty of Economics and Finance, University Union – Nikola Tesla, Address: Cara Dušana 62-64, 11158 Beograd, Serbia, Phone: +381112180271, E-mail: mmilunovic@unionnikolatesla.edu.rs, ORCID ID (https://orcid.org/0000-0003-3791-5098)

4   Đorđe Pavlović, Ph.D., Professor, Western Serbia Academy of Applied Studies, Address: Vuka Karadžića 3a, 14000 Valjevo, Serbia, Phone: +38114224735, E-mail: djordje.pavlovic@vipos.edu.rs, ORCID ID (https://orcid.org/0009-0007-9376-6265)

5   Tijana Savić Tot, Ph.D., Associate Professor, Faculty of Management FAM, University Union – Nikola Tesla, Address: Njegoševa 1a, 21205 Sremski Karlovci, Serbia, Phone: +38212155051, E-mail: tijana.savictot@famns.edu.rs, ORCID ID (https://orcid.org/0000-0001-5597-8004)

6   Pavle Radanov, PhD, Associate Professor, Metropolitan University in Belgrade, Faculty of Management, Tadeuša Košćuška 63 Belgrade, Serbia, Phone: +381 66 866 4900, E-mail: pavle.radanov@metropolitan.ac.rs, ORCID ID (https://orcid.org/0000-0003-4657-1995)

Introduction

In this study, we aim to answer the following questions: Are cultural tradition and marketing important factors in consumers' decision to purchase traditional alcoholic beverages? Who takes precedence in the purchase of traditional alcoholic beverages, marketing or cultural traditions? How significant are these variables, and how much do they influence the purchasing decisions of rakija consumers? Does the recognition of rakija by UNESCO as part of intangible cultural heritage also have an impact on purchasing decisions?

To the best of our knowledge, no previous research has explored this aspect of influence on purchasing decisions and quantities purchased by consumers of alcoholic beverages in Serbia. This study fills the identified gap in academic research, which is the main contribution of this work. Following the introduction, we will present findings from the literature to establish our research hypotheses. We will then present the results of our survey titled "Consumer attitudes about rakija." Through inferential statistical analysis, particularly regression analysis, we have obtained results that confirm two hypotheses and refute one. The paper concludes with a summary and suggests potential future avenues of research.

Literature Review

Rakija, also referred to as rakia or schnapps, is a spirit-based beverage that holds significant cultural and traditional value in Serbia (Nikićević, 2021). Specifically, šljivovica, a plum spirit or plum brandy, is widely recognized as a national Serbian beverage. However, other types of fruit spirits are also commonly distilled. The consumption of rakija is intimately intertwined with the daily lives of people residing in Serbian villages (Kerewsky-Halpern, 1984). Unlike wine, which is primarily associated with religious ceremonies, rakija is endowed with unique attributes that hold significant cultural value. The sentiment expressed by the Serbian people is that rakija is an integral part of their existence because it is consumed during pivotal life events such as birth, marriage, and death. Recently, the UNESCO World Heritage List expanded to include Serbian plum rakija šljivovica. This traditional plum brandy was recognized as intangible cultural heritage by UNESCO under the name "Social practices and knowledge related to the production and use of traditional plum brandy – šljivovica" at the end of 2022 (UNESCO, 2022).

In 2023, 953 producers of rakija were registered in Serbia, according to data obtained from the Ministry of Agriculture (BBC News na srpskom, 2023). Approximately 50 million liters of rakija are estimated to be produced in Serbia, with approximately 80% of the market operating illegally (Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia, 2020). Despite the significant number of registered distilleries, the export of spirits from Serbia remains relatively low, with only 2.823 million liters of spirits valued at $14.5 million being exported. In contrast, the value of imported strong alcoholic beverages into Serbia surpasses the aforementioned

export value, amounting to 3.442 liters of strong alcoholic beverages valued at $15.5 million (Info Press, 2020). Rakija was primarily exported to neighboring countries such as Montenegro and Bosnia. In contrast to rakija, the French cognac, with which Serbian distilleries prefer to compare their products, exhibits a pronounced inclination toward exportation. In 2016, an overwhelming majority (over 97%) of this particular beverage was consumed on an international scale, with its distribution spanning 159 countries (Carew et al., 2017). In contemporary times, despite Serbia's prominent position as one of the leading plum producers globally, the exportation of Serbian plums and plum-derived products remains inconsequential (Matković, 2015). Consequently, it is unsurprising that the acreage dedicated to plum cultivation in Serbia has been experiencing a decline (Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia, 2019).

Despite the presence of a thousand officially recognized distilleries and a multitude of pot stills operated by small-scale producers, the rakija industry in Serbia is not financially lucrative, and only a limited number of brands are available on the market (Adžić, 2021). Furthermore, Adžić (2021) posits that the primary challenge in the marketing of rakija is the establishment of unrealistically high prices beyond the purchasing power of consumers, resulting from an unfounded belief that rakija is on par with the highest quality of strong alcoholic beverages. Distilleries face challenges in selling their products despite their belief in their quality. The chemical and sensory analyses carried out by Mrvčić et al. (2021) emphasized that there are rakija derived from traditional production methods that lack sufficient understanding of production technologies and fail to maintain adequate control over fermentation and distillation processes. To establish a strong position in the market, it is essential for the product to demonstrate high quality (Adžić, 2023). However, a mere 25.96% of the 104 distillers surveyed adhered to modern and scientifically accepted processes in rakija production (Adžić et al., 2023). The research findings also indicate that only 3.85% of distillers in the Serbian rakija industry effectively utilize all four elements of the marketing mix in their business operations, indicating a lack of mastery of marketing strategies. Interestingly, those distillers who have successfully implemented these strategies have managed to command higher prices for their products. Based on the rakija price list provided by a prominent distributor in the Serbian market (*SUPERNOVA • Import and Distribution of Wine, Spirits and Equipment*, 2024), the average price of rakija stands at 6,180 RSD (approximately $57), with a 95% confidence interval ranging from 2,586.78 to 9,772.88. The median price of rakija is reported to be 2,832 RSD (approximately $26), with a price range spanning from 1,320 to 70,488 RSD.

