

THE MILLENNIAL GENERATION AND WINE PURCHASING BELIEFS IN CASUAL  
DINING RESTAURANTS

by

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B.A., California State University, Sacramento, CA, 2003  
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AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Hospitality Management and Dietetics  
College of Human Ecology

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

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## **Abstract**

The primary purposes of this research were to 1) use the Theory of Planned Behavior (TPB) to assess Millennial generation wine consumers attitudes, perceived behavioral controls, and subjective norms related to purchasing wine in casual dining restaurants (CDR), and 2) use Conjoint Analysis (CA) to analyze Millennials' preferences for wine information on the restaurant menu. An instrument was designed based on the TPB and CA and was sent online to 216 consumers using the database of a market research firm (e-rewards) (n = 216).

Independent variables (attitude, perceived behavioral control, and subjective norms) were analyzed to predict behavioral intentions to purchase wine. Exploratory factor analysis was combined with multiple linear regression to assess intention. Results identified attitudes and subjective norms as being significant in predicting behavioral intention, perceived behavioral controls was partially significant. Millennials' believe ordering wine with their friends and family in CDR's will make them feel smart and sophisticated and wine will increase the enjoyment of food. However, they do not believe wine consumption is appropriate in casual dining restaurants; they had strong perceptions that wine is purchased for special occasions and consumed in fine dining restaurants.

Part II of the study employed CA to determine Millennials preferences for wine information on the menu. Results indicated that Millennials prefer menus that provide wine/food pairing information, wine flavor descriptors located near food listings and quality wines at an affordable price.

Millennials attitudes, subjective norms, and perceived behavioral controls support previous research that this generation is interested in wine and wine is a social experience that increases their enjoyment of food and time spent with their friends and family. Through the use of CA, the present study suggests wine information on the menu is important to this segment of consumers. Additional research should be conducted to understand the stereotypes this generation has about wine consumption in casual dining restaurants. These operators and owners should consider focusing their marketing efforts showing Millennials enjoying wine while celebrating special occasions with their friends and family. In addition, redeveloping menus in their operations to add wine information may increase interest in wine and generate profit.

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# **CHAPTER 1 - INTRODUCTION**

## **Wine Research in the United States**

In the latter part of the nineteenth century wine production in the New World became commercially important. Historically, wine making and consumption were centered in Europe and Germany. Many of today's New World wine regions which include North and South America, Australia, and South Africa, began to make their presence known in the 1950's (MacNeil, 2001). Today, wine is enjoyed by hundreds of millions of consumers around the world and according to Mayo, Nohria and Singleton (2007) the United States (U.S.) is poised to become the global wine leader overtaking France and Italy as the world's largest consumer of table wines. This growth in demand in wine and the reduction in consumption in many of the major wine producing countries has added pressure on wine marketers to capture the attention of the U.S. wine consumer (Wine Institute, 2004). As the world wine market increases, the role of marketing has become an important issue.

The intention behind consumers' decisions to purchase wines in wine shops and grocery stores has been investigated. Almost one-quarter of wine consumers feel overwhelmed by the sheer volume of choices in the number of wineries, wine brands, labels, bottle shapes, style, and types of closures (Progressive Grocer, 2008). Research conducted over the past twenty years has sought to determine which of these commercial indicators is most important to consumers when making wine purchasing decisions. Keown and Casey (1995) and Gil and Sanchez (1997) were the first to establish that label information was the most influential commercial indicator that consumers use when making wine purchase decisions. Barber, Almanza, and Donovan (2006) and Barber, Ismail, and Taylor (2007) also determined that consumers placed a great significance on the overall label and bottle packaging when selecting a bottle of wine, but that

differences exist in these preferences based on factors of gender, income and age (Barber and Almanza (2006).

Other studies have focused on how consumers' experience and knowledge play into their decision-making process and found that consumers who have less wine experience and knowledge used point of sale information and considered the recommendations of friends, family and sales persons when making a purchase decision (Olsen, Thompson and Clarke, 2003; Dodd, Laverie, Wilcox and Duhan, 2005; and Chaney, 2000). Charters and Pettigrew (2007) determined that consumers who are more involved with the product (have more experience) make their purchase decisions based on familiarity with a wine's structural balance and complexity in flavor. Those who are less involved (have less experience) felt that a wine's quality was related to its packaging and sensory attributes such as taste, mouth feel, and body.

