

Preference and Attitudes of Mid-Atlantic Consumers Towards NJ Wine

Dr. Ramu Govindasamy

Professor and Chair, Dept. of Agricultural, Food and Resource Economics,
Rutgers University, New Jersey.

Dr. Surendran Arumugam

Post-Doctoral Associate, Dept. of Agricultural, Food and Resource Economics,
Rutgers University, New Jersey.

Dr. Kathleen Kelley

Professor, Plant Sciences, The Pennsylvania State University.

Abigail Miller

M.S. former graduate student, The Pennsylvania State University.

Other Investigators

Dr. Brad Rickard, Cornell University

Dr. Karl Storchmann, New York University

Dr. Jeffrey Hyde, The Pennsylvania State University.

Ms. Denise Gardner, The Pennsylvania State University.

Current View of Global Wine Production

- **> 1 million wine producers in the world.**
- **Produce about 2.8 billion cases of wine / year.**
- **Export market is about 1 billion cases.**
- **The global 'seaborne' export market is about 600 million cases, 60% of which is to the UK, the US and China.**
- **Top ten countries control 80% of production across 4.4 million hectares.**

World Vineyard Acreage By top 10 Countries 2011- 2014 and % Change 2014/2011 Acres (000)

| S.No | Country | 2011 | 2012 | 2013 | 2014 | % of world total 2014 | % Change 2014/2011 |
|------|--------------------|---------------|---------------|---------------|---------------|-----------------------|--------------------|
| 1 | Spain | 2,380 | 2,330 | 2,337 | 2,340 | 13.00% | -1.70% |
| 2 | China | 1,475 | 1,645 | 1,878 | 1,974 | 11.00% | 33.90% |
| 3 | France | 1,888 | 1,880 | 1,879 | 1,876 | 10.40% | -0.60% |
| 4 | Italy | 1,773 | 1,724 | 1,735 | 1,705 | 9.50% | -3.80% |
| 5 | Turkey | 1,255 | 1,228 | 1,245 | 1,240 | 6.90% | -1.20% |
| 6 | United states | 976 | 1,018 | 1,041 | 1,035 | 5.80% | 6.00% |
| 7 | Argentina | 540 | 547 | 554 | 552 | 3.10% | 2.30% |
| 8 | Chile | 509 | 509 | 514 | 521 | 2.90% | 2.40% |
| 9 | Iran | 525 | 531 | 513 | 507 | 2.80% | -3.50% |
| 10 | Portugal | 444 | 444 | 444 | 444 | 2.50% | 0.00% |
| | World total | 17,447 | 17,554 | 17,902 | 17,960 | 100.00% | 2.90% |

Source: <http://www.wineinstitute.org/resources/statistics>

World Wine Production By top 10 Countries 2011- 2014 and % Change 2014/2011 liters (000)

| S. No | Country | 2011 | 2012 | 2013 | 2014 | % world total 2014 | % Change 2014 / 2011 |
|-------|--------------|------------|------------|------------|------------|--------------------|----------------------|
| 1 | France | 4,432,200 | 5,075,700 | 4,107,500 | 4,670,100 | 16.54% | 5.40% |
| 2 | Italy | 4,673,000 | 4,270,500 | 5,402,900 | 4,473,900 | 15.85% | -4.30% |
| 3 | Spain | 3,535,300 | 3,370,900 | 3,123,300 | 3,820,400 | 13.53% | 8.10% |
| 4 | USA | 2,692,400 | 2,981,100 | 3,114,600 | 3,021,400 | 10.70% | 12.20% |
| 5 | Argentina | 1,547,000 | 1,177,800 | 1,498,400 | 1,519,700 | 5.38% | -1.80% |
| 6 | Australia | 1,109,000 | 1,187,000 | 1,250,000 | 1,200,000 | 4.25% | 8.20% |
| 7 | South Africa | 1,046,300 | 1,055,000 | 1,097,200 | 1,131,600 | 4.01% | 8.20% |
| 8 | China | 1,156,900 | 1,381,600 | 1,170,000 | 1,117,800 | 3.96% | -3.40% |
| 9 | Chile | 966,500 | 1,254,000 | 1,282,000 | 1,050,000 | 3.72% | 8.60% |
| 10 | Germany | 697,300 | 922,300 | 910,200 | 849,300 | 3.01% | 21.80% |
| | World total | 26,543,800 | 27,629,000 | 27,885,400 | 28,230,400 | 100% | 6.40% |

Source: <http://www.wineinstitute.org/resources/statistics>

World Wine Consumption By top 10 Countries 2011- 2014 and % Change 2014/2011 (Liters 000)

| S.No | Country | 2011 | 2012 | 2013 | 2014 | % Change 2014 /2011 | % Of world Consumtion 2014 |
|------|-------------|------------|------------|------------|------------|---------------------|----------------------------|
| 1 | USA | 3,163,300 | 3,159,500 | 3,117,600 | 3,217,500 | 1.7% | 13.0% |
| 2 | France | 2,932,200 | 3,026,900 | 2,818,100 | 2,790,000 | -4.9% | 11.3% |
| 3 | Italy | 2,305,200 | 2,263,300 | 2,179,500 | 2,040,000 | -11.5% | 8.3% |
| 4 | Germany | 1,970,700 | 2,000,000 | 2,030,000 | 2,020,000 | 2.5% | 8.2% |
| 5 | China | 1,520,300 | 1,773,700 | 1,747,100 | 1,580,000 | 3.9% | 6.4% |
| 6 | UK | 1,412,600 | 1,343,000 | 1,230,400 | 1,386,700 | -1.8% | 5.6% |
| 7 | Spain | 989,400 | 930,000 | 910,000 | 1,000,000 | 1.1% | 4.1% |
| 8 | Argentina | 980,900 | 1,005,100 | 1,033,700 | 990,000 | 0.9% | 4.0% |
| 9 | Russia | 1,127,600 | 1,039,400 | 1,050,000 | 960,000 | -14.9% | 3.9% |
| 10 | Australia | 462,000 | 458,000 | 453,000 | 540,000 | 16.9% | 2.2% |
| | World total | 24,686,245 | 24,945,409 | 24,579,072 | 24,701,440 | 0.1% | 100.0% |

Source: <http://www.wineinstitute.org/resources/statistics>

Research Focus

Objective:

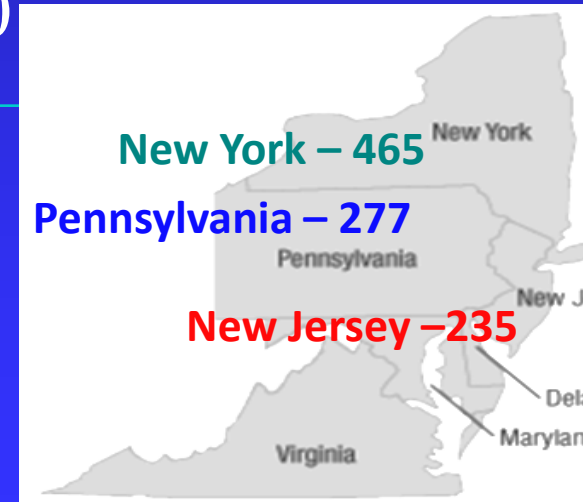
- Purchasing behavior and consumption attitudes of New Jersey, Pennsylvania and New York wine consumers.
- Effects of different promotion and marketing efforts on consumption of New Jersey wines.

Wine Consumer Survey Framework

- Two 15-minute Internet Surveys.
- 977 surveys collected between 22-24 Oct. 2014
- **Survey samples selection criteria:**
 - 21 years of age or older
 - Resided in New Jersey, New York, or Pennsylvania
 - Drank and purchased wine at least once within the previous year.

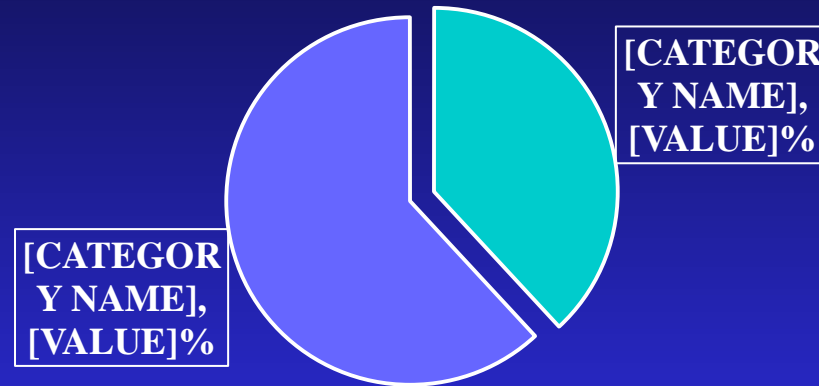
State of Primary Residence

| Residence | Frequency | Percent |
|--------------|-----------|---------|
| New Jersey | 235 | 24.0% |
| New York | 465 | 47.6% |
| Pennsylvania | 277 | 28.4% |
| Total | 977 | 100.0 |

