# **Personality Matters to Young Wine Consumers**

# Nathalie Spielmann

NEOMA Business School, France

nathalie.spielmann@neoma-bs.fr

#### Barry J. Babin

Louisiana Tech University, USA

bbabin@latech.edu

## **Caroline Verghote**

Communication Officer Canal+, France

caroline.verghote@laposte.net

#### Abstract:

*Purpose:* This paper proposes a personality-based approach to measure Millennials consumers' wine evaluations. Past personality-based measures (brand personality, country personality, product personality) each present their own issues when it comes to measuring wine perceptions, especially of neophyte wine consumers. We propose a new, holistic, adapted measure to gauge the personality dimensions Millennials perceive in wine.

Design/methodology/approach: Past items from personality scales were regrouped and reduced. An initial exploratory factor analysis was conducted, followed by a confirmatory factor analysis across wines from different regions. Predictive validity tests relating the dimensions of wine personality to key consumer outcomes were also conducted.

Findings: Our results suggest two dimensions of wine personality for Millennial consumers: a social and a philosophical dimension. The nine-trait structure is stable across origins and each dimension can be related to quality and value perceptions, attitudes, and purchase intent. The findings result in a new tool for managers to gauge their reception by Millennial wine consumers.

Keywords: Wine, personality, confirmatory factor analysis, Millennial consumers

#### 1. INTRODUCTION

Young wine consumers have been the focus of numerous studies, and for good reason – they are the consumers of tomorrow. And for a while now, Millennials have attracted the attention of academics. Extant research focuses on segmenting young wine drinkers (Thach and Olsen, 2006) and even the motivations of Millennials for becoming involved in wine related activities, such as tasting rooms and festivals (Bruwer *et al.* 2012). Recent research has focused on risk perceptions and information search when it comes to wine purchases, as well as identifying key product features coveted by Millennials, such as medals won, labels, and alcohol content (Atkin and Thach, 2012). Overall, research demonstrates that while young consumers may all have been born during the same time period, their consumption habits tend to be rather heterogeneous (Magistris *et al.* 2011; Thach and Olsen, 2006).

This article proposes to use a personality-based approach in order to better understand and uncover the evaluative dimensions that young wine consumers use for wines. In consequence, we empirically propose, test, and validate a personality measure for wines, adapted for Millennials.

#### 2. CONCEPTUAL FRAMEWORK

## 2.1. Important Dimensions of Wine Consumption for Young Consumers

From this point on, we will refer to Millennials as consumers born between 1977 and 1997. Our examination of the available literature regarding this age cohort suggests that there are two important evaluative dimensions for Millennials when it comes to wine. First, other than being a lifestyle product for Millennials, wine is a social product for these consumers, representative of conviviality and company (Agnoli et al. 2011; Ritchie, 2011; Teagle et al. 2010; Thach and Olsen, 2006). Millennials like to consume wines with others because it allows them to share the wines they are drinking (Ritchie, 2011) and it is also a product that demonstrates their social and cultural capital (Richard K. Miller and Associates, 2011). Second, wine represents an experience product that Millennials can become highly involved with, because as a cohort, Millennials are very meticulous and concerned about their purchases (Richard K. Miller and Associates, 2011). Millennials, albeit their limited experience, can clearly evaluate wines using specific features including the origin, the vintage, the label, the brand name, and the grape variety (Magistris et al. 2011). Millennials also evaluate wines based on their value propositions, be they economical, environmental, and even experiential (Thach and Olsen, 2006). The aforementioned results suggest that Millennials not only have an attraction to the wine lifestyle, but they are willing to be involved with the product. This involvement translates into active participation in wine related activities, and these not just for the consumption of wine but also for their affective, experiential, and educational value (Bruwer et al. 2012).

### 2.2. Personality-Based Measures

Consumers make consumption choices that are congruent with their self-concept (Malhotra, 1988). The purpose of personality scales is to measure objects using terminology that represents the self-concept for the consumer (Malhotra, 1981). Objects whose personality traits are congruent with those of a consumer are expected to benefit from more positive marketing outcomes. Most personality-based measures used in marketing were been adapted from the psychology field, in particular from the Big Five Personality Dimensions (Goldberg, 1990). Malhotra (1981) first proposed a one-dimensional measure for product personality, followed by the brand personality scale (Aaker, 1997), the personalities of products (Jordan, 2002), the country personality scale (d'Astous and Boujbel, 2007), and the product personality scale (Mugge *et al.* 2009). The scales tend to be highly variable in terms of the number of dimensions and traits they contain: from one-dimension (Malhotra, 1981, Mugge *et al.* 2009) to six dimensions (d'Astous and Boujbel, 2007) and from 15 items (Malhotra, 1981) to 42 items (Aaker, 1997).