### **Wine Consumers in the United States**

Wine and marketing research over the past two decades has determined which product attributes consumers believe are most important when purchasing a bottle of wine. Recent research, however, has focused more on "cohorts" of wine consumers in an attempt to provide marketing and advertising firms, and wine producers and retailers with knowledge about these groups' wine-related behaviors. It is important to understand the differences in the segments of consumers as this enables marketers to tailor products and advertisements for different groups. Current researchers have begun to segment consumers based on the generation in which they were born. McGarry-Wolf and McVey (2001) established that consumers born in different generations vary in their alcohol preferences and Generation X'ers were more likely to purchase beer and are less loyal to wine than other generations. In 2005, the Wine Market Council reported that the Millennial generation was becoming the next generation of wine consumers,



and as a result, researchers began to include this segment in their research. Thach and Olsen (2006) discovered that not only were the Millennials interested in wine, but they were different than other generations in their marketing needs by requiring more innovation and a focus on value. Olsen, Thach and Nowak (2007) studied core U.S. wine consumers in four segments: Millennials, Gen X'ers, Baby Boomers, and Traditionalists to determine how these consumers were socialized to wine. They found that all four cohorts started to drink wine because they thought that wine fit better with food. And, Barber, Dodd and Ghiselli (2008) reported that Millennials and Generation X'ers purchased more wine than Baby Boomers and Traditionalists and unlike any generation in the past, Millennials were choosing to drink wine over beer and hard liquors. Additionally, Olsen, Thach and Nowak (2007) reported that all four generations agreed that the most popular way to consume wine was with meals, either at home or in restaurants.

### **Wine Sales in Restaurants**

Although several studies have been conducted defining wine consumer segments and factors important to consumers when purchasing wine in wine shops and grocery stores, few studies have attempted to relate wine purchase intention to the food service industry, especially in casual dining restaurants. The National Restaurant Association's (2006) restaurant industry forecast reports that wine is becoming increasingly popular in restaurants. Restaurants are responsible for about 20% of all U.S. wine sales. Among fine dining operators, 65 percent expected wine to represent a larger proportion of sales in 2007, while 50 percent of casual dining and 37 percent of family dining operators expected the same (NRA, 2006). According to the Wine Economist (2008), the importance of wine in restaurants continues to grow. Over 70% of restaurants reported that wine was a larger percentage of their total sales in 2007 compared with

2006. Yang and Lynn (2009) determined that the average check in a restaurant in the U.S. is less than \$7 a person, indicating that fine dining is a small percentage of the restaurant business and the casual dining statistic is the one that matters. Casual dining restaurants, therefore, may be able to boost wine sales by offering a greater number of lower cost wines.

More restaurants are paying attention to wine and wine-drinkers and increasing sales accordingly (Popp, 2005). If these restaurateurs can establish who is more likely to purchase wine in their restaurant and develop marketing techniques to attract this segment, wine sales can create a positive influence on their bottom line. Understanding customers and providing variety and value in line with needs are the keys to building relationships and profits through alcohol sales (Popp, 2005).

The present study uses the Theory of Planned Behavior to understand consumer behaviors related to the purchase of wine in casual dining restaurants. The Theory of Planned Behavior (TPB) is a psychological model that examines the behavior of individuals and states that the best predictor of a person's behavior in any given situation is their intention to perform the behavior (Ajzen, 1985, 1991). The theory proposes that a person's behavioral intention is based upon three antecedents: attitudes, subjective norms, and perceived behavioral controls (Ajzen, 1991). More specifically, to predict whether a person intends to do something we need to know whether the person is in favor of doing it (attitude), how much the person feels social pressure to do it (subjective norm), and whether the person feels in control of the action in question (perceived behavioral control).

In the current literature, consumers have cited a broad range of factors as barriers to purchasing wine in wine shops and grocery stores: the price of a wine (Gil and Sanchez, 1997), commercial indicators such as brand and origin (Anon, 1999), and experience with the product

(Charters and Pettigrew, 2007). In addition, the literature reported peers and family members as being influential to Millennials and their decision to purchase wine (Thach and Olsen, 2006). Yet, an in-depth review of the literature did not reveal any consumer behavioral research that had been conducted to address perceived behavioral control and its relationship to the intention to order wine in casual dining restaurants. Therefore, the present study applies the Theory of Planned Behavior (TPB) to investigate the relationships among Millennial consumers' attitude, subjective norms, and perceived behavioral controls and to explore factors that might encourage them to purchase wine in casual dining restaurants (Ajzen, 1985) (Figure 1.1).