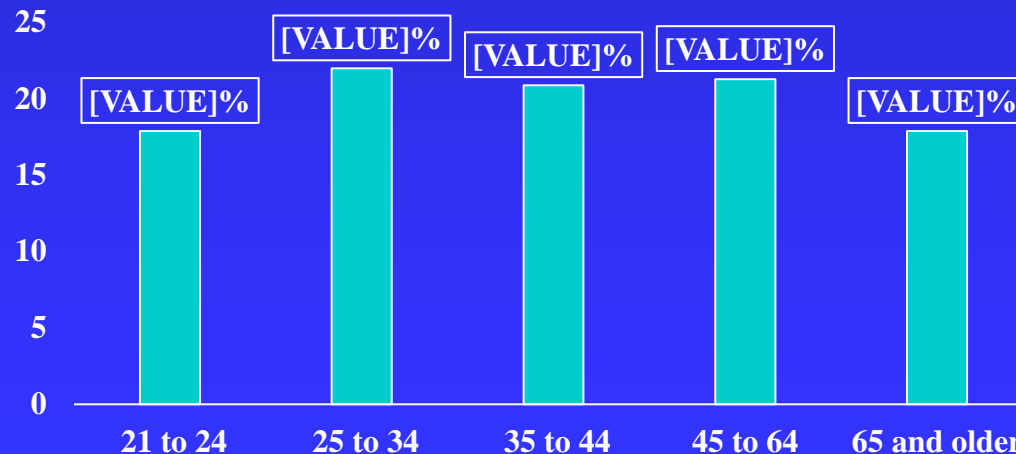


Participant Demographics

Gender



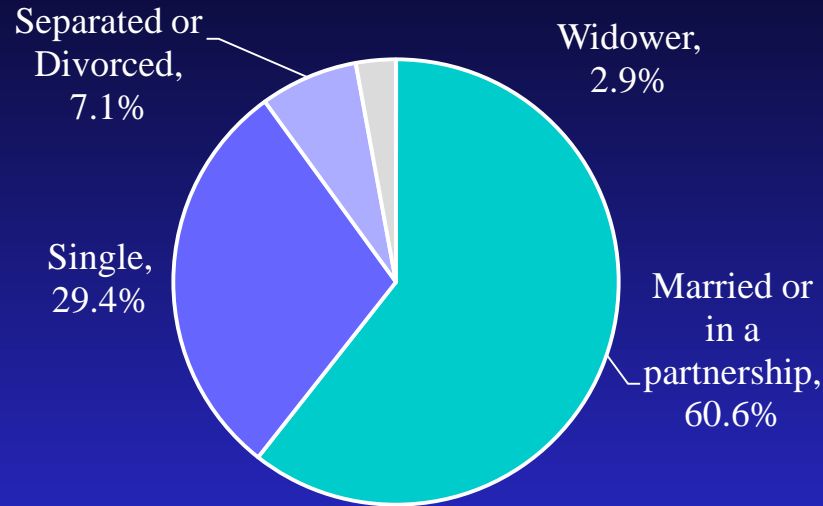
Age of the Respondent



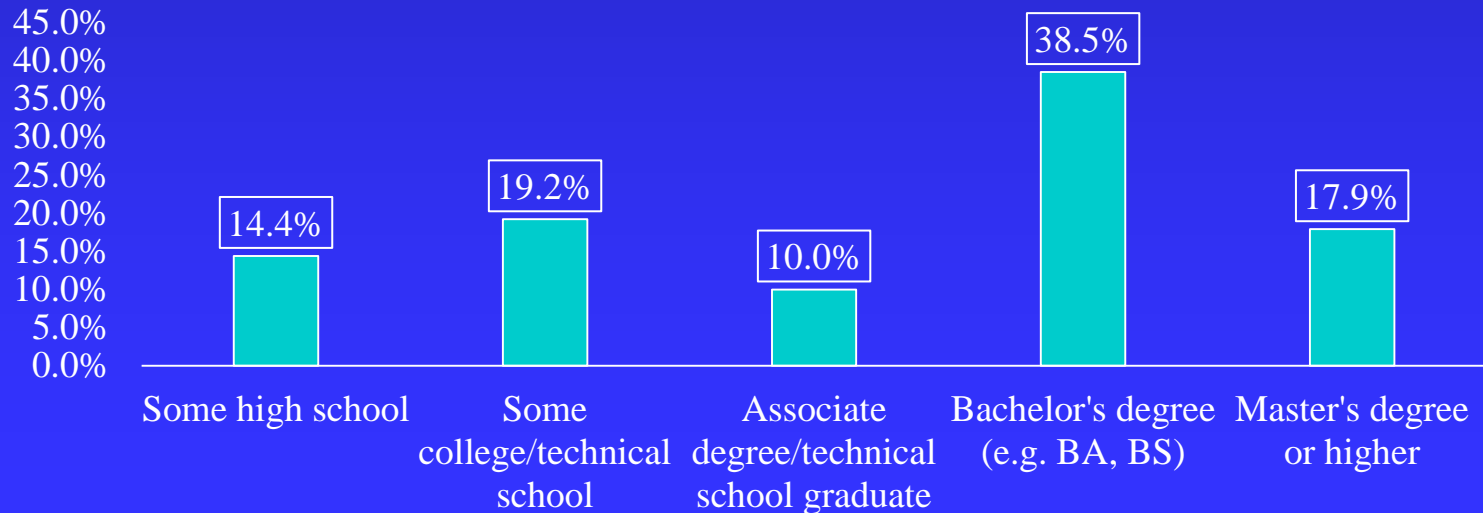
2013 Total Annual Household Income Before Taxes

| Income | Frequency | Percent |
|--------------------------|------------|-------------|
| Less than \$25,000 | 99 | 10.2 |
| \$25,000-\$49,999 | 200 | 20.6 |
| \$50,000-\$75,999 | 210 | 21.6 |
| \$76,000-\$99,999 | 150 | 15.4 |
| \$100,000-\$150,000 | 189 | 19.5 |
| \$150,000-\$200,000 | 71 | 7.3 |
| \$200,000 or greater | 52 | 5.4 |
| Total | 971 | 100 |

Current Marital Status



Level of Education

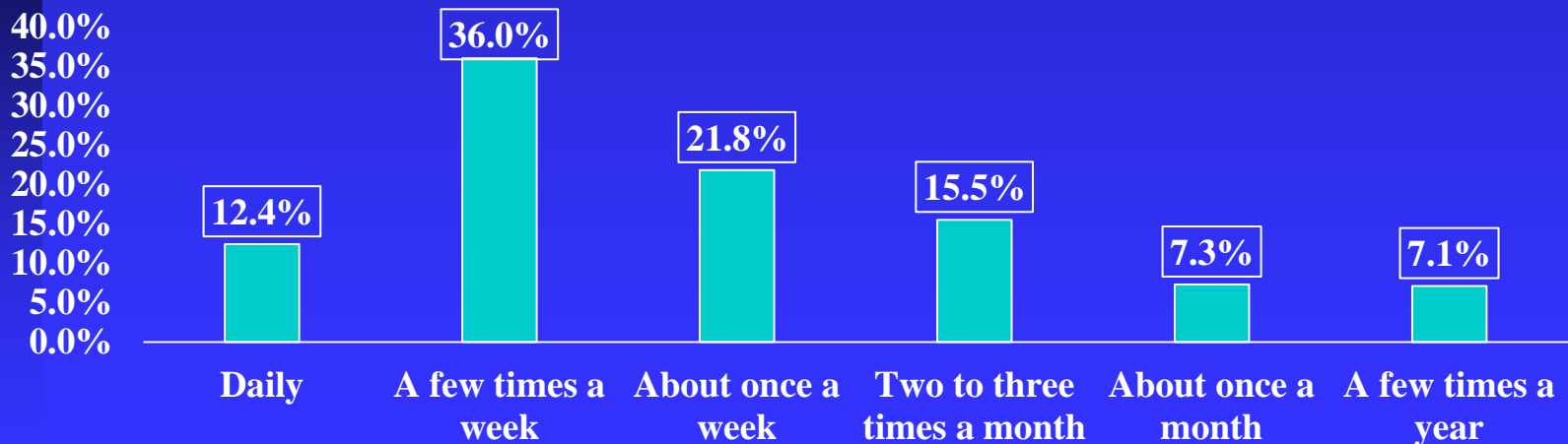


Purchasing Behavior of
Mid-Atlantic Wine Consumers

Respondent Involvement in Wine Purchasing

| Participants | Frequency | Percent |
|---|------------|------------|
| Purchases the “everyday wine” that is consumed in the house on an average day | 167 | 17.1 |
| Purchases wine to serve during special occasions and to entertain | 125 | 12.8 |
| Purchases both “everyday” wine and for special occasions | 685 | 70.1 |
| Total | 977 | 100 |

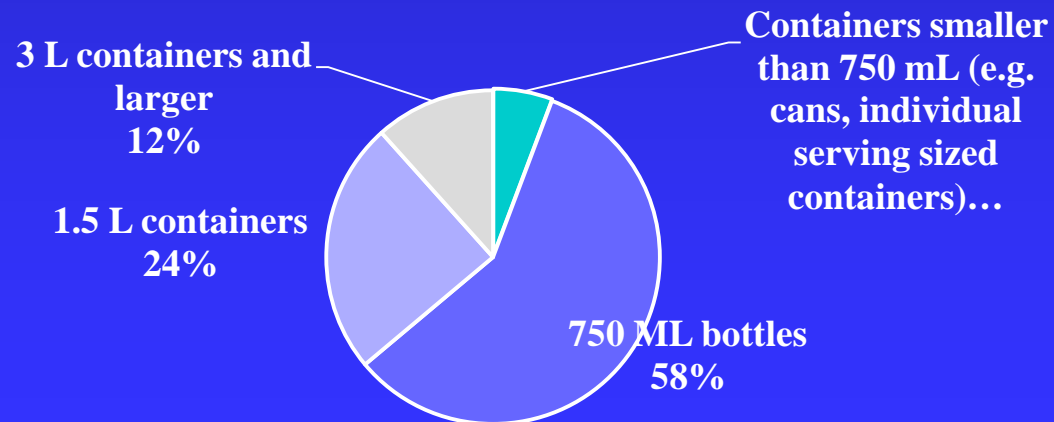
How Often Do the Participants Drink Wine



Number of People Drink Wine In the Household

| Participants | Frequency | Percent |
|---|-----------|---------|
| Participant only drinks wine | 286 | 29.4 |
| Participant and one other adult in HH drinks wine | 554 | 56.9 |
| Participant and at least two other adults drinks wine | 133 | 13.7 |
| Total | 973 | 100 |

