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Assisting Mid-Atlantic Wine Industry Stakeholders in Developing Consumer-Centric Marketing Strategies: Internet Survey Results

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Abstract

Two Internet surveys were administered to wine consumers in New Jersey, New York, and Pennsylvania. Purchasing frequencies, consumption occasions, and sources used to learn about wine were documented. National data are readily available; however, the study discussed in this article focused on Mid-Atlantic consumers, whose behaviors and attitudes were not well understood. These data provide Extension personnel in the region with the ability to better inform industry members about their clientele and help them develop marketing strategies that appeal to local wine drinkers.

Keywords: [survey](#), [segmentation](#), [New Jersey](#), [New York](#), [Pennsylvania](#)

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Introduction

Overall, the U.S. grape and wine industry has experienced positive growth for several years. For example, wine production increased by 13.3% between 2010 and 2015, and the number of wineries increased from 8,638 to 9,069 between December 2015 and December 2016 (Wines & Vines, 2017). The Mid-Atlantic region is no exception. Although in July 2016 California was the leader in domestic wine production with 4,077 wineries, New York ranked fourth with 365 wineries, and Pennsylvania had 218 (Wines & Vines, 2017). Moreover, there were nearly 50 wineries in New Jersey (Teague, 2016). As an example of the importance of each state's industry, in 2011, there were 8,629 full-time-equivalent industry-related jobs in Pennsylvania contributing \$401 million in wages (Frank, Rimerman, 2013b), New Jersey's industry had an economic impact of \$231 million that same year

(Frank, Rimerman, 2013a), and New York wineries generated \$553 million in revenue in 2012 (Stonebridge Research Group, 2014).

A simple Internet search reveals that Extension is an important industry resource, as demonstrated by the number of programs, bulletins, blogs, and so on dedicated to providing stakeholders with research-based information. Researchers have focused on documenting issues that affect wine grape production (Centinari, Kelley, Hed, Miller, & Patel-Campillo, 2016), and surveys have shown that grape growers have benefited from information dissemination by university and Extension personnel (Ferreira, Hatch, & Wolf, 2016). Although research has focused primarily on viticulture and enology issues and not the wine consumer, understanding wine consumer attitudes and behaviors would facilitate the identification of opportunities for growth (Fletcher, 2013).

It is important to note that only 37% of U.S. consumers age 21 and older drink wine, an additional 26% consume alcohol other than wine, and the remaining abstain (Franson, 2016). Wine consumption frequencies can be segmented into those who consume wine daily to a few times a week ("super core"), those who consume wine about once a week ("core"), and those who consume wine less frequently ("marginal" wine drinkers) (Perdue, 2009). Investigating these groups' attitudes and behaviors can result in learning what may motivate less frequent wine drinkers to consume more of the beverage. Although existing data are helpful, characterizations of U.S. wine drinkers are often based on data collected on a national scale and are not often segmented on the basis of regions or metropolitan areas. We were particularly interested in wine consumption and purchasing behaviors of those who reside in three Mid-Atlantic states (New Jersey, New York, and Pennsylvania) as there may be differences in their preferences, motivations, purchases and ways they learn about wine as compared to the general wine consumer defined by national data. With information on New Jersey, New York, and Pennsylvania consumers, Extension personnel can better assist the region's tasting room owners and operators in focusing their marketing strategies to boost tasting room sales. This outcome, in turn, can have a positive impact on a winery's business and the local economy.