The present study also will employ the use of conjoint analysis (CA) to analyze product preference data and simulate consumer choice. Not only is it important to understand consumers' behaviors to increase the chance consumers will intend to do a desired action, it is crucial to analyze the factors that influence their purchasing decisions. CA has emerged as a contemporary research technique to reveal consumer preference about choosing a particular product (Koo, Tao, and Yeung, 1999). CA provides answers to questions such as: Which product attributes are important or unimportant to the consumer? And, what levels of product attributes are the most or least desirable in the consumer's mind?

For the purpose of the present study, CA data will be collected by asking subjects about their preferences for menu options, and then CA will decompose the judgment data into components based on qualitative attributes of the menu, thereby providing the "hot buttons" necessary for tailoring menus to a particular market segment. The appeal of this method is that it can determine exactly which menu attributes of food-wine pairing information, wine descriptors, and/or prices affect consumers' intent to purchase wine.

## **Statement of Problem**

Research indicates that the Millennial generation is developing as a new wine consumer segment in the United States (Barber, Dodd and Ghiselli, 2008; Wine Market Council, 2006). Generally viewed as children of the Baby Boomers, the Millennials may be the largest consumer group in the history of the U.S. in terms of their purchasing power and represent the future market for most consumer brands (Harris Interactive, 2001). If the Millennial generation is developing as a new wine consumer segment, it is imperative that restaurant operators understand how this generation makes the choice to purchase wine and what behaviors contribute to their purchase decisions. Wine purchased in up-scale fine dining establishments is a typical scenario, but how can restaurateurs in the casual dining segment of foodservice tap into this generation of wine enthusiasts to generate more revenue in a slumping financial environment? Only one study was found in which consumers were asked about their decisions to purchase wine in a restaurant setting. Wansink, Cordua, Blair, Payne and Geiger (2006) studied wine promotions in a mid-priced chain restaurant and found three factors were associated with an increase in wine sales: selected wine recommendations, food-wine pairing recommendations, and wine tastings. Additionally, research involving the use of CA has sought to study the behavior of consumers with different wine consumption intensities such as the frequency of wine consumption and quantities (Goldsmith and d'Hauteville, 1998; Thomas and Pickering, 2003). No research has been published on Millennial consumers and their attitudes, subjective norms, and perceived behavioral controls as they reflect on their intent to purchase wines in casual dining restaurants.

## **Justification**

Current research has shown that Millennials spend a disproportionate amount of their income on food, food away from home and alcoholic beverages. They are the main drivers in growth in the beer, wine, and bourbon categories (Phillips, 2009). Given the importance of this generations' spending behavior and their wine purchasing preferences, research is needed to determine the attitudes, subjective norms, and perceived behavioral controls of Millennial wine consumers in casual dining restaurants. In addition, by discovering which menu attributes motivate these consumers to order wine in casual dining restaurants, restaurateurs can begin to understand the Millennials' wine purchasing behaviors and their preferences for wine information on the menu.

## **Purpose**

The purpose of the present study is to investigate the combined influence of wine information provided on a menu in relation to the antecedents that affect Millennials' willingness to purchase wine in casual dining restaurants.

## **Objectives**

The specific objectives of the present study were to:

1. Develop an instrument based on the Theory of Planned Behavior that will assist researchers and restaurant operators in identifying attitudes, subjective norms, and barriers that affect the purchase of wine in casual dining restaurants.
2. Develop a measurement based on conjoint analysis that will support the TPB model.

3. Determine Millennial consumers' attitudes about purchasing wine in casual dining restaurants.
4. Determine what subjective norms Millennials consider when deciding whether to purchase wine in casual dining restaurants.
5. Determine what barriers Millennials have to purchasing wine in a casual dining restaurant.