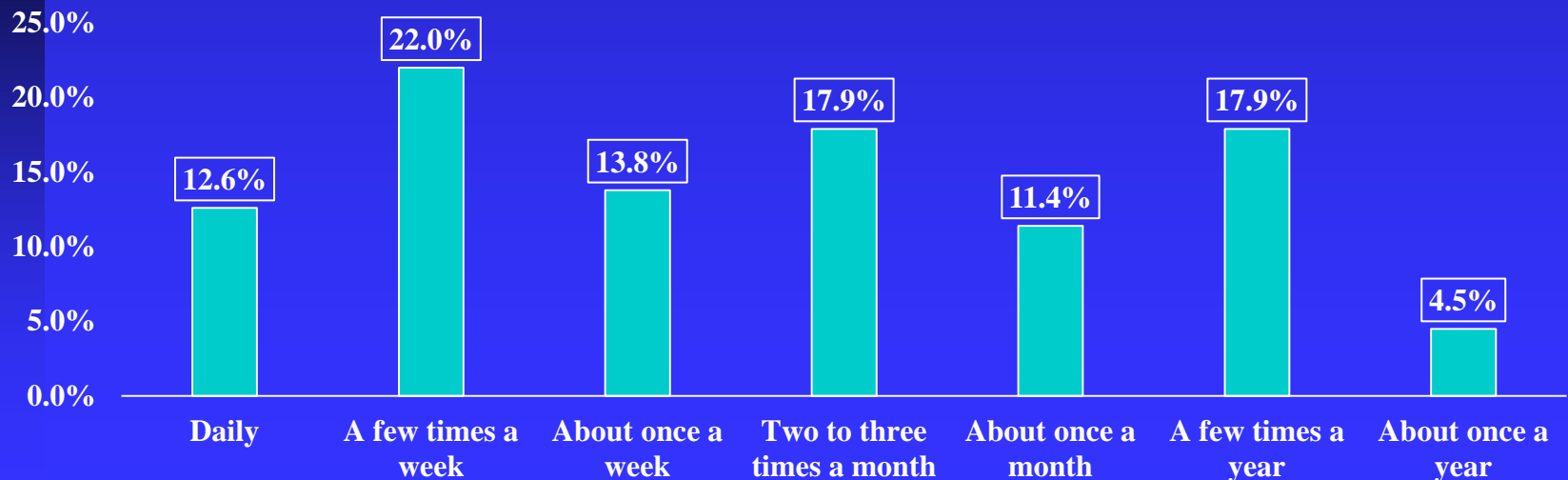
Percentage Share of Wine Containers the Participant Purchases



Respondents Perception of 10% Alcohol by Volume and/or Fewer than 80 Calories Per 5 oz Wine.

| | Participants | Frequency | Percent |
|----------------------|--------------|-----------|---------|
| Yes | | 245 | 25.2 |
| No | | 392 | 40.2 |
| Unsure/ I Don't Know | | 337 | 34.6 |
| Total | | 974 | 100 |

Consumption Frequency of Lower Alcohol Content and/or Calories Wine.



Past Consumption Experience of Wine that Produced In the New Jersey, New York and/or Pennsylvania

| Response | Frequency | Percent |
|----------|-----------|---------|
| Yes | 760 | 78.1 |
| No | 213 | 21.9 |
| Total | 973 | 100 |

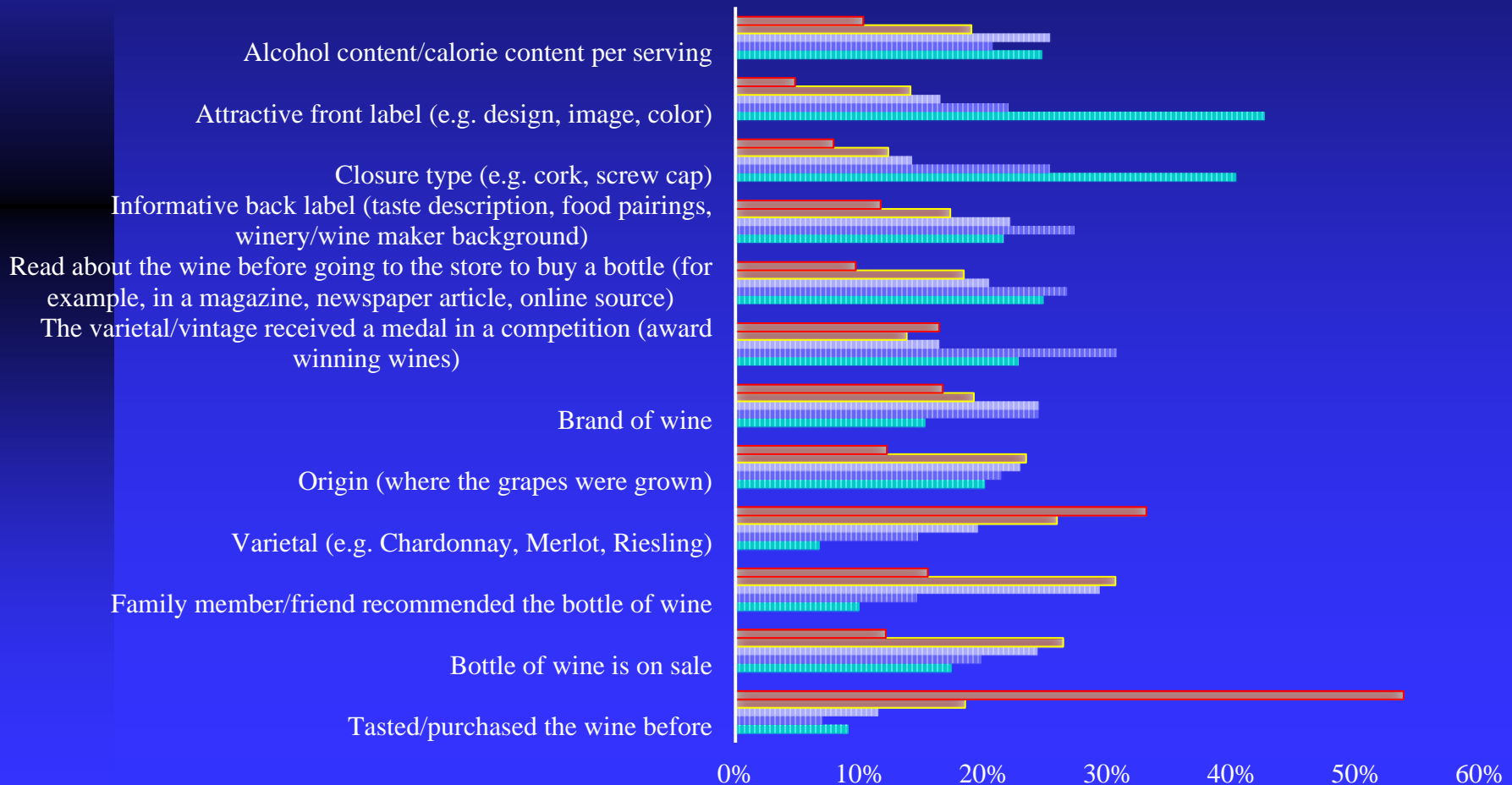
Of the last 10 bottles of 750 mL wine the respondent willing to buy less than 10% alcohol by volume and/or fewer than 80 calories per 5 oz. On an average of **2.86 bottles**.

The respondent preference of **red, white, and/or rose wine**

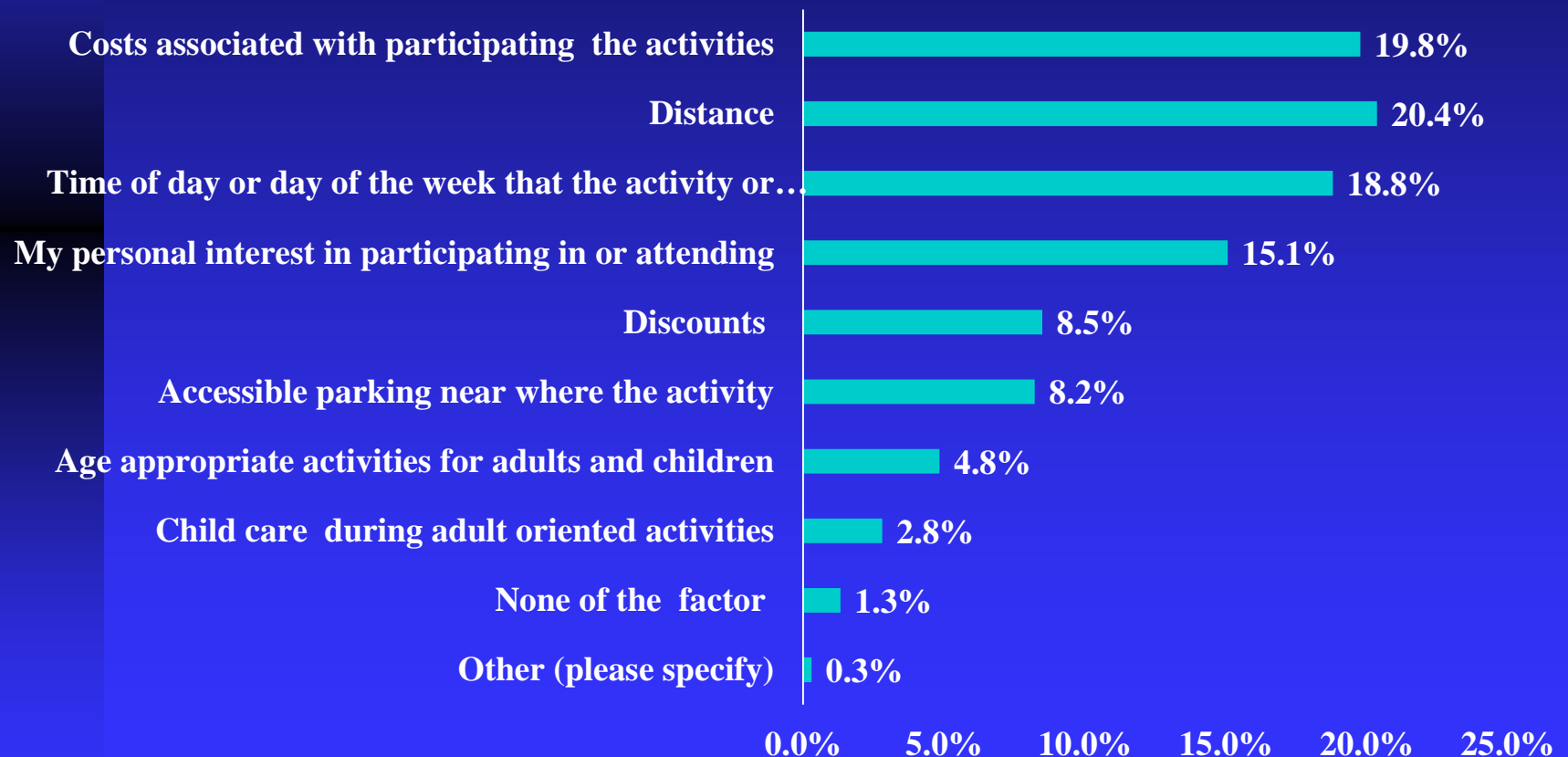
| | |
|-------|--------|
| Red | 48.8 % |
| White | 37.4% |
| Rose | 17.3% |

Common Factors that Influence the Respondents When Purchasing a 750 ml Bottle of Wine.