Survey Methodology

We developed two separate 15-min Internet surveys (Survey 1, conducted September 20–25, 2013, and Survey 2, conducted October 22–24, 2014). The surveys were approved by the Office of Research Protections at The Pennsylvania State University and administered to Survey Sampling International (Shelton, CT) panelists residing in the three target states. We screened panelists to ensure that they were not wine industry members, were at least 21 years old, and had purchased and drunk wine at least once during the preceding year. Each survey was pretested on a subset (Survey 1 = 164 and Survey 2 = 98) of the target consumer audience. Although it is possible that participants could have participated in both surveys, panelists were not recruited to participate in Survey 2 on the basis of their having participated in Survey 1. Our goal with Survey 2 was to explore issues we identified while analyzing results from Survey 1. Hence, aside from asking participants to respond to demographic questions and questions on wine consumption frequency, we focused on different issues in each survey. We did not have any contact with potential participants; rather, a Survey Sampling International administrator sent panelists an electronic consent statement conveying that a participant's name in no way would be linked to his or her responses and a link to the survey, which was housed on SurveyMonkey.com (Palo Alto, CA). For Survey 1, 1,952 participants opened and attempted the survey, with 1,246 qualifying for and completing the survey. For Survey 2, 1,280 participants opened and attempted the survey, with 977 qualifying for and completing the survey. After panelists completed the survey they were directed to the Survey Sampling International website where their participation was recorded and they were provided with a \$1 incentive.

We analyzed survey data using SPSS Versions 21 and 22 (SPSS, Chicago, IL). We used analyses of variance to assess differences in responses across wine-consumption-frequency groups.

Results

Survey Participant Demographics

Table 1 provides an overview of the demographic profiles of participants according to wine consumption frequency. At least one third of participants were super core wine consumers, though the percentage of these consumers was greater in Survey 2 (48.4%) than in Survey 1 (32.9%). Differences were detected in both surveys for select income and education levels and in Survey 2 for the age ranges 21 to 24 years and 65 years and older. We capped Survey 1 age ranges at 64 years of age due to previous research indicating that alcohol consumption decreased for adults age 65 and older (Guenther, Bowman, & Goldman, 2010; Wilson et al., 2013); however, for Survey 2, we included the age range of 65 and older to learn what reasons, if any, might cause a decrease in wine consumption.

Table 1.

Summary of Survey Participant Demographics According to Wine Consumption Frequency

Demographic	Survey 1					Survey 2				
	Super core (<i>n</i> = 410) <i>f</i> (%)	Core (<i>n</i> = 234) <i>f</i> (%)	Marginal (<i>n</i> = 602) <i>f</i> (%)	F	<i>p</i>	Super core (<i>n</i> = 473) <i>f</i> (%)	Core (<i>n</i> = 213) <i>f</i> (%)	Marginal (<i>n</i> = 291) <i>f</i> (%)	F	<i>p</i>
Age range										
21 to 24	64 (15.6)a	52 (22.2)a	113 (18.8)a	2.233	.108	61 (12.9)b	47 (22.1)a	67 (23.0)a	7.987	.000
25 to 34	123 (30.0)a	53 (22.6)a	164 (27.2)a	2.031	.132	113 (23.9)a	50 (23.5)a	52 (17.9)a	2.076	.126
35 to 44	123 (30.0)a	61 (26.1)a	161 (26.7)a	0.834	.435	109 (23.0)a	50 (20.2)a	52 (17.9)a	1.500	.224
45 to 64	100 (24.4)a	68 (29.1)a	164 (27.2)a	0.936	.392	112 (23.7)a	42 (19.7)a	54 (18.6)a	1.611	.200
65 and older ^a	--	--	--			78 (16.5)b	31 (14.6)b	66 (22.7)a	3.405	.034
Gender										
Female	222 (56.2)b	151 (66.2)a	371 (66.3)a	5.724	.003	266 (56.2)b	134 (62.9)ab	205 (70.4)a	7.872	.00
Gross household										