The existing personality scales used in marketing research present certain issues when it comes to measuring wine personality, specifically for Millennials. The first issue is that certain dimensions of established personality scales have been shown to be more applicable to specific product categories versus others and not to origin products (Heslop *et al.* 2010; Maehle *et al.* (2011). Second, the product personality scale (Mugge *et al.* 2009) seeks to measure the physical evaluation of products. However, wine consists not only of extrinsic features but also contains experiential, intrinsic features (Spielmann, 2015). Third, the country personality scale (d'Astous and Boujbel, 2007) measures the perceptions of nations, and not necessarily of products from a nation. Finally, most of the wine research has focused how Aaker's (1997) brand personality scale applies to wine label design (Boudreaux and Palmer, 2007; Elliot and Barth, 2012), holistic package design (Orth and Malkewitz, 2008) without developing a new scale adapted exclusively to wine as a branded product as perceived by Millenials.

Wine is a branded experiential origin product. As such, this research seeks to develop an adapted personality-based measure to gauge the evaluations of Millennial wine consumers. By combining product, brand, and country personality scales and testing these with young consumers, we propose to establish an adapted measure that wine firms and marketers can use to evaluate the perceptions Millennial consumers have of their products on the market.

#### 3. METHODS

### 3.1. Pretest and Exploratory Factor Analysis

As per the literature on personality traits in marketing, all items in previously devised scales (Aaker, 1997; d'Astous and Boujbel, 2007; Jordan, 2002; Mugge *et al.* 2009) were compiled, resulting in 153 traits. Repeated traits were removed. As posited by Boudreaux and Palmer (2007), traits that could not be applied to wine or have previously been contested as inappropriate for personality measurement (e.g. those in the ruggedness dimension such as Western) were also removed, which resulted in 59 traits. This list of traits was presented to a

panel of French students from a business school in November 2014. Respondents were asked to state (on a seven-point Likert scale, where 1 represented not at all and 7 represented very much so) how much they felt this trait could be applied to wine. A total of 333 completed surveys were returned and removing those who were not in the Millennial age cohort as well as non-consumers of wine resulted in a final tally of 318 respondents. Women represented 62% of the sample. At the end of the survey, respondents were also asked to describe in their own words the differences between New and Old World wines and to give some origin examples of each.

An exploratory factor analysis consisting of multiple iterations to remove poorly performing items (e.g., those that loaded on more than one factor or those that had low, below 0.40 factor loadings) finally revealed a five dimensional structure containing 19 traits with a total variance explained of 62.93%. The final structure was tested and revealed as stable between genders. Table 1 presents the initial wine personality structure.

**Table 1: Initial Wine Personality Dimensions** 

-	Dimensions						
	Mannered	Pleasant	Styled	Gendered	Negative		
Convivial	.678						
Merry	.757						
Open	.655						
Intellectual	.719						
Laid-back	.602						
Realistic	.737						
Sincere	.716						
Spiritual	.656						
Sentimental	.740						
Agreeable		.808					
Interesting		.799					
Original		.700					
Modest			.726				
Neutral			.693				
Robust			.757				
Feminine				.867			
Masculine				.883			
Immoral					.885		
Absurd					.812		

# 3.2. Confirmatory Factor Analyses and Multi-group Comparisons

In order to refine the structure and to uncover the personality structure as applied to different wines from different origins, another study was conducted. A bottle of wine was selected and a fake label was created upon which was only varied the origin: Mexico, France,

and Armenia. While Mexico represented a New World wine, as per the open-ended question in the pre-test, France represented the Old World wine, and Armenia, which was never mentioned, was used as a stimulus to represent a wine from an unknown origin. Each respondent viewed only one of the wine bottles and then answered how well they felt the 19 personality traits represented the wine, on a Likert scale of 1 (not at all) to 7 (very much). Respondents then answered questions relating to their quality perceptions (as per Sprott and Shimp, 2004), attitude toward the wine (using the measure by Lepkowska-White *et al.* 2003), value perceptions (using the measure by Raghubir and Srivastva, 2002) and their purchase intention (adapted from Voss *et al.* 2003). Respondents were asked to answer the CETSCALE (by Shimp and Sharma, 1987) in order to gauge their level of ethnocentrism. The survey ended with socio-demographic questions.