### **Research Questions**

1. Does the knowledge about wine impact Millennials decision to purchase wine in casual dining restaurants?
2. Does the educational level impact Millennials decision to purchase wine in casual dining restaurants?
3. Is there a difference in the intention of Millennials to purchase wine based on their gender?
4. Is there a difference in the intention of Millennials to purchase wine based on their geographical location?

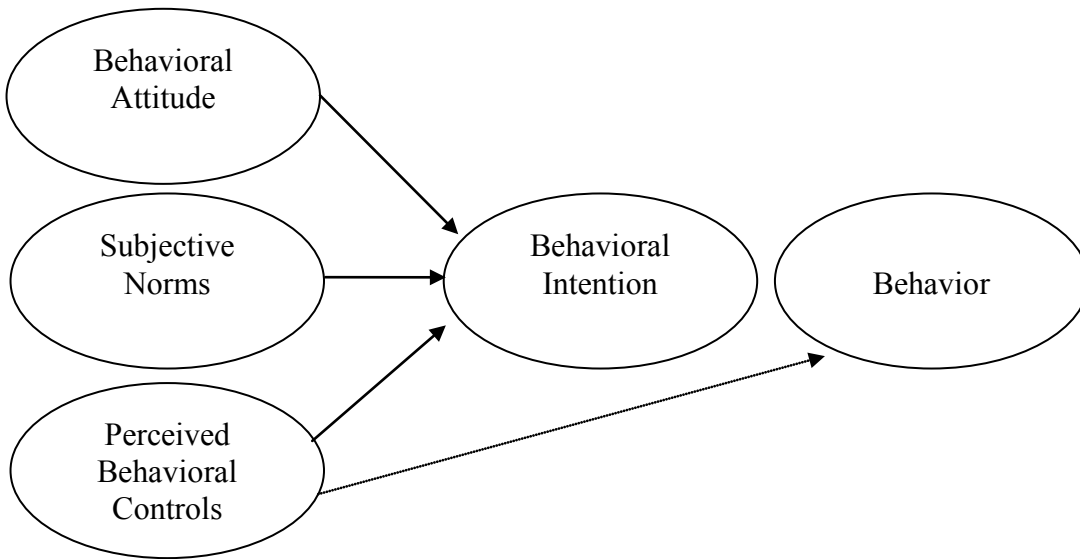
### **Hypotheses**

- H<sub>1</sub>: Millennials' behavioral attitudes about wine will affect their intent to purchase wine in casual dining restaurants.
- H<sub>2</sub>: Millennials' subjective norms will affect their intent to purchase wine in casual dining restaurants.
- H<sub>3</sub>: Perceived Behavioral Controls (barriers) will affect Millennials' intention to purchase wine in casual dining restaurants.

H<sub>4</sub>: Millennials' will prefer low wine prices on the menu in casual dining restaurants.

H<sub>5</sub>: Millennials' will prefer wine/food pairing information and wine descriptors on the menu in casual dining restaurants.

H<sub>6</sub>: Millennials will prefer to have the wine information near the food options on the menu in casual dining restaurants.



**Figure 1-1:** Millennial Wine Consumers Behavioral Model Using the TPB (Ajzen and Madden, 1986).



## **Definition of Terminology**

**Baby Boomers:** Born between 1946 -1964, baby boomers are more service oriented and have an innate drive to succeed. They are good at relationships, team players and problem solvers that want to please, yet they are somewhat cynical towards institutions. This generation has inherited the work ethic of the traditionalists and feels that hard work equals self-fulfillment (Temple University Center for Intergenerational Learning, 2007; Fletcher et al., 2009).

**Casual Dining Restaurants:** Restaurants that attract middle-income individuals who enjoy dining out but do not want the formal atmosphere and high price found in fine dining restaurants (Chon and Sparrows, 2000). “The atmosphere is casual, the mood relaxed, and the price midrange at these restaurants” (Gregoire, 2010, p.12).

**Fine Dining Restaurants:** “White table-cloth” restaurants, characterized by a high level of attentive table service, expensive looking furnishings and décor and fine cuisine (Chon and Sparrows, 2000). Prices paid for a meal in a fine dining restaurant typically exceed \$100 per person (Gregoire, 2010).

