TEXAS TECH UNIVERSITY
College *of* Human Sciences
Texas Wine Marketing Research Institute

# CONSUMER ATTITUDES TOWARDS TEXAS WINE

## A COMPARATIVE REPORT 2006-2016

**Authored by:**
**Kimberly Mathe Soulek, Ph.D.**
**Tim Dodd, Ph.D.**
**Natalia Velikova, Ph.D.**
**Texas Wine Marketing Research Institute**
**College of Human Sciences**
**Texas Tech University**
**November, 2016**
*For Inquiries contact kim.soulek@ttu.edu*

## INTRODUCTION

Consumer preference and perceptions of wine can vary on many factors including varietal, sweetness, and place-of-origin. In fact, wine holds the highest geographic association of any agricultural product with strong relationships between country-of-origin image and equity (Thode & Maskulka, 1998; Bruwer & Johnson, 2010; Yasin, Noor, & Mohamad, 2007). While some wine growing regions have a long history of producing quality wines, newer wine growing regions are emerging or have emerged in atypical destinations, like that of the state Texas.

Currently, Texas is ranked as the fifth highest wine producing state in the US (MKF research, 2012) and includes eight appellations. Wine production in Texas continues to grow as approximately 1.5 million gallons were produced in 2014 (Texas Wine and Grape Growers Association, 2015). In large part, Texas growing success is due to the geography and climate of the land. The soil of Texas tends to be minerally rich, especially against certain geographical terrains like rivers and streams which provided an early natural base for Spanish missionaries in wine production during the $17^{th}$ century (Long, Ting, & Mathe-Soulek, in press). After a few wineries survived through prohibition (Long et al., in press), today, the Texas wine industry is expanding and contributed nearly $2 billion to the Texas economy through means of employment, tourism and taxes paid (Texas Wine and Grape Growers Association, 2016).

In terms of sales, it is estimated that approximately 95% of all Texas wine is sold within the state (Barber, Taylor, Kolyesnikova, & Dodd, 2007), making the understanding of the Texas consumer of critical importance. This study presents a two-period examination of the Texas consumers' perception of wine and consumer behavioral changes that could affect the marketing of the Texas wine industry.

## LITERATURE REVIEW

Extrinsic cues are elements of quality associated with a product that are external to the product itself such as store image and country-of-origin (Bruwer & Buller, 2003). Certain countries and destinations have extrinsic cues that are highly associated with products they produce. Chocolates from Belgium, and cars from Germany are two extrinsic cueing examples that put forth an image of quality, without even experiencing the products intrinsic factors such as color or flavor of food. For wine production, research has showed that France has the strongest country-of-origin extrinsic cues of quality. With such strong association between country-of-origin and quality, consumers in new wine markets like Asia tend to prefer wine from established originations like France and Italy, even over others who may produce a comparable quality wine (Bruwer & Buller, 2003). This is due to the long history and production consistency of wines produced in these regions.

Texas wine producers rely heavily on the local market for purchase of wine. Therefore, it is important to measure those who purchase the product and track perceptions of quality over time. In large part this is due to consumer ethnocentrism and identification. Identity can present itself in two ways: globally or locally. A global identity is a feeling of belonging and collectiveness with others worldwide whereas a local identity is one in which an individual immerses in a local communities customs, norms and other elements unique to a community (Johnston, 2016). For locally produced products like that of Texas wine, a local identity is important in marketing to consumers. Under the GO TEXAN marketing campaign, Texas wine producers can use consumers' ethnocentrism to sell products instead of selling the perceived quality of the wine, which is not a typical external cue associated with Texas wine. Ethnocentrism is the practice of comparison of others to one's own culture; such that one believes his or her culture is superior to others (Heydari, Teymoori, Haghish & Mohamadi, 2014; Johnson 2016). For Texas and its residents, the level of ethnocentrism is higher than most, and outsiders view Texans as having large egos and an old west way of life (Schneider, 2007). Johnston, Phelan & Velikova (2015) concur with this notion suggesting that Texans show strong state pride, admiration for living in the state, and preference for state produced products. However, despite strong ethnocentrism and identity with the state of Texas, prior studies have shown that Texans prefer Californian wine (48.2%) to Texas wine (15.5%), while Old World Regions like France (3.2%) and Italy (6.0%) faired on the lower end of region preference for Texans. However, despite the overall preference for New World, and more specifically American produced wine, Texans rated the quality of Californian, French, Italian and Australian wine over their own locally produced wine (Barber et al., 2007).