The online survey was sent out to French students in February 2015. A total of 236 surveys were completed. All respondents were French nationals and all were wine consumers. Men represented 36% of the sample, and all respondents were between the ages of 20 and 35. There were no significant differences between the groups (Mexico, France, Armenia) in terms of the level of ethnocentrism of the respondents (F (2,233)=.113, p>.05).

After a series of preliminary factor analyses suggesting two factors as the only dimensionality that would yield dimensions that are comprehensible and include at least three items per factor, we conducted multigroup confirmatory factor analysis to address the measurement structure across the three wine origins. Table 2 displays the factor structure imposed on the covariance matrices for the Mexican, French and Armenian wines, respectively. The two dimensions have been named social and philosophical. Measurement invariance involves a series of CFA models that impose varying levels of constraints on the covariance structures. Metric invariance exists if the evidence suggests that both the same factor pattern (configural invariance) and the same factor loadings exist across groups.

The first CFA model tests the configural structure suggested in Table 2 across samples. The model is considered "totally free" in the sense that each factor loading is free to take on its specific estimated value in each sample. The totally free, three-group CFA yields a  $\chi^2$  of 150.5 with 78 degrees of freedom (df) (p < 0.01), which equates to a Comparative Fit Index (CFI) of 0.936 and a Root Mean Squared Residual (RMSEA) of 0.110. Although the goodness of fit indicators are within range of those associated with good fit, the RMSEA is slightly high for a model of this size and complexity (Hair *et al.* 2006).

Table 2 also displays the completely standardized factor loading estimates produced for each group. The loadings provide input useful to compute other diagnostic indicators of construct validity. In this case, the construct reliability estimates all are above 0.68, suggesting good reliability. In addition, the average variance extracted (AVE) estimates are at or above 0.5 for Factor 2 in the French and Mexican samples, but below 0.5 for Armenian sample (0.35). Additionally, the AVE is just below 0.5 for the first factor for the Mexican and French wines, but above 0.5 for the Armenian sample. Thus, the construct reliability estimates provide evidence of construct validity although several AVEs fall below the 0.5 rule of thumb (Hair *et al.* 2006).

**Table 2: Standardized Factor Loading Estimates Per Group** 

	Mexico		France		Armenia	
	Social	Philosophical	Social	Philosophical	Social	Philosophical
Merry	0.79		0.79		0.79	
Laid-back	0.77		0.55		0.76	
Original	0.52		0.68		0.71	
Open	0.60		0.73		0.59	
Convivial	0.61		0.34		0.80	
Spiritual		0.62		0.62		0.62
Intellectual		0.85		0.74		0.65
Interesting		0.63		0.84		0.60
Sincere		0.89		0.56		0.47
Variance Extracted	44.4%	57.4%	40.8%	48.8%	53.9%	34.7%
Construct Reliability	0.80	0.84	0.76	0.79	0.85	0.68

Discriminant validity exists clearly in both the Mexican wine and Armenian wine samples. The corrected correlation estimate (PHI) between dimensions are 0.59 and 0.57 in the Mexican and Armenian conditions, respectively. In both cases, the AVE between dimensions exceeds the square of PHI coefficient (0.35 and 0.33 compared to the lowest AVE of 0.347). In the French wine sample, the correlation estimate between factors is 0.84, which squared, exceeds the AVE estimates for the two factors. However, compressing the two factors into one yields a significantly worse fit (change in  $\chi^2 = 41$ , 1 df, p < .01), suggesting some evidence of discriminant validity.

Examining metric invariance can test the question of whether or not the factor structure of brand personality changes based on a product's country of origin. Consequently, a multigroup model examines metric invariance by comparing the TF CFA result to that of a CFA constraining the loadings to be equal across all groups (i.e., factor structure invariance). The CFA model with the equality constraints added yields a  $\chi^2$  of 169.4 with 92 df (p < 0.01),

which equates to a CFI of 0.931 and a RMSEA of 0.110. The difference in  $\chi^2$  of 18.9 with 14 df is not significant (p = 0.83). Thus, adding the equality constraints does not significantly diminish the fit of the CFA, suggesting metric invariance.

### 3.3. Predictive validity

Correlations between each dimensions and key wine marketing outcomes (quality perceptions, attitudes, value perceptions, purchase intention) are presented in Table 3. We note that the correlations are almost always significant and positive. For the Mexican wine, our New World option, both dimensions are positively and significantly related to marketing outcomes. For the French wine, the Old World example, the social dimension does not correlate significantly with either quality or value perceptions. However the philosophical dimension correlates quite strongly for all marketing outcomes. For the Armenian wine, the social dimension does not have an influence on perceptions of value but positively influences all other perceptions. The highest correlations are between the philosophical dimension and attitude toward the product as well as quality perceptions.