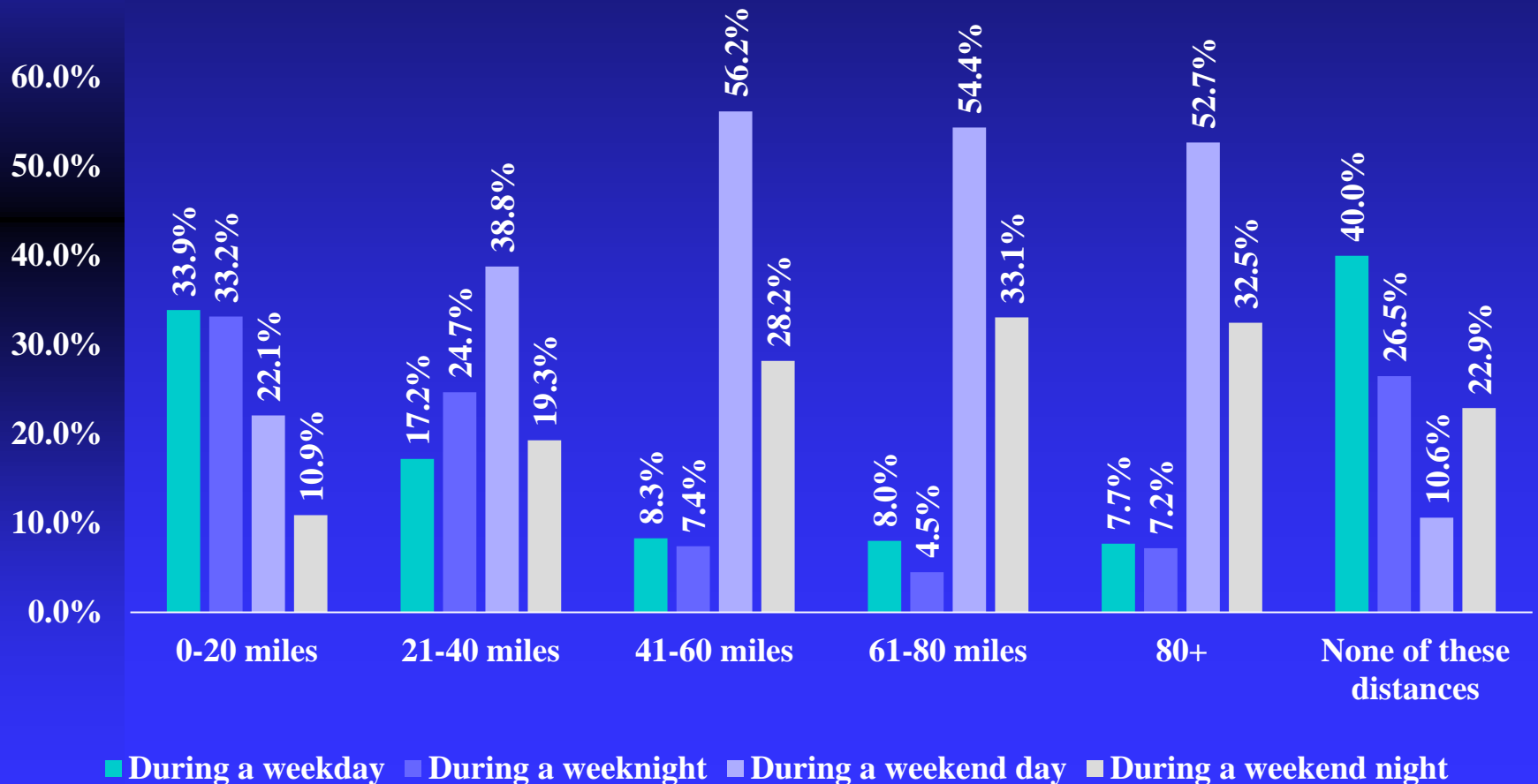
■ Most Important
■ Very Important
■ Important
■ Somewhat
■ Least Important



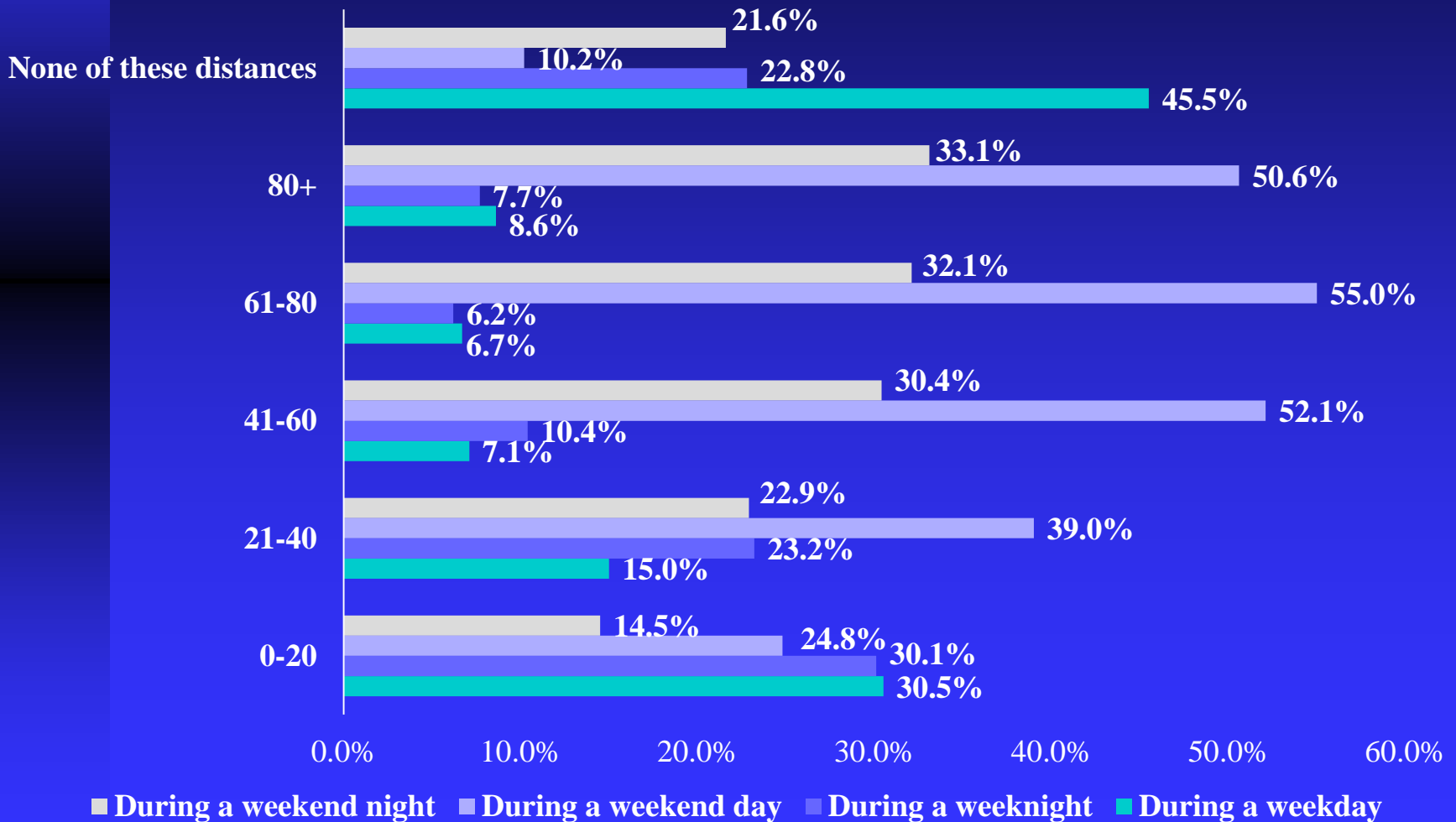
Factors that Decides to Participate in Leisure Activities and Events Held at a Winery



Distances Willing to Travel to Attend a Free Event Held at a Winery During a Weekday, Weeknight, Weekend day, and Weekend Night



Distances Willing to Travel to Attend a Fee Event Held at a Winery During a Weekday, Weeknight, Weekend day, and Weekend Night



Purchased a Bottle of Wine Specifically Because all or Some of the Profits are Donated to a Cause or Nonprofit Organization

| Participant's response | Frequency | Valid Percent |
|-------------------------------|------------------|----------------------|
| Yes | 263 | 27.3 |
| No | 700 | 72.7 |
| Total | 963 | 100 |