## METHODS

### Survey Instrument

The survey instrument in 2016 was based on the prior data collection in 2006 (see Barber et al., 2007). Each of the data collections had 31 common questions that were administered in each time period. The questions were divided into sections including: consumer consumption, knowledge, preferences for Texas wine, and demographics.

The first section of the survey asked questions about frequency of consumption, preference for type of wine (red, blush/rose, or white), style of wine (sweet or dry), willingness to pay, and where consumers purchase wine. The second section of the survey focused specifically on Texas wine and consumers were asked questions about awareness, value, quality, price, supply, expectation, and image. Additionally, future purchase intent and likelihood to recommend were measured to assess potential future purchase implications. All perception and future based questions were measured on a 5-point scale with 1=strongly disagree, 5=strongly agree, or 1= very unlikely, 5= very likely, depending on the nature of the question.

The third section included consumers' knowledge of wine. They were asked their subjective wine knowledge, their wine knowledge compared to friends, and their wine knowledge compared to experts. They were also asked objective wine questions with correct or incorrect answers to provide a more accurate assessment about their knowledge of wine. Finally, the survey included demographic questions such as gender, age, ethnicity, education, income and how long they have lived in the state of Texas.

### Data Collection

In 2006 participants for the survey were recruited and contacted by a third party contractor. The survey was conducted over the phone with an interviewer reading the questions and recording the answers. In 2006, 502 responses were collected from Texans who had consumed wine. Exclusion criteria included not being 21 years of age, and not having consumed wine in the past 12 months. With the increased technology and reach of the Internet, in 2016 the survey was conducted via online recruitment and survey format. The change in sampling method was needed as today, few households are available by telephone (Christian, Keeter, Purcell, & Smith, 2010). As in the prior collection, in 2016 a third party agency was responsible for the recruitment of participants. Like in 2006, the agency recruited Texans who had consumed wine to evaluate the questions. The participants had to be 21 years of age or older and had to have consumed wine in the last 12 months. 1700 responses were recorded with 1263 being usable. Similarly, exclusion criteria included not being 21 years of age, not having consumed wine in the past 12 months.

## RESULTS

Respondents throughout the two data collections were primarily female with an average of 64.4% over the two years. For education, undergraduate degree holders, and graduate degree holders accounted for an average of 61.7% of the respondents. The majority of the sample was White/Caucasian, lived in Texas more than 21 years and consumes wine at least once per week.

### Demographics

Table 1: Demographic profile of sample 2006-2016

| | | 2006 | 2016 |
|---|---|---|---|
| Gender | Male | 33.7% | 37.6% |
| | Female | 66.3% | 62.4% |
| Education | Some high school or less | 2.2% | .8% |
| | High school graduate | 10.8% | 7.3% |
| | Vocational/technical | 2.6% | 3.2% |
| | Some college | 22.8% | 26.8% |
| | Undergraduate degree | 34.5% | 32.0% |
| | Graduate or professional degree | 27.1% | 29.8% |
| Income | Under $20,000 | 4.4% | 5.0% |
| | $20,001 - $39,999 | 10.7% | 13.4% |
| | $40,000 - $59,999 | 20.6% | 17.7% |
| | $60,000 - $79,999 | 16.5% | 17.6% |
| | $80,000 - $99,999 | 16.0% | 15.1% |
| | $100,000 - $119,999 | 9.2% | 11.0% |
| | $120,000 - $139,999 | 6.3% | 6.2% |
| | $140,000 or more | 16.3% | 14.1% |
| Ethnicity | White, non-Hispanic | 83.8% | 74.7% |
| | African American | 2.1% | 8.3% |
| | Hispanic/Latino | 7.6% | 9.6% |
| | Asian or Pacific Islander | 1.6% | 5.3% |
| | American Indian | .2% | .9% |
| | Other | 4.7% | 1.2% |
| | Prefer not to answer | 0.0% | 4.8% |
| Age | 21-31 | 2.0% | 18.6% |
| | 32-41 | 9.2% | 28.7% |
| | 42-51 | 16.1% | 13.3% |
| | 52-61 | 24.5% | 17.2% |
| | 62-71 | 22.0% | 16.6% |
| | 72-81 | 17.1% | 5.0% |
| | 82+ | 9.0% | 0.7% |
| Years in Texas | <5 years | 9.2% | 14.1% |
| | 6-10 years | 6.0% | 10.6% |
| | 11-15 years | 6.4% | 6.3% |
| | 16-20 years | 8.2% | 7.2% |
| | 21 or more years | 70.3% | 61.8% |
| Wine Consumption | Daily | 8.8% | 10.5% |
| | Several times per week | 23.7% | 37.0% |
| | Once a week | 28.1% | 30.2% |
| | Once a month | 18.9% | 15.1% |
| | Less than once a month | 20.5% | 3.7% |
| | Very Seldom | 0.0% | 2.8% |