**Table 3: Correlations with key wine marketing outcomes** 

		Quality	Attitude	Value	Purchase Intent
Mexico	Social	.204*	.347**	.347**	.279**
	Philosophical	.394**	.375**	.342**	.336**
France	Social	.252	.381**	.158	.367**
	Philosophical	.481**	.610**	.331**	.454**
Armenia	Social	.258*	.308**	.176	.240*
	Philosophical	.635**	.611**	.270*	.532**

<sup>\*</sup> significant p<.05 \*\* significant p<.01

## 4. DISCUSSION AND CONCLUSIONS

The results of this research demonstrate the appropriateness of a personality measure adapted to Millennial wine consumers. The nine-trait, two-dimensional structure that emerged from our research is not only discriminately valid from other personality scales developed in marketing, but it also has predictive validity. The two dimensions of the wine personality scale fit the preoccupations of Millennials with regards to wine: the social function of the product, and the philosophical aspect of wine. It has previously been outlined that young wine drinkers prefer to consume wines in social settings and for pleasure (Ritchie, 2011). This research confirms that when Millennials evaluate wines, they consider how

congruent it is with their desire to be social. Likewise, research has previously demonstrated that albeit new to wine drinking culture, Millennials are active and involved wine drinkers, seeking numerous value propositions (Bruwer *et al.* 2012). Our scale suggests that the philosophical, experiential, and intellectual values of a wine are very important to the Millennial consumer. It should nonetheless be noted that wine quality and value perceptions as well as attitudes and purchase intentions can be influenced by a multitude of variables and that wine personality is one of many factors used in the evaluation of wines by Millenials.

While it can be argued that the scale does not contain a lot of personality traits, less than in the extant scales, the traits that remain are clearly highly relevant for Millennials. It should be noted that the scale attempts to measure a very specific product category, and for an age cohort that although interested in the product category, does not have extensive experience with it (Melo *et al.* 2010) – this therefore limits in a way their ability to describe the personality associated to wine, explaining the nine traits retained versus more in other personality scales. Finally, the scale was developed using already parsimonious scales. Our scale, which is adapted to the consumer segment and to the product, contains the most parsimonious structure possible. As well, the student sample used in our studies represent a part but not all of those within the Millenial cohort (e.g., those who work). Future research should include these Millenials. As well, additional research on real (versus the fictitious ones used in the research) bottles of wine would incorporate the impact of product packaging in wine personality assessments.

Wine marketers and managers can easily adopt the scale presented here in order to gauge the perception of their products by Millennial consumers. Managers may wish to use the scale to first have an idea of how their brands and products are positioned either by trait or by dimension. Marketers may also use the scale to evaluate how general categories of wines are perceived. For example, our research suggests that New World wines benefit from boasting both a social and philosophical approach, perhaps best exemplified in slogans similar to: old-world traditional winemaking in a new world setting. Millennials seem to demonstrate traditional expectations from Old World wines, hence why the philosophical dimension is significantly and more strongly correlated to all marketing outcomes whereas the social dimension is only significantly correlated to attitude and purchase intent for such wines. Finally, if wines originate from a mostly unknown wine origin, it appears that they might benefit more from demonstrating a philosophical personality.

### **5. REFERENCES**

- Aaker, J. L. (1997), "Dimensions of brand personality," Journal of marketing research, Vol. 34 No. 3, pp. 347-356.
- Agnoli, L., Begalli, D., and Capitello, R. (2011), "Generation Y's perception of wine and consumption situations in a traditional wine-producing region," International Journal of Wine Business Research, Vol. 23 No. 2, pp. 176-192.
- d'Astous, A., and Boujbel, L. (2007), "Positioning countries on personality dimensions: Scale development and implications for country marketing," Journal of Business Research, Vol. 60 No. 3, pp. 231-239.