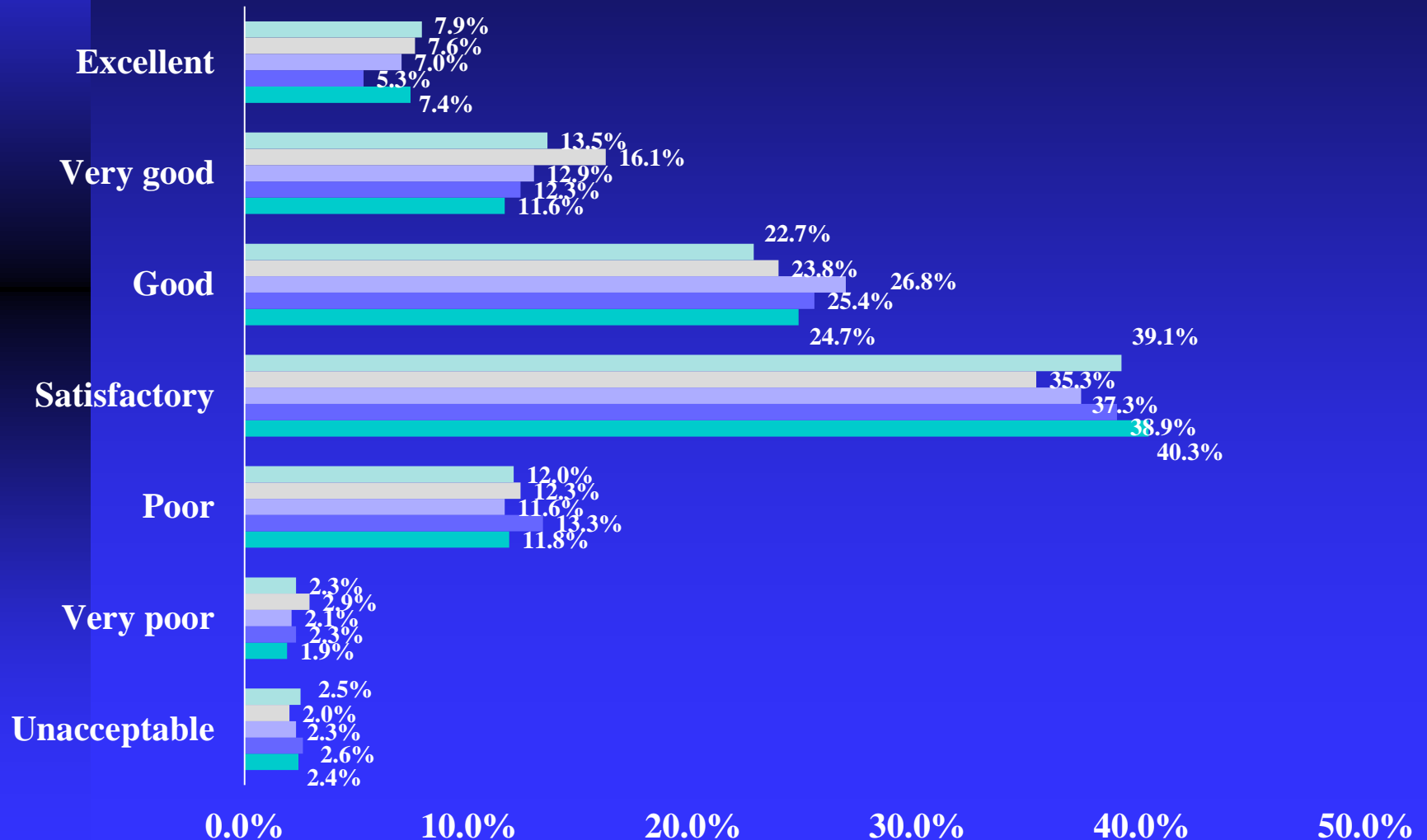
Would Knowing That a Winery Donates All or a Portion Of the Profits, From Specific Merchandise and Wine, to a Cause or Nonprofit Association that Encourage the Respondents to Visit that Particular Winery

| Participant's response | Frequency | Valid Percent |
|-------------------------------|------------------|----------------------|
| Yes | 483 | 50.2 |
| No | 224 | 23.3 |
| Not sure | 256 | 26.6 |
| Total | 963 | 100 |

Comparison of New Jersey,
New York and Pennsylvania Wine

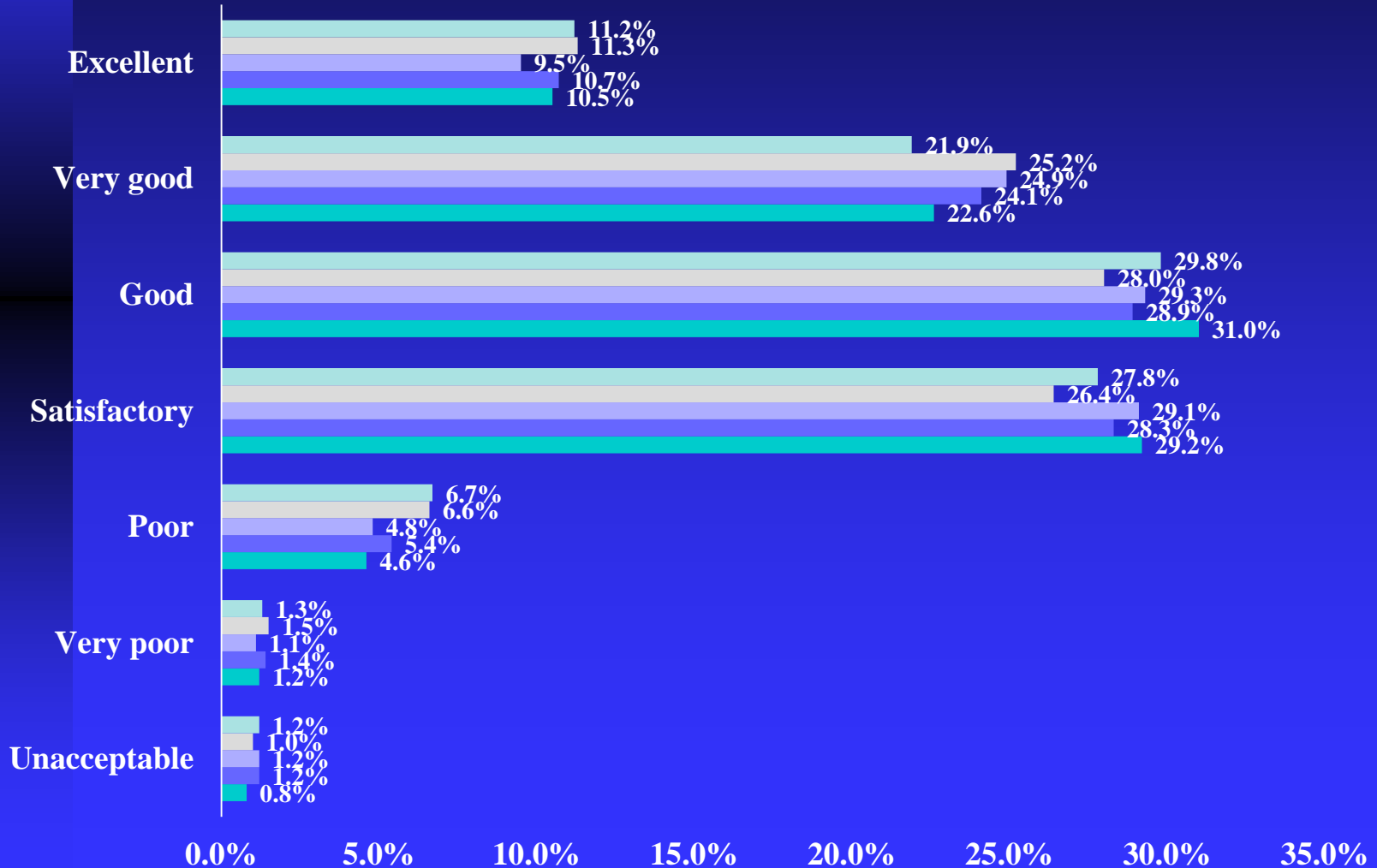
Respondents Perception About Wines Produced With Grapes Grown in New Jersey.