## Wine Preference

The trend in preference for sweet or dry wine from 2006-2016 shows that consumers now are more open to both sweet or dry wines, and have significantly less preference towards one or the other than in 2006 (Table 2).

Table 2: Overall preference for sweet or dry wine, 2006-2016

| | 2006 | 2016 |
|---|---|---|
| Sweet | 44.3% | 28.2% |
| Dry | 45.7% | 31.2% |
| No preference | 10.1% | 40.6% |

The overall preference for red, white and blush shows a relatively steady preference towards white, red, and blush from 2006-2016 (Table 3).

Table 3: Overall preference for red, white, or blush wine, 2006-2016

| | 2006 | 2016 |
|---|---|---|
| Red | 51.5% | 55.2% |
| White | 30.6% | 30.1% |
| Blush | 17.8% | 14.8% |

Through a cross tabulation (Table 4) of the two prior questions, those who prefer sweet wine, have shown a strong increase (+36.3%) in preference towards sweet reds, where those who prefer dry wine have seen a 7.5% increase towards blush/rose, with a decrease in dry reds. For those who had no preference for sweet or dry wines, overall have seen an considerable increase in preference in white wine (+8.6%), a decreased preference in red wines (-13.3%) and a mild increase in blush wines (+4.7%)

Table 4: Cross tabulation of sweet/dry wine with preference of red, white or blush, 2006-2016

| | | 2006 | 2016 |
|---|---|---|---|
| Sweet | Red | 37.9% | 74.2% |
| | White | 32.0% | 22.2% |
| | Blush | 30.1% | 3.7% |
| Dry | Red | 65.0% | 57.9% |
| | White | 29.6% | 29.2% |
| | Blush | 5.4% | 12.9% |
| No preference | Red | 53.2% | 39.9% |
| | White | 27.7% | 36.3% |
| | Blush | 19.1% | 23.8% |

## Wine Region Preference

The preference for wine region of origination continues to most favor California, but saw a nearly 12% decline in overall preference for the region from the prior data collection (Table 6). Both France and Italy have saw large increases in preference from 2006 to 2016, while Australian wine declined in preference. Approximately one-quarter of Texans prefer Texas wine in 2016, a 7.3% increase from the prior collection.

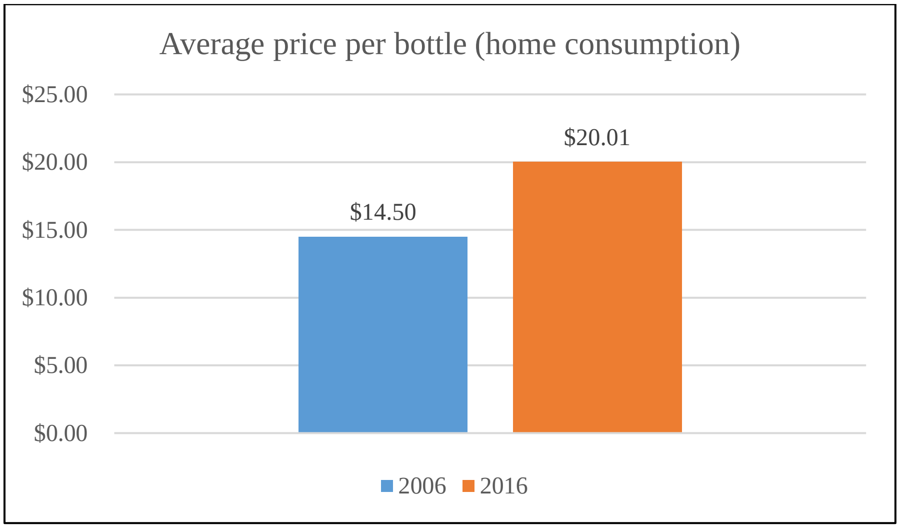
Table 6: Preference for wine region, 2006-2016