income										
Less than \$25,000	32 (8.1)b	23 (10.2)b	105 (18.7)a	12.829	.000	35 (7.4)b	17 (8.1)b	47 (16.3)a	8.539	.00
\$25,000 to \$49,999	90 (22.9)a	68 (30.2)a	151 (26.9)a	2.077	.126	84 (17.8)b	35 (16.6)b	81 (28.1)a	7.243	.001
\$50,000 to \$75,999	94 (23.9)a	50 (22.2)a	124 (22.1)a	0.221	.801	100 (21.2)a	54 (25.6)a	56 (19.4)a	1.410	.245
\$76,000 to \$99,999	65 (16.5)a	37 (16.4)a	67 (11.9)a	2.374	.094	81 (17.2)a	32 (15.2)a	37 (12.8)a	1.282	.278
\$100,000 to \$150,000	65 (16.5)a	30 (13.3)a	73 (13.0)a	1.238	.290	111 (23.5)a	42 (19.9)ab	36 (12.5)b	7.020	.001
Greater than \$150,000	47 (12.0)a	17 (7.6)b	41 (7.3)b	3.363	.035	61 (12.9)a	31 (14.6)a	31 (10.7)a	0.888	.412
Education										
Some high school/high school graduate	56 (14.1)a	33 (14.5)a	104 (18.5)a	1.157	.315	64 (13.6)ab	18 (8.5)b	58 (20.0)a	6.836	.001
Some college/technical school	88 (22.2)a	64 (28.1)a	154 (27.4)a	2.009	.135	80 (17.0)a	38 (18.0)a	69 (23.8)a	2.816	.060
Associate's degree/technical school graduate	42 (10.6)a	24 (10.5)a	67 (11.9)a	20.268	.765	41 (8.7)a	19 (9.0)a	37 (12.8)a	1.785	.168
Bachelor's degree	134 (33.8)a	77 (33.8)a	150 (26.7)b	3.556	.029	194 (41.2)a	94 (44.5)a	86 (29.7)ab	7.226	.001
Master's degree or higher	76 (19.2)a	30 (13.2)a	87 (15.5)a	2.182	.113	92 (19.5)a	42 (19.9)a	40 (13.8)a	2.384	.093
Adults, age 21 and older, in the household who drink wine										
No other adults 21 and older in the household	81 (20.6)a	39 (17.1)a	97 (17.3)a	0.969	.380	83 (17.6)a	43 (20.2)a	50 (17.4)a	0.408	.665
Participant is the only adult who drinks wine	32 (8.1)a	24 (10.5)a	56 (10.0)a	0.651	.522	46 (9.7)a	27 (12.7)a	40 (13.9)a	1.646	.193
Participant and	173	103 (45.2)a	253	0.078	.925	288 (61.0)a	107 (50.2)b	156	3.999	.019

one other adult	(43.9)a		(52.9)a					(54.2)ab		
Participant and two or more adults	108 (27.4)a	62 (27.2)a	155 (27.6)a	0.008	.992	55 (11.7)a	36 (16.9)a	42 (14.6)a	1.860	.156
State of residence										
New Jersey	78 (19.0)a	46 (19.7)a	118 (19.6)a	0.031	.969	126 (26.6)a	51 (23.9)a	58 (19.9)a	2.223	.109
New York	214 (52.2)a	117 (50.0)ab	266 (44.2)b	3.396	.034	226 (47.8)a	106 (49.8)a	133 (45.7)a	0.412	.662
Pennsylvania	118 (28.8)b	71 (30.3)ab	218 (36.2)a	3.426	.033	58 (25.6)b	56 (26.3)ab	100 (34.4)a	3.722	.025

Note. The two surveys were administered as follows: Survey 1—September 20–25, 2013; Survey 2—October 22–24, 2014. "Super core" represents those who drink wine daily to a few times a week, "core" represents those who drink wine about once a week, and "marginal" represents those who drink wine less frequently. Percentages with different letters within rows and surveys (Survey 1 and Survey 2) represent ANOVA followed by Games-Howell tests where values are significantly different at the level of $p < .05$; SPSS Version 21 and 22, Chicago, IL. ^aWe included the 65-and-older age range in Survey 2 to better understand any reasons that might influence a decline in wine consumption.