■ Cabernet Sauvignon
■ Merlot
■ Pinto Grigio/Pinot Gris
■ Riesling
■ Chardonnay



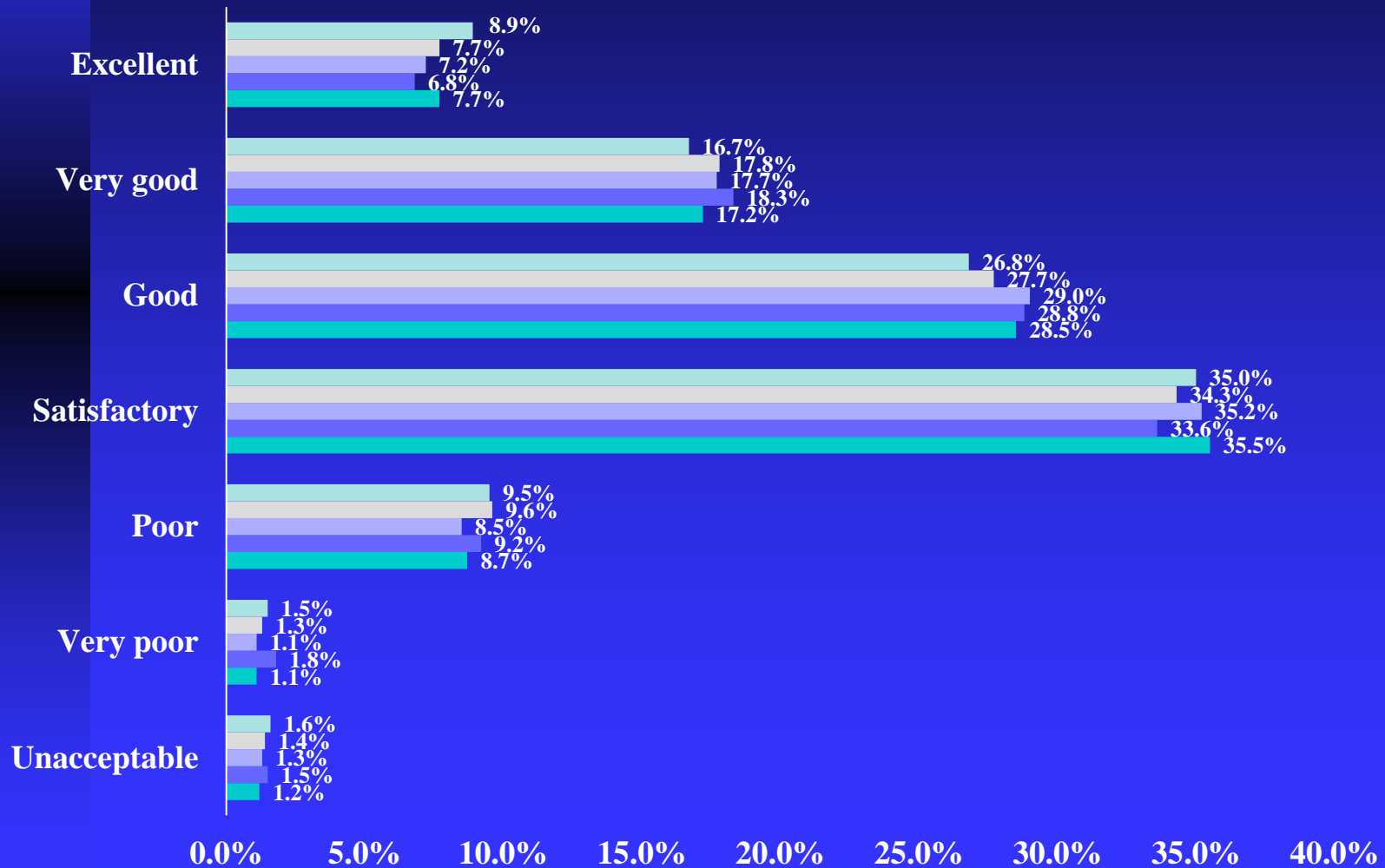
Respondents Perception About Wines Produced With Grapes Grown in New York.

■ Cabernet Sauvignon ■ Merlot ■ Pinto Grigio/Pinot Gris ■ Riesling ■ Chardonnay



Respondents Perception About Wines Produced With Grapes Grown in Pennsylvania.

■ Cabernet Sauvignon ■ Merlot ■ Pinto Grigio/Pinot Gris ■ Riesling ■ Chardonnay

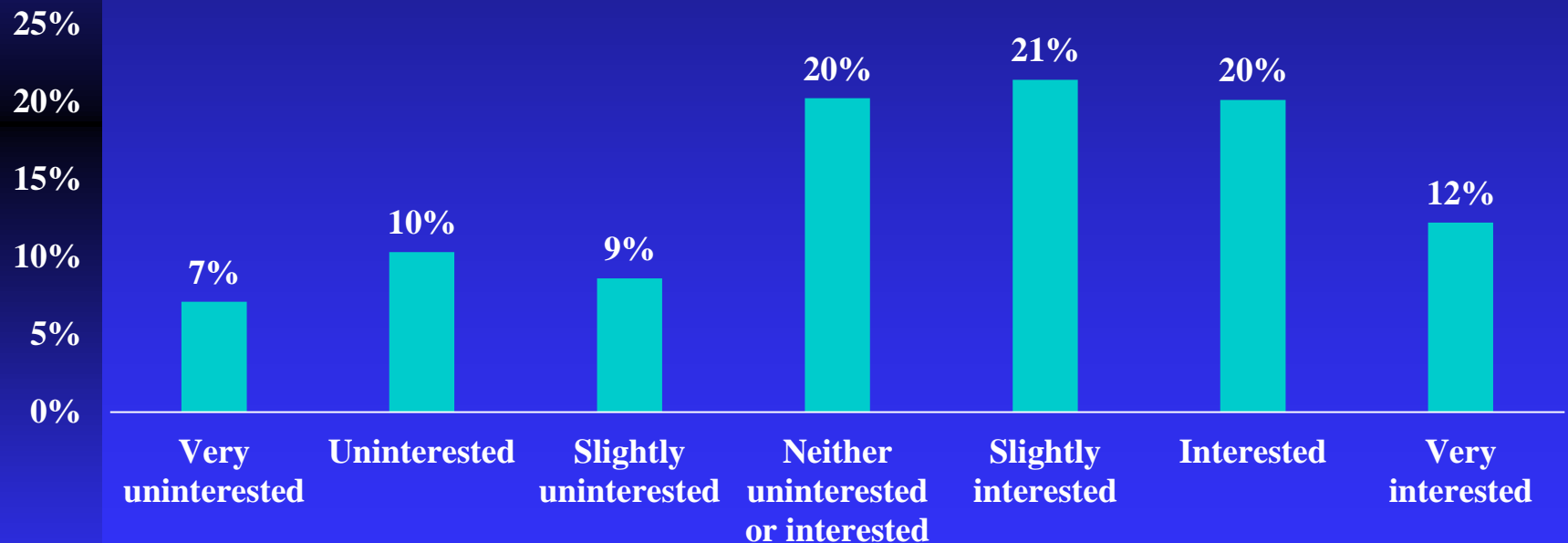


Preference for
Wine Produced in New Jersey
By NJ, PA and NY Residents

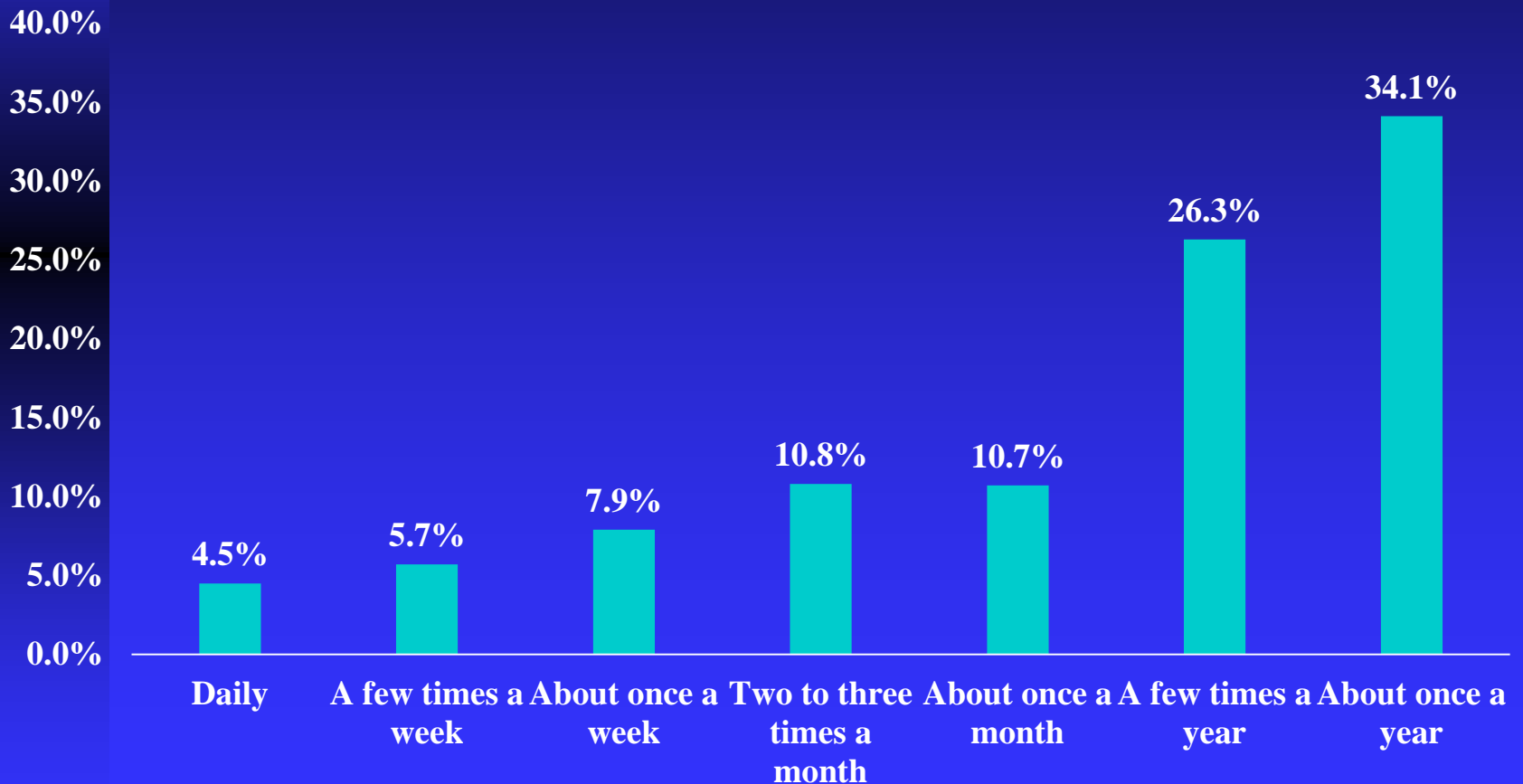
Respondents Perception About Wines that could be Produced With Grapes Grown in New Jersey.