| | 2006 | 2016 |
|---|---|---|
| France | 3.5% | 6.7% |
| Italy | 6.5% | 11.2% |
| California | 52.4% | 40.8% |
| Australia | 8.9% | 3.6% |
| Texas | 16.9% | 24.2% |
| Other | 11.9% | 5.6% |

## Average Price Paid

Consumers average price paid at home for a bottle of wine was assessed using an open-ended format where consumers could state the exact amount they typically spend. The average of these results by year showed that there was a significant increase to $20 a bottle from the $14-$15 range in 2006 (Figure 1).

Figure 1: Average bottle price, 2006-2016



## Consumer wine importance, significance, and knowledge

Table 8 shows the evaluations of Texas wine consumers, and Texas wine perceptions from 2006-2016. The Texas wine consumer appears to find wine more important and significant part of their lives. Moreover, the Texas wine consumers' subjective knowledge has significantly increased over the two time periods. The subjective measures of knowledge were measured on a (1=very little knowledge, to 5=very much knowledge).

Table 8: Overall mean (average) difference changes for wine attributes and Texas perceptions of wine, 2006-2016

| | 2006 | 2016 |
|---|---|---|
| Wine Importance | 2.69 | 3.48 |
| Wine Significance | 2.72 | 3.52 |
| Wine Knowledge | 2.72 | 3.52 |
| Wine Knowledge (compared to friends) | 2.69 | 3.18 |
| Wine Knowledge (compared to expert) | 1.42 | 2.32 |

While the subjective measures of wine increased in each of the categories, the objective measures of knowledge (Table 9), did not. Four questions were used to assess the consumers' basic knowledge of wine. Two of the questions saw a decrease in percentage that answered correctly, and two questions saw an increase of questions answered correctly from 2006 to 2016.

Table 9: Objective wine knowledge assessment, 2006-2016

| Questions intended to determine respondents knowledge | Percentage of Correct Answers (2006) | Percentage of Correct Answers (2012) | Difference between 2016 and 2006 |
|---|---|---|---|
| Which wine should be served at room temperature? | 77.5% | 70.9% | -6.6% |
| Chardonnay is what type of wine? | 73.7% | 72.1% | -1.6% |
| Port is usually served with what type of food? | 48.2% | 55.3% | 7.1% |
| Table wines have an alcohol content of? | 42.6% | 50.2% | 7.6% |

## **Perceptions of Texas Wine**

Consumers were asked a series of questions about their opinion of Texas wine. In each category there were statistically significant increases in these perceptions. Of particular note is the increase in recognition of Texas wine which increased on average of .84 (on a 5 point scale) from 2006 to 2016. Also, the likelihood to recommend Texas wine increased nearly a full point, suggesting that Texans are likely to recommend Texas wine to others. The perceptions of the availability of Texas wine only slightly increased (+.16).

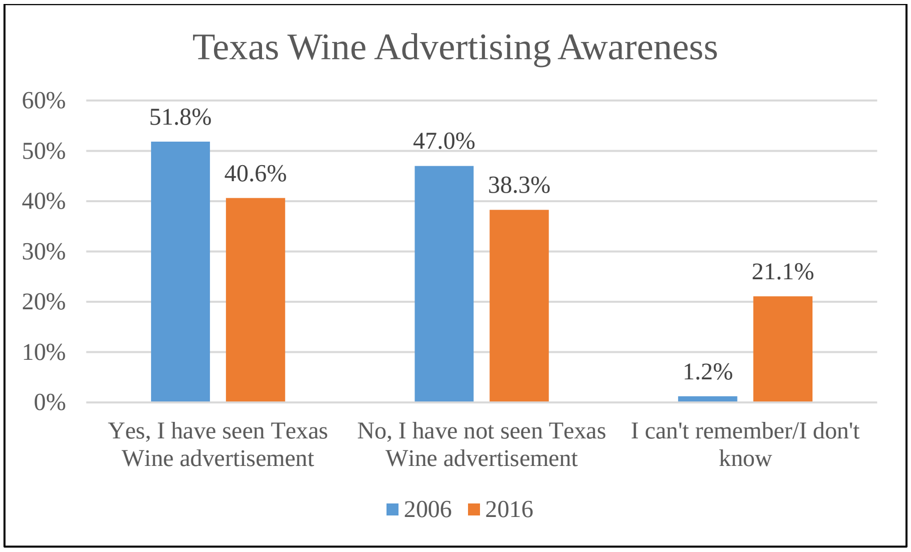
Table 10: Average consumer perceptions of Texas Wine, 2006-2016