Changes in Participants' Wine Consumption and What Influenced These Changes

Two focuses of our study were changes in participants' wine consumption levels and factors leading to those changes (see Table 2). Approximately a quarter (24.0%) of marginal wine consumers in Survey 1 indicated that their wine consumption increased between 2010 and 2013, which was significantly less than the percentages of super core and core participants who reported such a change in consumption. If a participant's consumption had increased or decreased, the participant was asked to select statements that best represented why his or her consumption changed.

There were a few statistically significant differences among segments as to why an individual may have increased his or her wine consumption. Although no differences existed among consumption segments for the top two selected reasons—"became more interested in drinking wine than other alcoholic beverages" and "learned more about wine and was interested in consuming more"—more super core consumers than marginal consumers indicated that they were interested in the health benefits associated with drinking wine, had more time available to do things such as drink wine, were now spending money on wine that they had spent on other things previously, and believed reports indicating that moderate wine consumption helps with weight control. No differences existed among the three groups as to why their consumption decreased with regard to the top four selected reasons presented.

Table 2.

Survey 1 Participants Whose Wine Consumption Increased, Decreased, or Stayed the Same Between 2010 and 2013 and Reasons Consumption Changed, Segmented by Wine Consumption Frequency

Variable	Wine consumption frequency segment			F	p
	Super core	Core	Marginal		
	(n = 410) f (%)	(n = 234) f (%)	(n = 602) f (%)		
Participants whose wine consumption increased	165 (41.0)a	75 (32.5)a	138 (24.0)b	16.370	.000
Reasons wine consumption increased (%)					
More interested in drinking wine than other alcoholic beverages	89 (53.9)a	39 (52.0)a	72 (52.2)a	0.062	.940
More educated about wine and interested in consuming more	67 (40.6)a	30 (40.0)a	63 (45.7)a	0.493	.611
Interested in health benefits associated with drinking wine	80 (48.5)a	37 (49.3)ab	42 (30.4)b	6.188	.002
Increased time available to do things like drink wine	53 (32.1)a	19 (25.3)ab	25 (18.1)b	3.916	.021
Increased availability of wine varietals I like	43 (26.1)a	14 (18.7)a	24 (17.4)a	1.893	.152
Money normally spent on other things is now spent on wine	38 (23.0)a	9 (12.0)ab	14 (10.1)b	5.306	.005
Reports published that moderate wine consumption helps with weight control	31 (18.8)a	9 (12.0)ab	9 (6.5)b	5.147	.006
Less concerned that children in the household will drink wine	24 (14.5)a	8 (10.7)a	10 (7.2)a	2.042	.131
Now have access to certified organic, sustainable, and/or biodynamic wines	10 (6.1)a	0 (0.0)b	2 (1.4)ab	4.192	.016
Participants whose wine consumption decreased	52 (12.9)b	32 (13.9)b	130 (22.6)a	9.234	.000
Reasons wine consumption decreased					
Price of wine	23 (44.2)a	12 (37.5)a	38 (29.2)a	1.964	.143
Money normally spent on wine is now spent on other things	14 (26.9)a	14 (43.8)a	39 (30.0)a	1.435	.240
Concerns about weight gain	19 (36.5)a	9 (28.1)a	31 (23.8)a	1.501	.225
Health concerns associated with drinking wine	14 (26.9)a	9 (28.1)a	27 (20.8)a	0.626	.536
Less time available to do things like drink wine	4 (7.7)b	8 (25.0)ab	35 (26.9)a	4.213	.016
Greater interest in drinking other alcoholic beverages than drinking wine	8 (15.4)a	3 (9.4)a	26 (20.0)a	1.097	.336
Concerns that children in the household will drink or begin to drink alcohol	3 (5.8)a	6 (18.8)a	19 (14.6)a	1.814	.165
Concerns about the amount of wine I was drinking	8 (15.4)a	5 (15.6)a	11 (8.5)a	1.259	.286
Fewer wines that I like are available	2 (3.8)a	2 (6.3)a	3 (2.3)a	0.661	.517
Participants whose wine consumption remained the same	189 (46.0)a	126 (53.7)a	321 (53.4)a	2.946	.053