| Varieties | Unacceptable | Very poor | Poor | Satisfactory | Good | Very good | Excellent | Total |
|--------------------------|--------------|-----------|-------|--------------|-------|-----------|-----------|-------|
| Chardonnay | 2.4% | 1.9% | 11.8% | 40.3% | 24.7% | 11.6% | 7.4% | 100% |
| Riesling | 2.6% | 2.3% | 13.3% | 38.9% | 25.4% | 12.3% | 5.3% | 100% |
| Pinto Grigio/ Pinot Gris | 2.3% | 2.1% | 11.6% | 37.3% | 26.8% | 12.9% | 7.0% | 100% |
| Merlot | 2.0% | 2.9% | 12.3% | 35.3% | 23.8% | 16.1% | 7.6% | 100% |
| Cabernet Sauvignon | 2.5% | 2.3% | 12.0% | 39.1% | 22.7% | 13.5% | 7.9% | 100% |

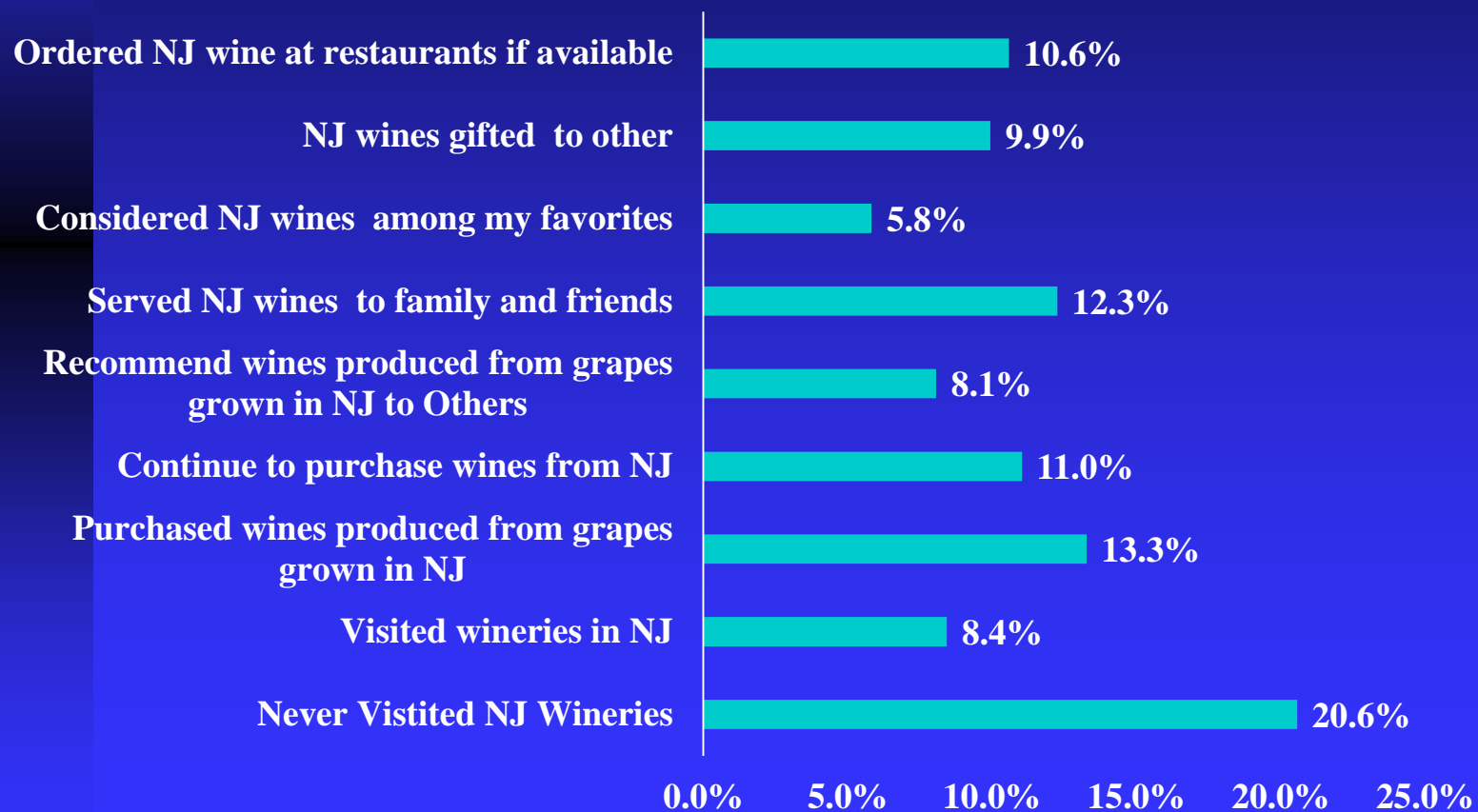
Respondents Level of Interest in Purchasing and Drinking of NJ- Wines With Less than 10% Alcohol by Volume / 80 Calories / 5 oz.



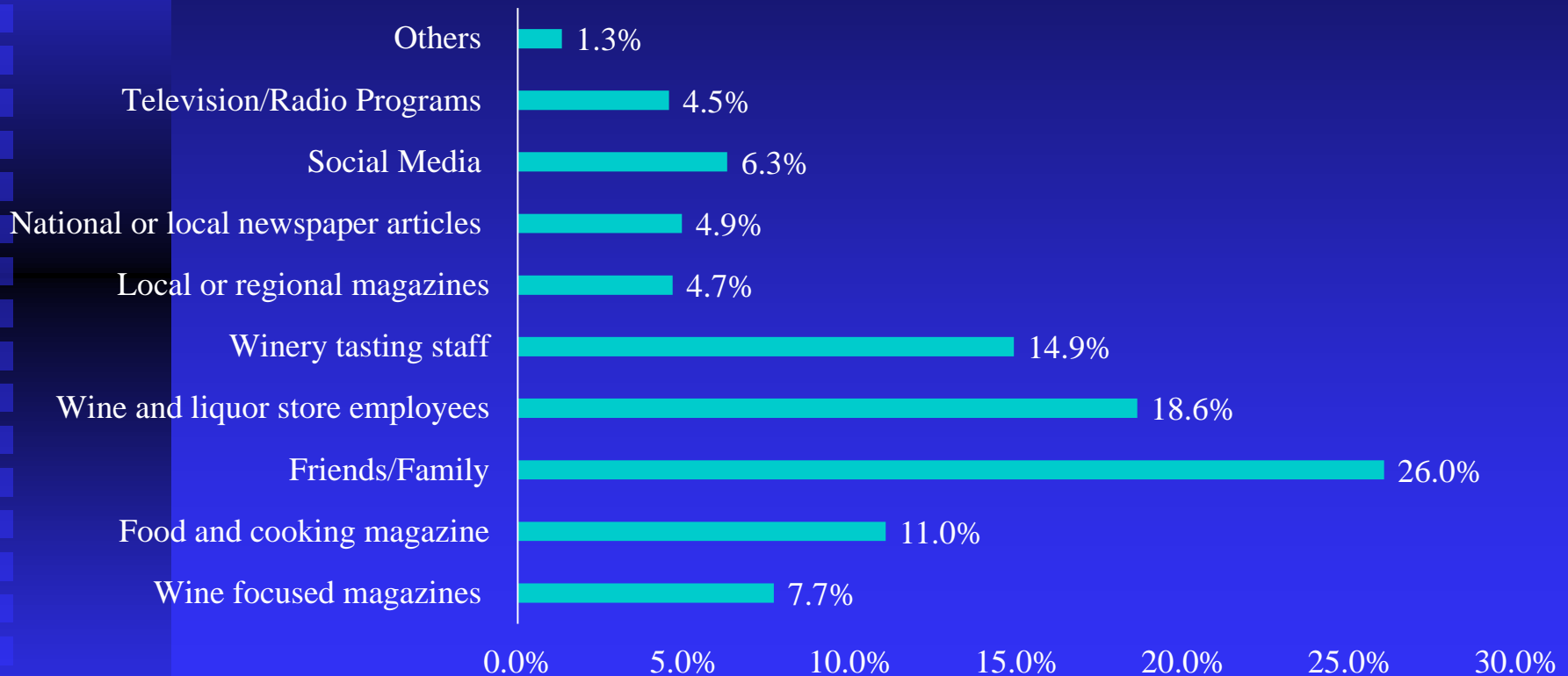
Drinking Frequency of New Jersey Wine



Respondents Experiences with Visiting Wineries and Purchasing and Drinking Wine Produced in New Jersey



Sources to learn More about Wine



NJ- Residents Purchasing
Behavior of Wine

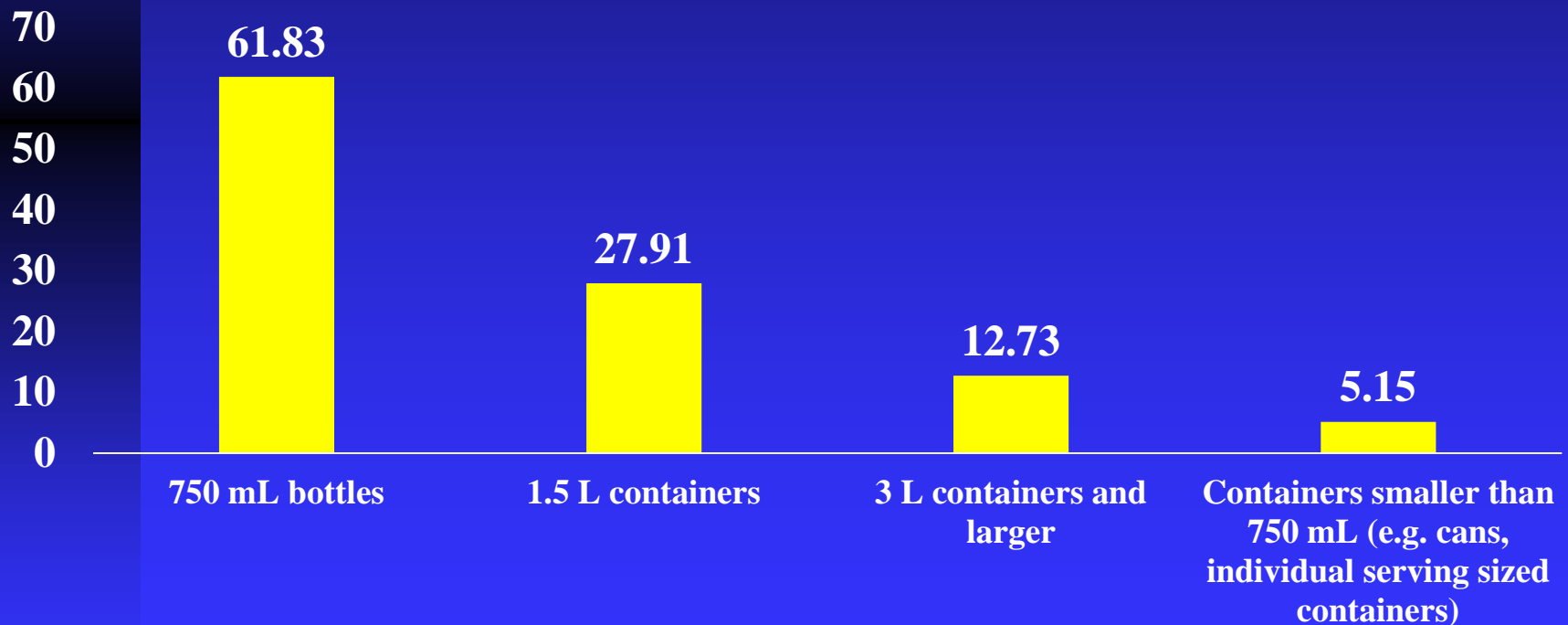
NJ- Respondent Involvement in Wine Purchasing