| | 2006 | 2016 |
|---|---|---|
| Texas Wine Value | 3.84 | 4.27 |
| Texas Wine Quality | 3.66 | 4.24 |
| Texas Wine Recognition | 2.54 | 3.38 |
| Texas Wine Price | 3.80 | 4.08 |
| Texas Wine, Exceeds Expectations | 3.72 | 4.13 |
| Texas Wine Availability | 3.55 | 3.71 |
| Texas Wine Likelihood to Recommend | 3.18 | 4.14 |
| Texas Wine Future Purchase | 3.56 | 4.30 |

## **Texas Wine Advertising**

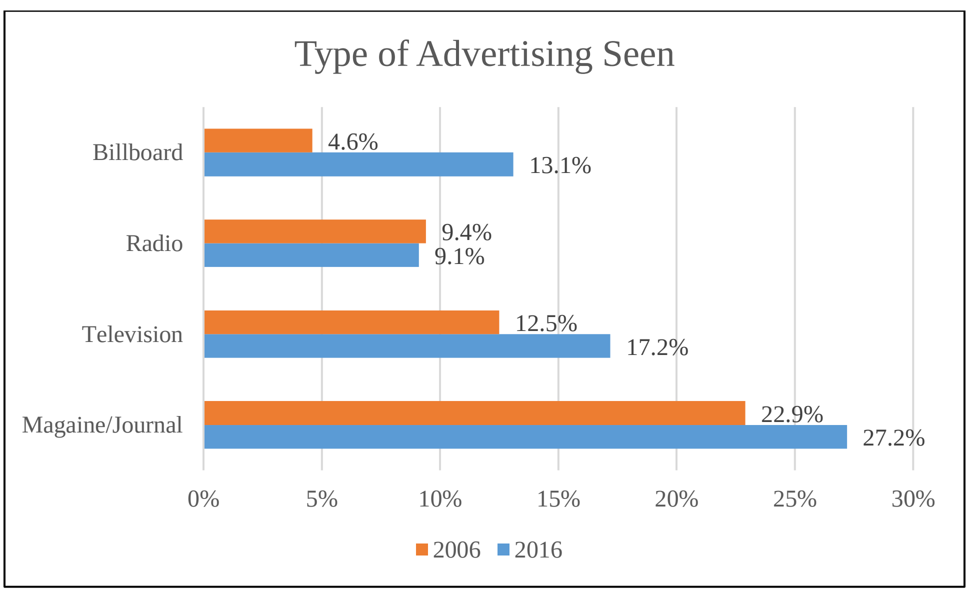
The percentage of individuals who remembered seeing an advertisement has decreased from 2006 to 2016. Conversely, the number of people who state they did not see an advertisement for Texas wine also decreased. This is due to the large increase of consumers who could not recall if they had or had not seen a Texas wine advertisement.

Figure 2: Consumer awareness of Texas Wine advertising, 2006-2016




In both 2006 and 2016, of the consumers who had stated they had seen Texas wine being advertised, the primary source of advertisement was in a magazine or a journal (Figure 3). Notably, the largest percentage increase in advertisements seen was in billboard advertising with an 8.5% difference between the time periods.

Figure 3: Types of advertising seen by consumers, 2006-2016



# DISCUSSION AND CONCLUSIONS

The results of this study show that consumer attitudes and behaviors with respect to wine have evolved over time. The information provided here demonstrates that the wine industry is dynamic and those involved with the marketing of Texas wine should tailor strategies to correspond with changes in consumer preferences.