Drinking has been linked to a conventional way of life among individuals of varying genders and age groups and is commonly viewed as a source of pleasure and relaxation. Despite individuals possessing a certain perception of their health identity in relation to alcohol consumption, the consumption of alcohol in diverse social contexts has resulted in the emergence of distinct and conflicting drinking identities. Certain social events or gatherings are associated with higher levels of alcohol consumption than others are.

Typically, occasions that involve drinking with other adults tend to necessitate greater alcohol consumption, as individuals strive to be included in social groups (Gregory-Smith & Manika, 2017). Social norms exert a significant influence on consumer behavior (Melnyk et al., 2022). The impact of social and cultural norms on behavior that is deemed acceptable remains consistent across different times and cultural contexts. However, it is noteworthy that the influence of norms on behavior that is considered unacceptable has intensified over time, particularly in societies characterized by a focus on survival and adherence to traditional values. There are two main rationales behind the consumption of alcohol (Pettigrew & Charters, 2010). First, it serves as a means of celebration, fostering stronger social bonds within a community. Second, it enables individuals to express their social status and position through their choice and consumption of beverages. Local brands are deemed more suitable for consumption at home due to their affordability and less prestigious image.

Subsequent studies on classical conditioning should focus on comprehending the domains in which the principles of classical conditioning are applicable in practical contexts, thereby enhancing its external validity. The concept of involvement has gained significant attention in consumer behavior research (Rahman & Reynolds, 2015). Involvement refers to an individual's perception of the relevance of a consumption object, which is based on their inherent needs, values, and interests. When consumers perceive a product as addressing or corresponding to something of substantial value or fundamental importance in their lives, they become "inolved" with the product. The level of involvement a consumer has with a product influences their decision-making processes, leading to variations among individuals. In light of the diminishing significance of national borders and the erosion of traditional cultural boundaries, the inclination of consumers toward specific alcoholic beverages seems to be less influenced by longstanding regional customs and more by the increasing acceptance of cultural transformation (Smith & Mitry, 2007).

The contemporary marketing philosophy is centered on the concept of value; however, the existing marketing theory that elucidates value from the consumer's perspective is restricted (Tanrikulu, 2021). The theory of consumption value is a marketing theory that offers a profound understanding of the driving forces behind consumers' consumption behavior through consumption values. While personal-based values are instrumental in establishing a connection between the motivation for purchasing and the personal values of consumers, the supplementary value (such as expositional, religious, cultural, etc.) that is contingent upon the particular nature of the product under investigation is equally significant. Rakija is a culturally endorsed national alcoholic drink in Serbia that should have a major effect on its consumption and sales. Therefore, we established the following hypotheses for further statistical analysis:

H1: Traditional cultural heritage significantly affects the purchase of rakija.

H2: The UNESCO recognition of šljivovica as part of its intangible heritage list significantly affects the purchase of rakija.

The dominant alcoholic brands in the current market have cultivated strong consumer loyalty through years of reputation building (Gordon, 2003). In addition to these major brands, there are niche products available to cater to the preferences of connoisseurs. Consumers today have a wide range of brands from which to choose, catering to various tastes and budgets. However, consumers may face difficulty in distinguishing between brands, making the power of persuasion through promotion a significant influence on their choices. As a result, a complex and sophisticated consumer marketing industry has emerged. Under the broader category of marketing costs, two key components can be identified. First, there are costs associated with brand development, encompassing product marketing activities such as advertising, promotion, public relations, and other paid-for initiatives aimed at influencing demand. Second, there are costs related to channel management, which involves selling and distribution. This category encompasses the entire infrastructure required to drive products through the distribution chain and reach consumers. The alcoholic beverage industry commonly distinguishes between two channels known as on-premises and off-premises trades (Gordon, 2003). The on-premises trade involves consumption in establishments such as pubs, hotels, and restaurants, while the off-premises trade pertains to retail outlets such as supermarkets and other stores. Successful international drink marketers possess channel capabilities that enable them to bring a diverse portfolio of brands to the market, each with a distinct positioning. These marketers effectively execute the brand message at the point of sale.

Gaining insight into consumer preferences is crucial for the development of a prosperous product (Palma et al., 2018). However, it is important to acknowledge that preferences vary among individuals. Sociodemographic characteristics exhibit limited correlation with preferences. Instead, the recommendations provided by friends and critics hold significant value for the majority of consumers. Surprisingly, a higher alcohol concentration does not carry a negative perception. Discounts effectively capture the attention of most consumers. Furthermore, the impact of price on the probability of choice is generally negative, albeit occasionally uncertain (Palma et al., 2018). The Vodka consumer attitude and purchasing behaviors study (Prentice & Handsjuk, 2016) aimed to examine the relationships between various marketing factors and the purchasing behavior and brand preference of Vodka in the Australian market. The factors under investigation included branding, country of origin, packaging, and social media. The findings of this study suggest that marketers should allocate additional resources to establishing a strong brand image, enhancing brand awareness, and fostering positive brand perceptions. The results indicate that branding significantly influences consumers' attitudes toward Vodka, their brand preference, and their frequency of purchase.

Verdonk et al. (2017) proposed a theoretical framework for understanding the factors that influence the purchasing preferences of sparkling wine, particularly that of champagne. It posits that personal taste, guidance from trusted sources such as family, friends, and wine salespersons, expert reviews, brand image and reputation, country or region of origin, price, consumption occasion, the nature of the company at the occasion, and gift purchasing all play significant roles in shaping consumer choices

in this domain. By examining these various dimensions, this model aims to provide a comprehensive understanding of the complex decision-making process involved in the selection of sparkling wine products. The findings from a focus group study revealed that convenience played a crucial role in the wine purchasing behavior of participants, with price serving as a key guiding factor (Weightman et al., 2019). Price is a significant factor for consumers in determining the quality of a product and is considered one of the primary drivers of purchase decisions. Hlédik and Harsányi (2019) recognized three significant contexts for alcohol buying, namely, everyday consumption, special occasions, and gifts.