- Atkin, T., and Thach, L. (2012), "Millennial wine consumers: Risk perception and information search," Wine Economics and Policy, Vol. 1 No. 1, pp. 54-62.
- Boudreaux, C. A. and Palmer, S. E. (2007), "A charming little cabernet: effects of wine label design on purchase intent and brand personality," *International Journal of Wine Business Research*, Vol. 19 No. 3, pp. 170-186.
- Bruwer, J., Lesschaeve, I., and Campbell, B. L. (2012), "Consumption dynamics and demographics of Canadian wine consumers: Retailing insights from the tasting room channel," Journal of Retailing and Consumer Services, Vol. 19 No. 1, pp. 45-58.
- Elliot, S., and Barth, J. E. (2012), "Wine label design and personality preferences of millennials," Journal of Product & Brand Management, Vol. 21 No. 3, pp. 183-191.
- Goldberg, L.R., 1990, "An alternative "description of personality": the big-five factor structure," Journal of Personality and Social Psychology, Vol. 59 No. 6, pp. 1216–1229.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2006). Multivariate data analysis (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Heslop, L. A., Cray, D., and Armenakyan, A. (2010), "Cue incongruity in wine personality formation and purchasing," International Journal of Wine Business Research, Vol. 22 No. 3, pp. 288-307.
- Jordan, P. W. (2002), "The personalities of products," Green, W. S. and Jordan, P. W. (Eds.) Pleasure with products: beyond usability, Taylor and Francis, New York, NY, pp. 19-47.
- Lepkowska-White, E., Brashear, T. G., and Weinberger, M. G. (2003), "A Test of Ad Appeal Effectiveness in Poland and The United States-The Interplay of Appeal, Product, and Culture," Journal of Advertising, Vol. 32 No. 3, pp. 57-66
- MacDonald, J. B., Saliba, A. J., and Bruwer, J. (2013), "Wine choice and drivers of consumption explored in relation to generational cohorts and methodology," Journal of Retailing and Consumer Services, Vol. 20 No. 3, pp. 349-357.
- Maehle, N., Otnes, C., and Supphellen, M. (2011), "Consumers' perceptions of the dimensions of brand personality," Journal of Consumer Behaviour, Vol. 10 No. 5, pp. 290-303.
- Magistris, T. D., Groot, E., Gracia, A., and Albisu, L. M. (2011), "Do Millennial generation's wine preferences of the "New World" differ from the "Old World"? A pilot study," International Journal of Wine Business Research, Vol. 23 No. 2, pp. 145-160.
- Malhotra, N. K. (1981), "A scale to measure self-concepts, person concepts, and product concepts," Journal of marketing research, Vol. 18 No. 4, pp. 456-464.
- Malhotra, N. K. (1988), "Self concept and product choice: An integrated perspective," Journal of Economic Psychology, Vol. 9 No. 1, pp. 1-28.
- Melo, L., Delahunty, C., Forde, C. and Cox, D.N. (2010), "Development and validation of a tool to recall alcoholic beverage and wine consumption over consumers" lifetimes", Food Quality and Preference, Vol. 21, pp. 607-704.
- Mugge, R., Govers, P. C., and Schoormans, J. P. (2009), "The development and testing of a product personality scale," Design Studies, Vol. 30 No. 3, pp. 287-302.
- Orth, U.R. and Malkewitz, K. (2008), "Holistic package design and consumer brand impressions," *Journal of Marketing*, Vol. 72 No. 3, pp. 64-81.
- Raghubir, P., and Srivastava, J. (2002), "Effect of face value on product valuation in foreign currencies," Journal of Consumer Research, Vol. 29 No. 3, pp. 335-347.
- Richard K. Miller and Associates (2011), Consumer Behavior 2011: Millennial Consumers, Richard K. Miller and Associates (RKMA), Loganville, GA, pp. 211-6.
- Ritchie, C. (2011), "Young adult interaction with wine in the UK," International Journal of Contemporary Hospitality Management, Vol. 23 No. 1, pp. 99-114.

- Shimp, T. A. and Sharma, S. (1987), "Consumer ethnocentrism: construction and validation of the CETSCALE," Journal of Marketing Research, Vol. 24 No. 3, pp. 280-289
- Spielmann, Nathalie (2015), "Anything but Typical: How Consumers Evaluate Origin Products Based on Their Cues," International Journal of Wine Business Research, Vol. 27 No. 1, pp. 23-39
- Sprott, D. E. and Shimp, T. A. (2004), "Using Product Sampling to Augment the Perceived Quality of Store Brands," Journal of Retailing, Vol. 80 No. 4, pp.305-315.
- Thach, L. and Olsen, J. E. (2006), "Market segment analysis to target young adult wine drinkers", Agribusiness, Vol. 22, pp. 307-322.
- Voss, K. E., Spangenberg, E. R. and Grohmann, B. (2003), "Measuring the Hedonic and Utilitarian Dimensions of Consumer Attitude," Journal of Marketing Research, Vol. 40 No. 3, pp. 310-320.