In 2016, categorically, most consumers started to drink wine several times a week, compared to once a week in 2006. Overtime, consumers began to place a greater value in terms of importance and significance of wine in their lives. Similarly, subjective knowledge increased with 2016 having a greater tendency for consumers to know “much” about wine whereas in 2006 consumers were more prone to know “a little” about wine.

Results also showed that overtime consumers showed less preference towards one wine specifically, and are more open to both sweet and dry wine. Overall, from 2006 to 2016 the preference for white, red and blush remained relatively stable. When considering the preferences for sweet vs. dry wine (or those with no preference) those who preferred sweet wine, have drastically increased in their preference for sweet red wine, whereas a dramatic drop in the preference for sweet blush wine was apparent. For those who had no preference for either sweet or dry wine, in 2016 a relatively equal number of consumers preferred white wine or red wine, which was a drastic difference than 2006 where red wine was the preference.

The strongest region preference remains with California in both 2006 to 2016, albeit the preference has dramatically declined. Slight increases in preference for both Italian wine and French wine occurred over the two time periods, but the largest increase was that nearly ¼ of consumers now prefer the Texas wine region, compared to approximately 17% in 2006.

In 2006, nearly 40% of consumers suggested they would either likely or highly likely recommend Texas wine to others and 50% were likely or very likely to purchase Texas wine over the next year. In 2016 almost 85% are likely or very likely to purchase Texas wine within the next year and almost 80% are likely to recommend Texas wine.

With these promising increases in preference and perceptions towards Texas wine, the Texas wine industry has ample opportunity to seize these positive perceptions and continue to build regional favorability. By increasing positive perceptions of wine through Texas consumers, nearby states will also be likely to begin to explore Texas wine, and in turn build the image of the Texas wine brand.

## REFERENCES


Barber, N., Taylor, D.C., Kolyesnikova, N., & Dodd, T. (2007). Consumer Attitudes to Texas Wine. Retrieved on October, 13, 2016 from http://www.depts.ttu.edu/hs/texaswine/docs/CONSUMER_ATTITUDES_TO_TEXAS.pdf.

Bruwer, J., & Johnson, R. (2010). Place-based marketing and regional branding strategy perspectives in the California wine industry. *Journal of Consumer Marketing*, *27*(1), 5–16. http://doi.org/10.1108/07363761011012903

Christian, L., Keeter, S., Purcell, K., Smith, A. (2010). "Assessing the Cell Phone Challenge to Survey Research in 2010". Pew Research Center Retrieved Aug 12, 2011 from http://pewresearch.org/pubs/1601/assessing-cell-phone-challenge-in-public-opinion-surveys

Heydari, A., Teymoori, A., Haghish, E. F., & Mohamadi, B. (2014). Influential factors on ethnocentrism: The effect of socioeconomic status, anomie, and authoritarianism. *Social Science Information*, *53*(2), 240-254.

Johnston, N. (2016). Consumer motivations and responses towards state-level branded and sustainable ag-related products. Unpublished Doctoral Dissertation. Texas Tech University.

Johnson, N., Phelan, K., & Velikova, N. (2015). Exploring cultural identity and ethnocentrism: The development of the Texas cultural identity scale. Paper presented at the I-CHRIE Conference. Orlando, FL.

Long, J., Ting, W., & Mathe-Soulek, K. (In press). Marketing Texas wine: Determining the who, what, and where of a growing market. *Journal of Hospitality and Tourism Cases.*

MKF Research. (2012). The Economic Impact of Washington State Wine and Grapes, (806), 1–53. Retrieved from papers3://publication/uuid/FD5FD4E7-96A1-40E2-ACFE-C4BF6E59FAFD

Schneider, A. (2007). Politically correct stereotyping: The case of Texans. *International Journal of Contemporary Sociology*, *44*(1), 87.

Texas Wine and Grape Growers Association (2016). Texas Wine Industry Facts. Retrived on April 7, 2016 from < http://www.txwines.org/texas-wine/texas-wine-industry-facts/>.

Thode, S. F., & Maskulka, J. M. (1998). Place-based marketing strategies, brand equity and vineyard valuation. *Journal of Product & Brand Management*, *7*(5), 379-399.

Mohd Yasin, N., Nasser Noor, M., & Mohamad, O. (2007). Does image of country-of-origin matter to brand equity?. *Journal of Product & Brand Management*, *16*(1), 38-48.