The beverage industry offers consumers an extensive selection of choices compared to many other fast-moving consumer goods categories (Gordon, 2003). Consumers today rely heavily on brands when making choices, as brands provide reassurance regarding the origin and quality of products, ultimately guaranteeing satisfaction. Consequently, the brand itself often becomes the primary basis for consumers to choose one product over another. Alcohol pricing is widely recognized as a potential mechanism influencing levels of alcohol consumption. In light of the expenditure survey conducted by Lu et al. (2017), an average price was calculated assuming that 86 percent of the expenditure was derived from promotional items and 14 percent from nonpromotional items. This average price was subsequently utilized in the computation of expenditure from these models. It is noteworthy that the introduction of a promotion invariably results in increased purchasing of alcohol for the specific product in question, both in terms of units purchased and expenditure.

Advertising plays a significant role in the marketing of alcoholic beverages, exerting a formidable influence on a diverse range of consumers across multiple locations (Frank Amoateng & Kofi Poku, 2012). Since 1971, there has been a significant surge of over 400% in total expenditures on alcoholic beverage advertising in the United States (Wilcox et al., 2015). The advent of new media platforms, such as social networking sites, has significantly transformed the media landscape (Moraes et al., 2014). Word-of-mouth/mouse (WOM) continues to be the most influential promotional tool, with recommendations from acquaintances or influencers serving as a potent marketing weapon (Kaikati & Kaikati, 2004). Currently, social networks have emerged as the prevailing means of communication in the field of alcoholic beverage marketing (Atkinson et al., 2021). These platforms have facilitated a multitude of communication practices that allow for interactions between multiple individuals, thereby leading to a substantial rise in the exposure of young individuals to pro-alcohol consumption messages. Consequently, the boundaries between content generated by alcohol brands, nightclubs, and consumers have become increasingly indistinct. Our objective is to assess the effectiveness of marketing programs and distilleries activities in Serbia in relation to sales outcomes, considering factors such as branding, distribution, pricing, and promotional efforts.

H3: The marketing program of distilleries significantly affects the purchase of rakija.

Materials and methods

The primary objective of this study is to investigate the impact of cultural tradition on consumer behavior regarding the purchase of rakija, the national alcoholic beverage of Serbia. To achieve this objective, a research scale approach was utilized. The brand preference scale employed in the aforementioned Prentice and Handsjuk (2016) study was modified for this research to ascertain the preference for rakija due to its traditional cultural heritage. The newly modified RPS was labeled the Rakija Preference Scale (the RPS scale is shown in Table 1). The purpose of the new scale is to test H1: Traditional cultural heritage significantly affects the purchase of rakija. The UNESCO Pride Scale, labeled UP, consists of three questions and was specifically designed for this study (scale UP in Table 1). The purpose of this scale is to examine the H2 hypothesis: The UNESCO recognition of šljivovica as part of its intangible heritage list significantly affects the purchase of rakija.

The secondary objective of this research is to measure the magnitude to which the marketing program of distilleries influences consumers' purchases of rakija. For this purpose, the marketing scale, referred to as the MKT, was developed. It comprises six Likert-type questions. According to Gordon (2003), three variables are associated with product marketing activities: brand, advertising, and price. The other three variables are related to channel management, with a focus on two off-premises activities and one on-premises activity carried out by distilleries. The purpose of this scale is to assess H3: The marketing activities of distilleries significantly affect the purchase of rakija.

Table 1. Research scales

RPS	**Rakija preference scale** (*Cronbach's Alpha = .879*)
RPS1	I would choose this rakija over any other available alcoholic beverages
RPS2	I am willing to recommend others to purchase rakija
RPS3	I intend to purchase rakija in the future
UP	**UNESCO pride scale** (*Cronbach's Alpha = .835*)
UP1	I am proud that rakija is our national drink
UP2	Rakija is a very important part of our culture
UP3	I am proud that šljivovica has been protected by UNESCO
MKT	**Marketing scale** (*Cronbach's Alpha = .648*)
MKT1	The brand is important to me when choosing rakija
MKT2	Advertising has a lot of influence on the choice of rakija that I drink
MKT3	I buy rakija in specialized stores
MKT4	If I don't find the rakija I want to buy, I will leave the store
MKT5	I choose bars that pour my favorite rakija
MKT6	What matters to me is the price of rakija

The study data were gathered in Serbia between December 2023 and March 2024 through a survey method. A random selection was made for the research sample to ensure a representative group of participants. The survey was carried out anonymously, and participation was voluntary. A total of 620 people completed the online questionnaire entitled Consumer attitudes about rakija. Twelve underage respondents were

automatically excluded, resulting in a valid sample of 608 ($n = 608$). Data collection was performed electronically using a questionnaire created with Google Forms. Prior to taking part in the study, all participants provided their consent for the use of the collected data for academic purposes in the development of a scientific paper. Participant attitudes and opinions were assessed on a scale from one to seven, where one indicated complete disagreement and seven indicated complete agreement. Descriptive statistics and parametric methods were employed in the data analysis, which was conducted using SmarPLS version 4.1, JASP version 0.18.3, and SPSS version 25.

Results

In the sample, the number of female participants exceeded that of male participants, with 328 female participants or 54% compared to 279 male participants or 46%. The average age of the participants, ranging from 18 to 77 years, was 42.45 years, with a median of 44. The majority of the participants (490 or 81%) were employed. In addition, a significant majority of the participants (476 or 79%) had a college degree. The vast majority of the participants lived in urban areas (522 or 86%). Therefore, it was expected that only 15% or 90 participants would be engaged in agriculture. Of the 608 participants, 93 or 15.30% did not consume alcohol. Since the focus of the study was on the attitudes of rakija users, we thanked this group of participants and did not ask further questions. Among the remaining 515 participants, 120 or 23.30% did not consume rakija, so they were not asked about their attitudes toward rakija. However, as nonconsumers may buy a bottle of rakija as a gift, they were asked questions about prices and the quantity of rakija purchased. Of this group of participants, 363 or 71% buy rakija, while 148 or 29% do not. Finally, the final number of rakija users decreased from 608 to 395 participants. Among these rakija users, 56 or 14.18% of the participants did not like rakija as a drink even though they consumed it.