Note. The survey was administered September 20–25, 2013. "Super core" represents those who drink wine daily to a few times a week, "core" represents those who drink wine about once a week, and "marginal" represents those who drink wine less frequently. Percentages with different letters within rows represent ANOVA followed by Games-Howell tests where values are significantly different at the level of $p < .05$; SPSS Version 21 and 22, Chicago, IL.

Frequency, Regularity, and Quantities of Wine Purchases

Survey 1 participants were asked to select the categories that described the frequency with which they purchased 750 ml bottles of wine, with more super core participants reporting that they purchased wine more frequently and purchased the wine to be consumed immediately as compared to core and marginal consumers. Data for wine purchasing frequency, regularity, and quantity are shown in Table 3.

Table 3.

Survey 1 Participants' Wine Purchasing Frequencies, Regularity of Purchasing, and Quantities of 750 ml Bottles of Wine Purchased, Segmented by Wine Consumption Frequency

Variable	Wine consumption frequency segment			F	p
	Super core (n = 410) f (%)	Core (n = 234) f (%)	Marginal (n = 602) f (%)		
Frequencies with which participants purchase 750 ml bottles of wine					
Daily	27 (6.6)a	0 (0)b	0 (0)b	29.361	.000
A few times a week	66 (16.1)a	5 (2.1)b	0 (0)b	68.853	.000
About once a week	119 (29.0)a	41 (17.5)b	14 (2.3)c	83.446	.000
Two to three times a month	114 (27.8)a	72 (30.8)a	83 (13.8)b	21.929	.000
About once a month	67 (16.3)b	70 (29.9)a	142 (23.6)a	8.482	.000
A few times a year	17 (4.1)c	46 (19.7)b	362 (60.1)a	260.451	.000
Quantities of and regularity with which 750 ml bottles purchased (%) ^a					
One or more bottles to be consumed immediately	305 (74.4)a	136 (58.1)b	373 (62.0)b	11.817	.000
One or more bottles to be added to a collection and/or consumed at a later date	216 (52.7)a	126 (53.8)a	246 (40.9)b	9.517	.000
Greater amounts (at least a case of wine—12 bottles) but at infrequent intervals	48 (11.7)a	29 (12.4)a	51 (8.5)a	2.090	.124
Fixed number through a wine club on a scheduled basis	12 (2.9)a	5 (2.1)a	8 (1.3)a	1.596	.203

Note. The survey was administered September 20–25, 2013. "Super core" represents those who drink wine daily to a few times a week, "core" represents those who drink wine about once a week, and "marginal" represents those who drink wine less frequently. Percentages with different letters within rows represent ANOVA followed by Games-Howell tests where values are significantly different at the level of $p < .05$; SPSS Version 21 and 22, Chicago, IL.

^aPercentages do not equal 100% because participants were able to select more than one response category.

Occasions When Participants Drank Wine

We also explored when participants consumed wine (see Table 4). Fewer Survey 1 marginal consumers drank wine than either super core or core consumers except when at a party or gathering with family and/or friends. On such occasions, more core participants (78.6%) drank the beverage than super core and marginal participants. More super core participants drank wine during meals at home and when cooking as compared to their counterparts.

Table 4.