| Particulars | New Jersey | % |
|--|------------|---------------|
| I only purchase the "everyday" wine that I/we consume in the home during an average day (not for special occasions or entertaining). | 32 | 13.6% |
| I only purchase wine I/we serve during special occasions and when we entertain. | 32 | 13.6% |
| I purchase both the "everyday" wine and the wine purchased for special occasions and entertaining | 171 | 72.8% |
| None of the above/I do not purchase wine for the household | 0 | 0.0% |
| Total | 235 | 100.0% |

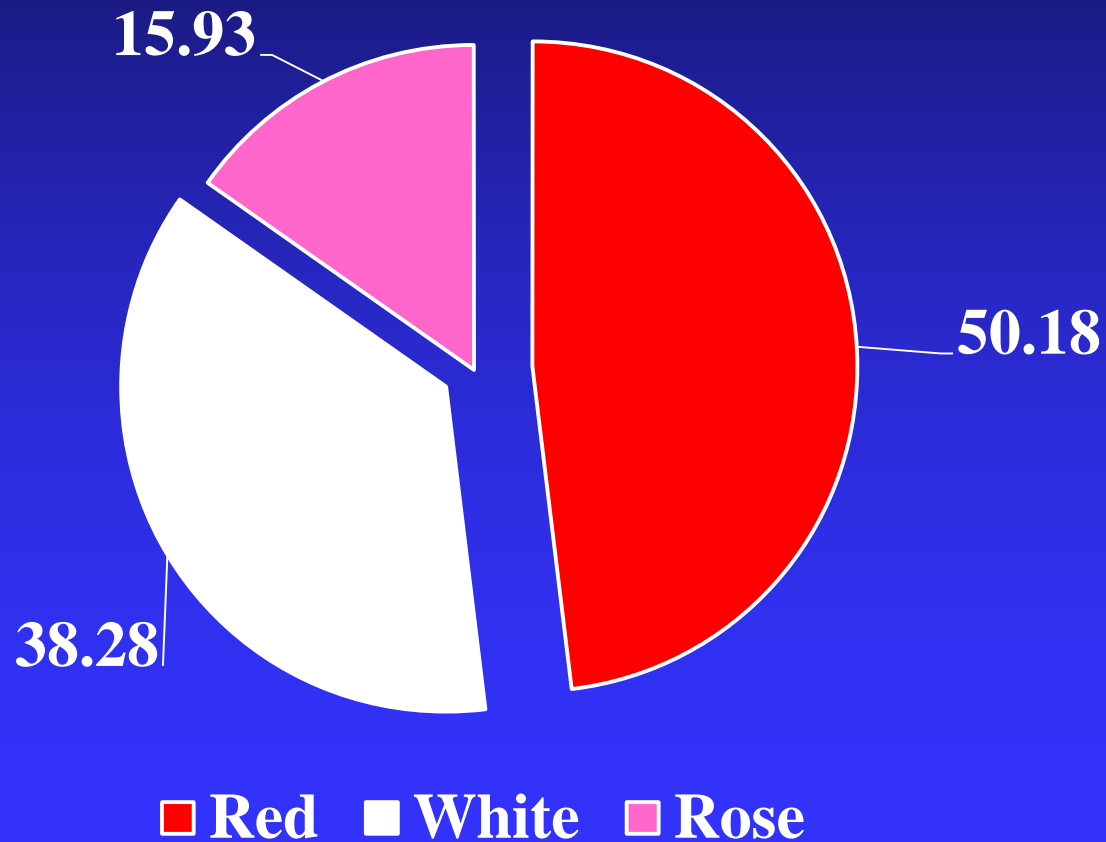
NJ- Respondents Drinking Frequency of Wine

| Particulars | Frequency | % |
|-----------------------------------|------------------|---------------|
| Daily | 38 | 16.2% |
| A few times a week | 88 | 37.4% |
| About once a week | 51 | 21.7% |
| Two to three times a month | 34 | 14.5% |
| About once a month | 13 | 5.5% |
| A few times a year | 11 | 4.7% |
| About once a year | 0 | 0.0% |
| Total | 235 | 100.0% |

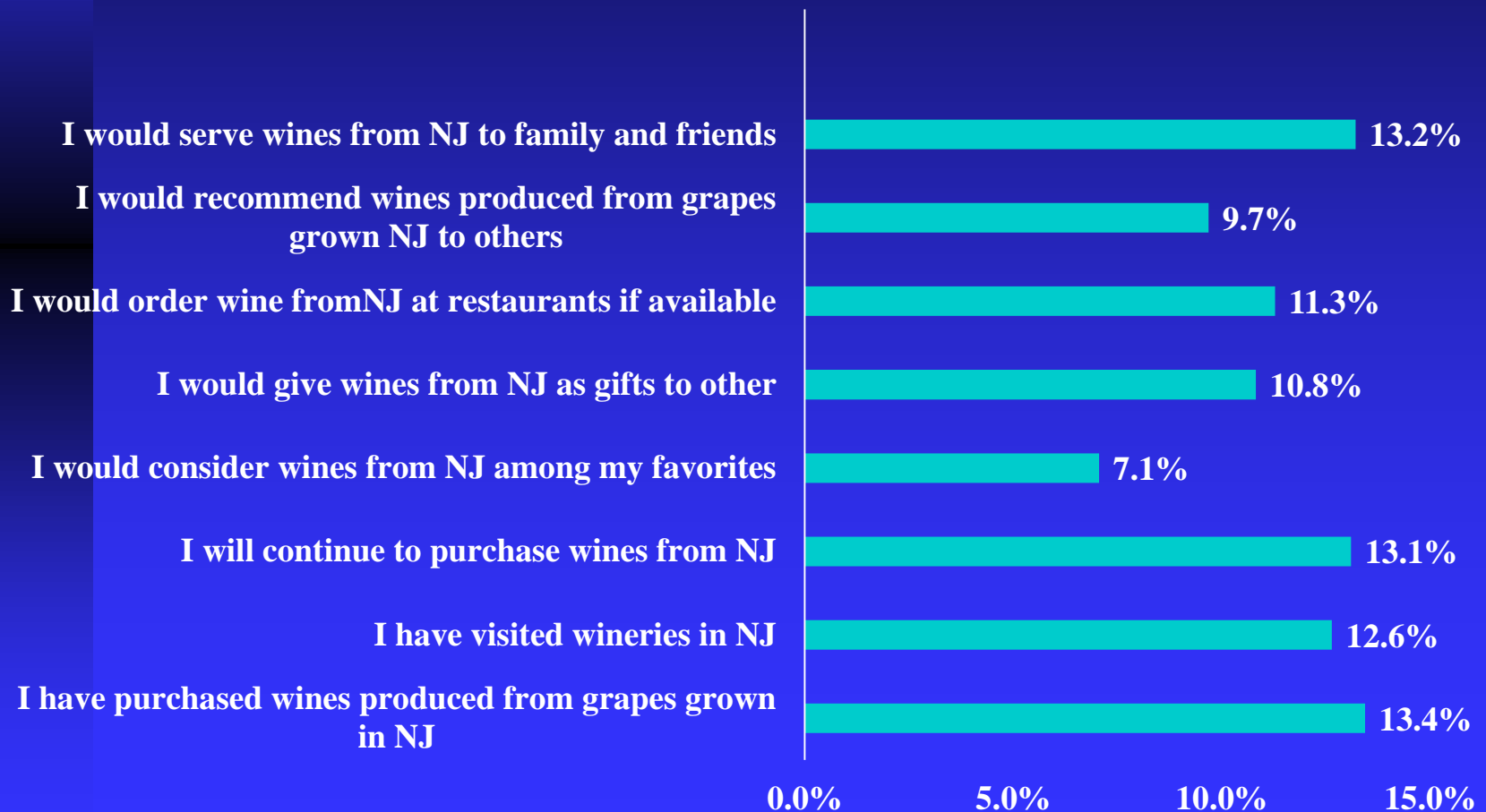
Average Percent of the wine purchased By the NJ-Respondents



Average Percent of the wine purchased By the NJ-Respondents



NJ- Respondents Experiences with Visiting Wineries and Purchasing and Drinking behavior of Wine



Thank you.

Questions....?

For further information and suggestions
contact Ramu Govindasamy

at

Govindasamy@aesop.rutgers.edu

<http://aesop.rutgers.edu/%7Eagecon/pub/agmkt.htm>