The mean monthly consumption of rakija among the participants was 0.58 liters ($SD = 0.965$), while the average consumption of other brandies was 0.20 liters per month ($SD = 0.356$). A total of 19.7% of rakija users preferred other strong alcoholic beverages to rakija. Moreover, the respondents consumed an average of 2.98 liters of beer monthly ($SD = 6.095$) and 1.23 liters of wine ($SD = 2.063$). Approximately one-third of the rakija drinkers preferred beer to rakija, accounting for 35.2%, while nearly half of the rakija consumers preferred wine to rakija, representing 48.4%. In comparison to fruits from which respondents most prefer to drink rakija, plum stands out at 41.8%. In second place was quince at 16.2%, followed closely by apricot at 15.4%. The fourth and fifth most common fruits were pears (10.4%) and grapes (4.3%), while the remaining 11.9% of respondents preferred one of the other 32 fruits offered in the survey questionnaire.

The vast majority of rakija users, 93.7% of all respondents, or 370 out of 395, preferred homemade rakija. Approximately half of the participants, 170 or 43%, distilled and

consumed their own rakija. A little over a quarter of the respondents, 113 or 28.6%, purchase rakija from retail stores. Consequently, only 106 or 26.8% of the participants had a favorite brand of rakija, while almost three-quarters of the respondents, 289 or 73.2%, did not have a favorite brand. On average, rakija users who recognized brands bought their last bottle of rakija 6 months ago, with a median of 2 months. The highest frequency of individual brand names in response to the question "What is your favorite brand of rakija?" is five ($n = 129$), indicating that no brand stands out. The broader group of rakija users ($n = 393$) purchased their last bottle of rakija 10 months ago, with the same median of 2 months as in the narrower group of branded rakija users. On average, alcohol beverage consumers buy 7.36 liters of rakija annually ($Mdn = 3$), while they receive 7.41 liters of the same beverage as a gift ($Mdn = 5$).

Participants were surveyed regarding the context in which they purchase rakija. Responses were rated on a scale ranging from one to seven. Two final results had mean scores that surpassed the average, while one result fell below it. The mean score for the variable gift was the highest at 5.22, followed closely by the variable special occasions at 5.18. Interestingly, the variable everyday consumption had the lowest mean score of 2.64. Quality is of great importance to rakija users, who rate it at 4.63 out of 5, while they rate the quality of rakija on the Serbian market notably lower at 3.74 out of 5. According to a survey conducted among 490 alcoholic beverage consumers, it is believed that the average fair price for a bottle of rakija in retail should be 1,518 RSD ($Mdn = 1200, SD = 1995.732$). On average, respondents would not purchase rakija if it was priced below 884 RSD ($Mdn = 700, SD = 808.212$) due to concerns about its quality. However, the maximum average price at which respondents would not be willing to pay for rakija is 3,495 RSD ($Mdn = 2500, SD = 3494.866$).

Finally, we will highlight the most interesting comments from the participants that we asked to provide in the last, open-ended question of the survey. One respondent insists that "tradition should be preserved," while another believes that "all of our rakija are strong, or pungent, other strong alcoholic beverages have alcohol but are easier to drink." One participant claims that "rakija is much better and healthier than any other alcoholic drink, it is natural, especially if we make it ourselves," while another participant has a completely opposite view that "rakija is so rarely good that I almost always refuse it on every occasion." Two participants in this survey have very similar attitudes toward homemade and industrial rakija. The first stated, "I prefer homemade rakija and usually consume it in restaurants. I buy rakija as a gift, most often from trips," while the second stated, "I always buy rakija at the market, homemade, from the same people when it is for me (home, guests, etc.). I occasionally buy branded rakija in stores for gifts, but for my own consumption, only homemade rakija." Also interesting is the critical attitude of this participant:

> *You are pushing brands and stories about them, and I do not believe in them, and generally, people do not believe. I buy rakija from well-known domestic producers (peasants), usually after tasting. I produce part of the rakija*

when there is time for it. Industrial rakija repels me, and I often do not trust small producers who have expanded and branded production because by standardizing and technological processes they lose authenticity, the rakija becomes too standardized in taste, industrially "fine" and seems processed.

Common method bias can occur when the same measurement method is used to evaluate both the independent and dependent variables. The negative effects of common method bias are especially noticeable when self-reported data collection methods are employed, particularly in sensitive research areas such as alcohol consumption (Kock et al., 2021). To assess the honesty of respondents, specifically whether they provided automatic responses to Likert-type questions in these self-administered surveys, Harman's single-factor test was conducted. Principal axis factor analysis with a fixed factor to one produced a result of 25.187%, indicating that a single factor explains 25.187% of the variance in the data, which is below the 50% threshold (Aguirre-Urreta & Hu, 2019). This discovery implies the absence of common method bias. Furthermore, the reliability of all the scales for further statistical analysis was confirmed by the Cronbach's alpha values exceeding .06 (Ahdika, 2017), as presented in Table 1.

The mean score for all scales utilized in this study was computed. The UNESCO pride scale (UP_AVG) recorded the highest mean of all scales, 6.23 ($SD = 1.159$), which was very close to the maximum score of seven. The rakija preference scale (RPS_AVG) also achieved an above-average result, with a mean score of 4.74 ($SD = 1.692$). The mean score of the marketing scale (MKT_AVG) was 3.49 ($SD = 1.104$), which falls close to the middle of the scale.