Occasions When Survey 1 Participants Drank Wine, Segmented by Wine Consumption Frequency

Occasion	Wine consumption frequency segment			F	p
	Super core	Core	Marginal		
	(n = 473) f (%)	(n = 213) f (%)	(n = 291) f (%)		
At a party or gathering with family and/or friends	287 (70.0) ^b	184 (78.6) ^a	415 (68.9) ^b	4.054	.018
At home during meals	330 (80.5) ^a	161 (68.8) ^b	330 (54.8) ^c	38.452	.000
Dining out at a restaurant	301 (73.4) ^a	163 (69.7) ^a	344 (57.1) ^b	15.990	.000
At the end of the day to relax	267 (65.1) ^a	142 (60.7) ^a	274 (45.5) ^b	21.606	.000
At a bar or lounge	226 (55.1) ^a	209 (46.2) ^a	201 (33.4) ^b	25.028	.000
While watching TV or related activity	225 (54.9) ^a	104 (44.4) ^a	185 (30.7) ^b	31.382	.000
When cooking	185 (45.1) ^a	90 (38.5) ^b	122 (20.3) ^c	39.912	.000
At a business dinner or event	144 (35.1) ^a	82 (35.0) ^a	138 (22.9) ^b	11.318	.000
At a sporting event or concert	65 (15.9) ^a	33 (14.1) ^a	39 (6.5) ^b	12.594	.000

Note. The survey was administered September 20–25, 2013. "Super core" represents those who drink wine daily to a few times a week, "core" represents those who drink wine about once a week, and "marginal" represents those who drink wine less frequently. Percentages with different letters within rows represent ANOVA followed by Games-Howell tests where values are significantly different at the level of $p < .05$; SPSS Version 21 and 22, Chicago, IL. Percentages do not equal 100% because participants were able to select more than one response category.

How Participants Learned About Wine

With Survey 2, we explored educational sources participants used to learn about wine (see Table 5). Three

quarters of each segment indicated that they learned from friends and/or family, and approximately half selected wine and liquor store employees. Fewer marginal participants selected winery tasting room staff (32.6%) as compared to super core and core participants (48.2% and 48.4%, respectively). Approximately one third or less of participants indicated that they used other sources (e.g., food and cooking magazines, wine-focused magazines, social media) to learn about wine.

Table 5.
Survey 2 Participants' Ways of Learning About Wine, Segmented by Wine Consumption Frequency

	Wine consumption frequency segment			F	p
	Super core (n = 473) f (%)	Core (n = 213) f (%)	Marginal (n = 291) f (%)		
Sources participants used to learn about wine					
Friends and/or family	343 (72.5)a	170 (79.8)a	231 (79.4)a	3.356	.055
Wine and liquor store employees	257 (54.3)a	124 (58.2)a	151 (51.9)a	0.994	.371
Winery tasting room staff	228 (48.2)a	103 (48.4)a	95 (32.6)b	10.299	.000
Food and cooking magazines	176 (37.2)a	68 (31.9)ab	72 (24.7)b	6.474	.002
Wine-focused magazine	154 (32.6)a	39 (18.3)b	27 (9.3)c	31.145	.000
Social media	96 (20.3)a	29 (13.6)a	55 (18.9)a	2.215	.110
National or local newspaper articles	92 (19.5)a	27 (12.7)ab	22 (7.6)b	10.857	.000
Regional or local magazines	77 (16.3)a	26 (12.2)a	30 (10.3)a	2.968	.052
Television/radio programs	56 (11.8)a	31 (14.6)a	43 (14.8)a	0.856	.425

Note. The survey was administered October 22–24, 2014. "Super core" represents those who drink wine daily to a few times a week, "core" represents those who drink wine about once a week, and "marginal" represents those who drink wine less frequently. Percentages with different letters within rows represent ANOVA followed by Games-Howell tests where values are significantly different at the level of $p < .05$; SPSS Version 21 and 22, Chicago, IL. Percentages do not equal 100% because participants were able to select more than one response category.