A series of independent-samples t tests were conducted to compare the mean scores of all computed scales between rakija consumers who like rakija ($n = 338$) and rakija consumers who dislike it ($n = 56$). A design consisting of two groups with sample sizes of 338 and 56 can detect a medium effect size ($d = .50$) with a power of at least $1 - \beta = .933$, assuming an error rate of $\alpha = .05$ (two-sided). None of the tests revealed statistical significance at the .05 level, i.e., for UP_AVG $t(392) = -0.370, p = .711$, for RSP_AVG $t(392) = 0.683, p = .495$, or for MKT_AVG $t(392) = -0.370, p = .675$

However, the results of a series of independent-samples t tests conducted to compare the mean scores of all computed scales between the group of participants who purchased rakija ($n = 306$) and the group of participants who did not purchase rakija ($n = 89$) were quite different. A design consisting of two groups with sample sizes of 306 and 89 can detect a medium effect size ($d = .50$) with a power of at least $1 - \beta = .985$, assuming an error rate of $\alpha = .05$ (two-sided). We are more likely to miss (power less than 50%) effect sizes less than $d = .237$. The Brown-Forsythe test of equality of variances was not statistically significant for any of the dependent variables. The t test was significant for the composite average results of the UNESCO pride scale (UP_AVG) $t(393) = 1.976, p = .049$. The effect size of the mean difference of 0.275 was

small, $d = .238$. The composite average results of the rakija preference scale (RPS_ AVG) also yielded a significant t test $t(393) = 5.370, p < .001$. The effect size of the mean difference of 1.057 was between medium and large, $d = .670$. Finally, the t test was also significant for the composite average results of the marketing scale (MKT_ AVG) $t(393) = 4.460, p < .001$. The effect size of the mean difference of 0.579 was medium, $d = .537$. On average, the participants who purchased rakija had more positive attitudes toward tradition and marketing than did those who did not purchase it; these differences in attitudes were statistically significant.

As the test results for the UP_AVG scale are borderline values and as we have specific data on the purchase of brandy products in the sample, we will move on to further analysis. By conducting multiple regression analysis, we test the complex relationships between variables, specifically the impact of multiple factors on the dependent variable, which is the quantity of rakija purchases in liters. Additionally, regression analysis enables the simultaneous testing of multiple hypotheses and the estimation of the influence of each independent variable while controlling for others.

Figure 1. Graphical representation of regression analysis examining the impact of cultural tradition on the purchase of rakija
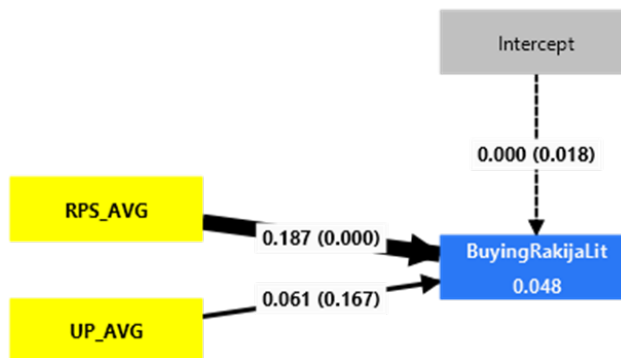
Multiple regression analysis was conducted to evaluate how well the heritage and origin measures predicted rakija sales (Figure 1). The predictors consisted of the aggregated and averaged values derived from the Rakija preference scale (RPS_AVG) and the UNESCO pride scale (UP_AVG), while the criterion variable was the rakija purchase quantity in liters (BuyingRakijaLit). Given that the significance of the Breusch–Pagan test was less than .001, the regression analysis in SmartPLS 4 was conducted by opting for heteroscedasticity consistent (HC4) standard errors, as suggested by Hayes and Cai (2007). Scatterplots demonstrated linear relationships, indicating that the assumption of linearity was not violated. The Durbin-Watson statistic was used to analyze the residuals. The results were within the acceptable range of 1.50 – 2.50, signifying the absence of autocorrelation in the residuals (Turner, 2020). Moreover, the variance inflation factor (VIF) for each predictor was found to be below the threshold of 5, alleviating any concerns regarding multicollinearity (Hair et al., 2019).

The linear combination of heritage and origin measures was significantly related to the rakija purchase quantity $R^2 = .048, F(2,388) = 9.674, p < .001$. The effect size is fairly poor, and approximately 5% of the variance in rakija sales in the sample can be accounted for by the linear combination of heritage and origin measures. Only the partial correlation between rakija preference and rakija sales was statistically significant, although the size of the associated effect of .187 was small according to Cohen's criteria (Cohen, 1988). Overall, cultural tradition had a tiny positive effect on purchase of rakija. However, only the variable RPS_AVG, which indicates the preference for rakija based on its heritage and origin of Serbian rakija, achieved statistical significance, while the variable UP-AVG, which represents the recent recognition of that heritage and origin of Serbian rakija by an international organization, did not. Therefore, hypothesis H1 (*Traditional cultural heritage significantly affects the purchase of rakija*) is supported, but hypothesis H2 (*the UNESCO recognition of šljivovica as part of its intangible heritage list significantly affects the purchase of rakija*) is rejected.

Figure 2. Graphical representation of regression analysis examining the impact of marketing on the purchase of rakija
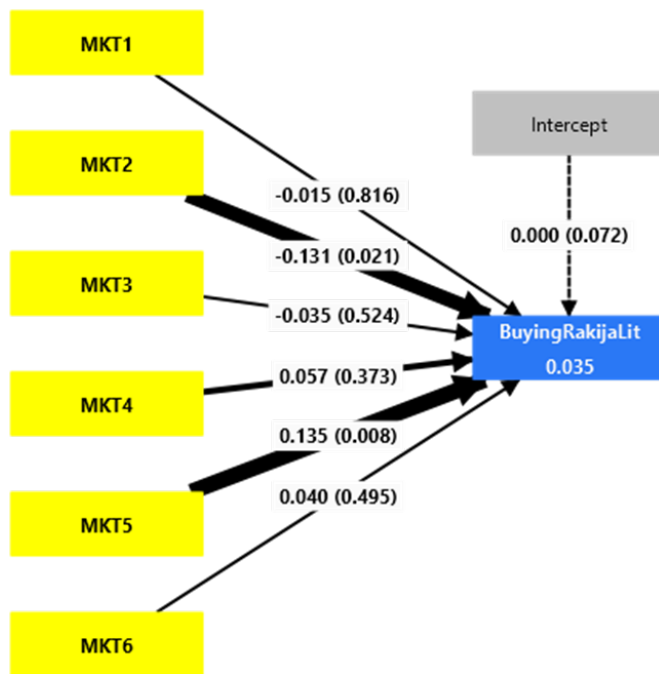

In the multiple regression analysis (see Figure 2), we evaluated the influence of six independent variables ("The brand is important to me when choosing rakija, Advertising has a lot of influence on the choice of rakija that I drink, I buy rakija in specialized stores, If I don't find the rakija I want to buy I will leave the store, I choose bars that pour my favorite rakija, and What matters to me is the price of rakija) on the dependent variable, How many liters of rakija do you buy per year? In SmartPLS 4, regression

analysis was performed with the selection of heteroscedasticity consistent (HC4) standard errors due to the statistical significance of the Breusch–Pagan test. Scatterplots revealed linear trends. Additionally, the Durbin-Watson statistic of 2.017 indicated the absence of autocorrelation in the residuals, confirming the independence of the errors. Additionally, the VIF was computed for each predictor, revealing that all the VIF values were below 1.5. This discovery eliminates any worries about multicollinearity among the predictors.

The overall multiple regression was statistically significant $(R^2 = .035, F(6,384) = 2.332, p < .001)$. In terms of model fit, the data fit the model poorly. The marketing activities of distillers accounted for only 3.5% of the purchases of rakija. We found that only two of the six independent variables had a statistically significant effect on the purchase of rakija. Advertising (MKT2) had a significant but negative effect, indicating that more advertising activities will decrease the purchase of rakija. The impact of on-premises marketing activities, specifically rakija bars (MKT5), on the purchase of rakija was substantial and held the highest level of influence, although the associated effect size was small. Overall, marketing had a slight positive effect on the purchase of rakija; however, it was solely the on-premises marketing activities that contributed to this outcome. As a result, hypothesis H3 (*The marketing activities of distilleries significantly affect the purchase of rakija*) is accepted.

We were ultimately interested in measuring the effect of all dependent variables together on the purchase of rakija. Analyses and necessary actions were conducted to ensure compliance with the assumptions of normality, linearity, multicollinearity, and homoscedasticity. Multiple regression was used to predict rakija purchases based on the composite average results of the marketing scale (MKT_AVG), rakija preference scale (RPS_AVG) and UNESCO pride scale (UP_AVG). The model was significant, $R^2 = .050, F(3,387) = 6.790, p < .001$, indicating that at least one predictor significantly affects the purchase of rakija (Figure 3). With this combination of influences, only the preference for rakija yielded a statistically significant outcome, despite the small effect size of the beta coefficient at .199. Furthermore, the coefficient of determination, reflecting the collective impact of all independent variables on the dependent variable, is deemed insignificant at .050.

Figure 3. Graphical representation of regression analysis on the influence of all dependent variables on the purchase of sales
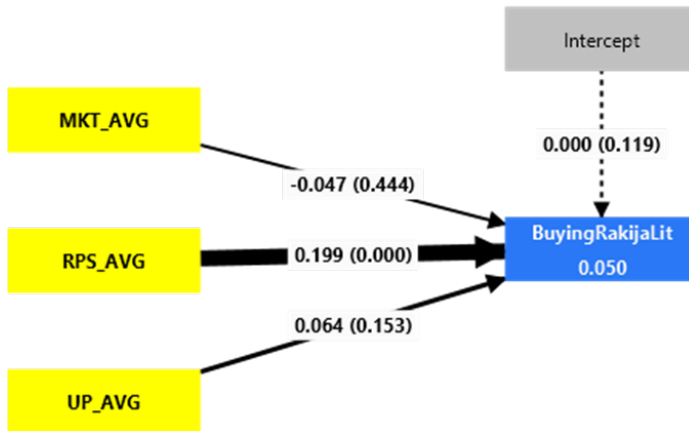
Discussions

The statistical findings are very clear; the first and third hypotheses are confirmed, while the second hypothesis is refuted. Traditional cultural heritage affects the purchase of rakija; however, the UNESCO recognition of šljivovica as part of its intangible heritage list does not. Moreover, the marketing program of distilleries affects the purchase of rakija. The influence of tradition embodied in cultural heritage on the sales of national alcoholic beverages deeply rooted in customs is not surprising. Neither is it surprising that marketing affects the sales of brandy products. What is surprising, however, are their minor effects. Nevertheless, our data also unveil the reasons why...

All of our respondents are extremely proud that rakija has been recognized by UNESCO. However, rakija is already a culturally accepted national drink, and this new recognition from an international organization is simply a reaffirmation of its status. This recognition has not influenced changes in old cultural patterns and therefore has not affected consumption. However, in regard to purchasing rakija for personal consumption, the data unequivocally show that rakija is rarely bought for personal consumption. It is mostly purchased as a gift or for special occasions. Additionally, as distilling rakija is a popular hobby in Serbia, the amount received by respondents as gifts without payment exceeds the amount purchased.

Previous analyses have shown that the main issues with rakija are low quality and high prices (Adžić, 2021; Mrvčić et al., 2021). In this study, participants clearly emphasized that the quality of rakija is extremely important to them but also that the quality of rakija in the domestic market does not meet their perception of satisfactory quality. Since almost half of the participants in the sample also made rakija for their own needs, it is clear to them that the highest quality fruit is not used as a raw material for rakija. This fruit is used for further sale, while lower quality fruit is used for rakija production.

Rakija brands on the market are advertised as being made from the best fruit, which is simply not true, as it is not economically feasible. Therefore, only one-fourth of the participants tend toward brands, and no rakija brand stands out in the market. In the words of one participant, "I do not believe in brands and generally, people do not believe." It is not surprising that 9 out of 10 participants preferred domestic rakija. The majority of participants enjoyed drinking šljivovica.