Conclusions and Implications

Our participant demographics varied slightly from those identified in national data. Between 2012 and 2016, Gen Xers and baby boomers (aged 35–46 and 47–64, respectively, in 2012) accounted for at least 70% of wine sales in the United States (McMillan, 2017); however, only 54.3% of Survey 1 participants and 42.1% of Survey 2 participants were aged 35–64. Whereas adult millennials (aged 21–34 in 2012) accounted for less than 15% of U.S. wine sales in 2012 and 2013 (McMillan, 2017), they accounted for 45.7% of Survey 1 participants and 40.1% of Survey 2 participants. Sixty-two percent of participants in both surveys were female, a proportion slightly higher than the 57% reported on a national basis (Boone, 2017).

Based on a national survey conducted in 2015 by Sonoma State University and the Wine Business Institute, 60% of respondents had a college degree (Thach & Chang, 2015). Fewer of our respondents attained this level of education, with just under 50% of Survey 1 participants and 56.3% of Survey 2 participants having at least a bachelor's degree.

About half (51.7%) of Survey 1 participants and 70.2% of Survey 2 participants drank wine from about once a week to daily (combined core and super core segments), a circumstance that can be encouraging for Mid-Atlantic wineries as these participants, in most cases, purchased wine more frequently than marginal wine consumers. Extension personnel can assist tasting room managers with developing surveys to learn about their visitors' consumption and purchasing habits and what could entice them to visit often. This information is essential for wineries, especially considering that in Pennsylvania, for example, 81% of the wine is sold directly at the winery or winery outlet (Dombrosky & Gajanan, 2013).

About three quarters of each segment learned about wine from friends and/or family. Tasting room operators should encourage customers to share their experiences with others, as positive word-of-mouth referrals can result in new-customer acquisitions (v. Wangenheim & Bayón, 2007). Customers, especially millennials, should be encouraged to share comments and photos with others on social media sites. According to a Gallo Wine Trends Survey, 51% of these young wine drinkers "would be encouraged to try a new wine" if they saw it recommended on social media (Fromm, 2017, para. 6).

Additionally, tasting room staff need to promote their wine knowledge and willingness to educate visitors. With only half of super core and core wine consumers responding that they learned about wine from winery tasting room staff, there is an opportunity for Extension personnel to develop customer-service training materials and help owners and operators customize materials that staff can consult to provide customers with an exceptional experience.

No differences existed among the three segments relative to the percentages who indicated that becoming more interested in drinking wine or learning more about wine had a positive influence on their consumption levels. However, more super core wine drinkers increased their consumption due to the health benefits associated with drinking wine and reports that moderate wine consumption helps with weight control. Hence, winery tasting rooms, with the help of Extension, could develop educational materials based on these data (e.g., findings suggesting that moderate wine consumption may have beneficial effects related to diabetes and other diseases [Artero, Artero, Tarin, & Cano, 2015]).

Extension personnel also should convey to industry members the occasions when wine is consumed. A range of 68.9% to 78.6% of participants across the three segments indicated that they consumed wine at parties or gatherings with family and/or friends. For those consumers more likely to drink wine during such occasions, wineries could develop promotional messages that emphasize bringing a bottle or two of their wines to parties and gatherings where it can be shared with family and friends or that indicate which wine styles are most appropriate for social gatherings. In addition, several of the occasions when participants consumed wine also involved consuming food items (e.g., at a party, dining at home, at a restaurant); thus, timely Extension fact sheets, blogs, and other communications could be published online and in newsletters with suggested pairings based on holiday traditions, cuisine, season, and so on. Winery tasting room staff also should be encouraged to talk with visitors to learn about potential events or gatherings they are hosting or attending, along with the theme or menu, and suggest wines that would be appropriate.

The information presented here also can be useful to Extension personnel working on subjects related to entrepreneurship or agribusinesses. Such Extension professionals could assist the industry by providing research-based content that then could be included in winery tasting room promotional materials, used to develop marketing strategies, and used to educate staff who interact with consumers during tasting room visits.

In general, wine industry stakeholders can benefit in myriad ways from implementing consumer-centric strategies. Armed with the data presented here, Extension professionals can help these stakeholders do that by improving their understanding of consumer motivations, interests, and behaviors.

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