Local brands of questionable quality, which have not evolved from the commodity brand, communicate with consumers using messages that they significantly do not believe. While price was not significant in the statistical tests, the price of rakija is certainly a determinant of quality (Weightman et al., 2019), and rakija consumers do not have trust in this price. The average price that observers consider fair is not within the 95% confidence interval of the specialized distributor's prices. Furthermore, the average price of rakija at distributors is nearly twice as high as the maximum price that consumers advise producers. The respondents themselves claimed that "I buy branded rakija in stores occasionally for gifts, but for my own consumption only homemade," or "I prefer homemade rakija (but) I buy (branded) rakija as a gift, most often from trips."

The act of giving a bottle of alcoholic beverage is also part of cultural heritage, which is why we interpret that price is not important when making a purchase. Rakija is bought as a gift or for important family occasions, not for personal consumption. Due to the custom of presenting the gift in front of others, there is also a presence of rakija with multiple packages, golden flakes in the drink, and protective packaging made of noble wood on the market. From the marketing programs of manufacturers, only on-premises actions are important, which is also the message to marketing practitioners from this research on which direction to direct their marketing actions. Of course, since only 3.8% of distilleries carry out comprehensive marketing activities in the market (Adžić et al., 2023), it is not surprising that the marketing effect size is only 3.5% in this research. Simply put, what is not there is not seen. Social networks and WOM, which Serbian distilleries have not mastered, are the focus of successful marketing campaigns for alcoholic beverages (eg. Fireball whisky, see Andry, 2021), while the marketing of competition from numerous brands of alcoholic beverages surely occupies a large part of the market share.

In summary, in the majority of cases, Serbs love their rakija and will proudly continue the tradition of consuming it, but they will not buy it. They will distill rakija themselves or with friends and thus carry on the tradition of their ancestors. Like in any traditional society, they find it difficult to accept changes. To them, new rakija brands are novelties that they do not believe in and are not yet ready to accept.

Conclusion

This is the first study on the tradition and cultural heritage of the rakija market based on consumer behavior analysis after UNESCO recognized Serbian rakija šljivovica as an intangible cultural heritage, which is the greatest contribution of this research.

Traditional cultural heritage influences the purchase of rakija; however, the inclusion of šljivovica in UNESCO's intangible heritage list does not have an impact. Additionally, the marketing strategies implemented by distillers also exert a certain degree of influence on the purchase decisions related to rakija. With this study, we also contribute to the limited literature that examines rakija marketing.

We acknowledge the limitations inherent in our study. Specifically, our research solely focuses on rakija and does not provide a comparative analysis with other strong alcoholic beverages. Moreover, this study is limited by the geographical scope of Serbia, which limits its generalizability to other countries. A research design that encompasses a broader spectrum of beverages and markets would undoubtedly stimulate further interest. Consequently, these aforementioned research gaps present opportunities for future research.

Conflict of interests

The authors declare no conflict of interest.

References

1. Adžić, S. (2021). Greške u marketingu rakije i kako ih izbeći (Rakia marketing mistakes and how to avoid them). *Management Horizons*, *1*(1), 167–196.

2. Adžić, S. (2023). The way Serbian rakija distillers evaluate the quality and market position of their spirits. *Journal of Agricultural Sciences, Belgrade*, *68*(2), 217–236. https://doi.org/10.2298/JAS2302217A

3. Adžić, S., Bubulj, M., & Jovičić, A. (2023). The marketing myopia of Serbian rakija distillers. *Economics of Agriculture*, *70*(3), 813–827. https://doi.org/10.59267/ekoPolj2303813A

4. Aguirre-Urreta, M. I., & Hu, J. (2019). Detecting Common Method Bias: Performance of the Harman's Single-Factor Test. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, *50*(2), 45–70. https://doi.org/10.1145/3330472.3330477

5. Ahdika, A. (2017). Improvement of Quality, Interest, Critical, and Analytical Thinking Ability of Students through the Application of Research Based Learning (RBL) in Introduction to Stochastic Processes Subject. *International Electronic Journal of Mathematics Education*, *12*(2), 167–191. https://doi.org/10.29333/iejme/608

6. Andry, K. (2021). *Liquor Industry Marketing Strategy: Mix Up the Perfect Marketing Cocktail for Your Brand*. Zehnder Agency. https://www.z-comm.com/perspectives/liquor-industry-marketing-strategy-mix-up-the-perfect-marketing-cocktail-for-your-brand/

7. Atkinson, A. M., Sumnall, H., & Meadows, B. (2021). 'We're in this together': A content analysis of marketing by alcohol brands on Facebook and Instagram during the first UK Lockdown, 2020. *International Journal of Drug Policy*, *98*, 103376. https://doi.org/10.1016/j.drugpo.2021.103376

8. BBC News na srpskom. (2023, January 13). *Između tradicije i zakona: Zašto u Srbiji cveta crno tržište rakije*. BBC News na srpskom. https://www.bbc.com/serbian/lat/srbija-64108261

9. Carew, R., Florkowski, W. J., & Meng, T. (2017). Segmenting wine markets with diverse price functions: Evidence from California red and white wines sold in British Columbia. *Wine Economics and Policy*, *6*(1), 48–59. https://doi.org/10.1016/j.wep.2017.05.002

10. Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Routledge. https://doi.org/10.4324/9780203771587

11. Frank Amoateng & Kofi Poku. (2012). The Impact of Advertisement on Alcohol Consumption: A Case Study of Consumers in Bantama Sub-Metro. *International Review of Management and Marketing*, *3*(1). http://search.ebscohost.com.proxy.kobson.nb.rs:2048/login.aspx?direct=true&db=edsdoj&AN=edsdoj.0e392fcd763452eb550e11e4f995845&site=eds-live

12. Gordon, G. E. (2003). Marketing Scotch Whisky. In I. Russell (Ed.), *Whisky: Technology, Production and Marketing*. Elsevier.

13. Gregory-Smith, D., & Manika, D. (2017). Consumers' identities and compartmentalisation tendencies in alcohol consumption. *Journal of Marketing Management*, *33*(11/12), 942–972.

14. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

15. Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, *39*(4), 709–722. https://doi.org/10.3758/BF03192961

16. Hlédik, E., & Harsányi, D. (2019). Towards quality consumption: Segmentation of the Hungarian wine market based on wine consumption and purchasing habits. *International Journal of Wine Business Research*, *31*(4), 602–617. https://doi.org/10.1108/IJWBR-10-2018-0063

17. Info Press. (2020). *Voćne rakije—Neiskorišćeni potencijal od pola milijarde evra*. Info Press. https://www.infopress.rs/privreda/vocne-rakije-neiskorisceni-potencijal-od-pola-milijarde-evra/

18. Kaikati, A. M., & Kaikati, J. G. (2004). Stealth Marketing: How to Reach Consumers Surreptitiously. *California Management Review*, *46*(4), 6–22. https://doi.org/10.2307/41166272

19. Kerewsky-Halpern, B. (1984). " Rakija" as Ritual in Rural Serbia. *East European Quarterly*, *18*(4), 481.

20. Kock, F., Berbekova, A., & Assaf, A. G. (2021). Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*, *86*, 104330. https://doi.org/10.1016/j.tourman.2021.104330

21. Lu, H., Hess, S., Daly, A., & Rohr, C. (2017). Measuring the impact of alcohol multi-buy promotions on consumers' purchase behaviour. *Journal of Choice Modelling*, *24*, 75–95.

22. Matković, M. (2015). Possibilities of plum cultivation in the Republic of Serbia. *Ekonomika Poljoprivrede*, *62*(4), 1045–1060. https://doi.org/10.5937/ekoPolj1504045M

23. Melnyk, V., Carrillat, F. A., & Melnyk, V. (2022). The Influence of Social Norms on Consumer Behavior: A Meta-Analysis. *Journal of Marketing*, *86*(3), 98–120.

24. Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia. (2019). *STIPS - Agricultural Information Market System of Serbia*. https://www.stips.minpolj.gov.rs/srl/vest/sljiva-i-dalje-glavna-ali-je-manje-ima

25. Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia. (2020). Informacija o jakim alkoholnim pićima u 2018. Godini. *Ministarstvo poljoprivrede, šumarstva i vodoprivrede*. http://www.minpolj.gov.rs/download/informacija-o-jakim-alkoholnim-picima-u-20018-godini/

26. Moraes, C., Michaelidou, N., & Meneses, R. W. (2014). The use of Facebook to promote drinking among young consumers. *Journal of Marketing Management*, *30*(13–14), 1377–1401.

27. Mrvčić, J., Trontel, A., Hanousek Čiča, K., Vahčić, N., Nikićević, N., Spaho, N., Mihaljević Žulj, M., Brodski, A., Jurak, V., Krajnović, M., Sahor, R., Rubeša Vili, V., Petrović, R., & Stanzer, D. (2021). Chemical and sensorial characteristics of traditional fruit spirits from Southeast Europe. *Glasnik Zaštite Bilja*, *44*.(6.), 80–89. https://doi.org/10.31727/gzb.44.6.9

28. Nikićević, N. (2021). *Production of superior quality plum brandy in small domestic distilleries in Serbia* (D. Jevremović, I. Glisić, & N. Milosević, Eds.; Issue 1322, pp. 351–354). International Society for Horticultural Science (ISHS). https://doi.org/10.17660/ActaHortic.2021.1322.48

29. Palma, D., Ortúzar, J. de D., Rizzi, L. I., & Casaubon, G. (2018). Modelling consumers' heterogeneous preferences: A case study with Chilean wine consumers. *Australian Journal of Grape & Wine Research*, *24*(1), 51–61.

30. Pettigrew, S., & Charters, S. (2010). Alcohol consumption motivations and behaviours in Hong Kong. *Asia Pacific Journal of Marketing and Logistics*, *22*(2), 210–221. https://doi.org/10.1108/13555851011026953

31. Prentice, C., & Handsjuk, N. (2016). Insights into Vodka consumer attitude and purchasing behaviors. *Journal of Retailing and Consumer Services*, *32*, 7–14.

32. Rahman, I., & Reynolds, D. (2015). Wine: Intrinsic attributes and consumers' drinking frequency, experience, and involvement. *International Journal of Hospitality Management*, *44*, 1–11.

33. Smith, DavidE., & Mitry, DarrylJ. (2007). Cultural Convergence: Consumer Behavioral Changes in the European Wine Market. *Journal of Wine Research*, *18*(2), 107–112.

34. *SUPERNOVA • Import and distribution of wine, spirits and equipment*. (2024). http://supernovawine.rs/#page03

35. Tanrikulu, C. (2021). Theory of consumption values in consumer behaviour research: A review and future research agenda. *International Journal of Consumer Studies*, *45*(6), 1176–1197.

36. Turner, P. (2020). Critical values for the Durbin-Watson test in large samples. *Applied Economics Letters*, *27*(18), 1495–1499. https://doi.org/10.1080/1350485 1.2019.1691711

37. UNESCO. (2022). *UNESCO - Social practices and knowledge related to the preparation and use of the traditional plum spirit – šljivovica*. https://ich.unesco. org/en/RL/social-practices-and-knowledge-related-to-the-preparation-and-use-of-the-traditional-plum-spirit-ljivovica-01882

38. Verdonk, N., Wilkinson, J., Culbert, J., Ristic, R., Pearce, K., & Wilkinson, K. (2017). Toward a model of sparkling wine purchasing preferences. *International Journal of Wine Business Research*, *29*(1), 58–73. https://doi.org/10.1108/ IJWBR-10-2015-0048

39. Weightman, C., Bauer, F. F., Terblanche, N. S., Valentin, D., & Nieuwoudt, H. H. (2019). An exploratory study of urban South African consumers' perceptions of wine and wine consumption: Focus on social, emotional, and functional factors. *Journal of Wine Research*, *30*(3), 179–203.

40. Wilcox, G. B., Kang, E. Y., & Chilek, L. A. (2015). Beer, wine, or spirits? Advertising's impact on four decades of category sales. *International Journal of Advertising*, *34*(4), 641–657. https://doi.org/10.1080/02650487.2015.1019961