**Generation X:** Born between 1965–1981, this generational cohort is hard working but prefers “hands off” supervision. They are more adaptable and flexible than previous generations, seek immediate gratification, and want their work/life balance respected. They are technoliterate but did not grow up with a computer attached to the tips of their fingers like the Millennials. They are the independent generation that is not intimidated by authority; they are bright, creative and task oriented (Temple, 2007; Fletcher et al., 2009).

**Millennial Generation:** This is the most recently documented and heavily studied generation born between 1982 –2001. They are the children of the baby boomers and will

represent a larger proportion of the population as they age. This segment is technologically advanced, adaptable to change and seek challenging motivating tasks. They are flexible but slightly impatient and expect immediate feedback due to their extensive use of high-speed technology (Temple, 2007; Fletcher et al., 2009)

**Quick Serve Restaurants:** Also referred to as limited service restaurants or fast food restaurants, provide inexpensive food and quick service, defined by the absence of table service. Food is typically ordered and paid for at the counter or drive-through window prior to the meal and is either eaten on-premises or taken out. Typical check sizes for this segment are \$6 or less per person (Intel, 2006).

**Traditionalists:** Born in the first half of the 1900's (Two cohorts have been identified: 1900-1924 and 1925-1945.), these individuals are loyal, hard working and thrifty. Their core values reflect respect for authority figures, a sense of delayed gratification and a preference to conform to social norms. They were often involved in some aspect of war and are therefore patriotic and have a deep rooted sense of duty and honor (Temple, 2007; Fletcher et al., 2009).

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## CHAPTER 2 - REVIEW OF LITERATURE

This chapter summarizes current literature relevant to the objectives of this study.

Concepts pertinent to the design of the study and the analysis of the results also are reviewed.

The purpose of the present study was to investigate Millennial consumers' behavioral intent to purchase wine in a casual dining restaurant. This review of literature discusses wine history and laws, generational segments, and the study's conceptual model, the theory of planned behavior.

### The History of Wine

Wine made from dates and other tree fruit was first consumed around 5000 to 6000 B.C. in the areas of Persia in the Middle East. Most historians of wine agree that the modern grape used for wine production probably evolved as the species *Vitis vinifera* which means "to bear or carry wine" (Kolpan, Smith, and Weiss, 2002). Winemaking from grapes began around 3000 B.C. in Egypt and Greece and was then taken to new heights by the Romans in 1000 B.C. (Henderson and Rex, 2007). Wine grapes were recognized as a plant that could easily be transplanted as an economically stable crop and by 500 B.C. the Greeks introduced grapevines into North Africa and southern Italy. The Romans were growing grapes in what would later become France, and what is now modern Germany, as early as the first century B.C. (Kolpan, Smith, and Weiss, 2002; Vine, 1997). The spread of the *vinifera* grape varieties continued with the European colonization of other continents. The North American continent was home to several different non-*vinifera* species, as there were no *vinifera* varieties growing in America until they were imported from Europe (Kolpan, Smith, and Weiss, 2002).

In the first half of the twentieth century winemaking worldwide suffered a multitude of setbacks due to war, prohibition and disease. Most notably was the introduction of the vine-

killing insect aphid, *phylloxera*. In the mid-nineteenth century, American vines were being shipped to Europe as part of a general program of plant material exchange. Unfortunately various plant diseases and insects were being sent along with the plant material and among those insects was *phylloxera*. The American vines had developed immunity to the *phylloxera*, but when these vines were planted in French soil, the insects rapidly multiplied and spread onto existing European *vinifera* vines resulting in almost complete devastation of almost every vineyard area in the world (Kolpan, Smith, and Weiss, 2002). It wasn't until the 1950's that wine, as a beverage and as a business, would begin to recover. The solution was the development and perfection of grafting techniques that enabled the *vinifera* to be grafted onto *phylloxera*-resistant American rootstock thus rendering the *phylloxera* aphid powerless (MacNeil, 2001). This technique not only enabled the European wine makers to begin replanting the infamous *Vitis vinifera* wine grapes, it also paved the way for American wine producers to cross the desired qualities of the *Vitis vinifera* rootstock with the non-*vinifera* American rootstock.

The European *Vitis vinifera* vines did not do well in the eastern United States but flourished in the western New World. The first vineyard in the *Baja*, or lower California, was unsuccessfully established in the late 1690's. It wasn't until the California Gold Rush of 1849 brought many European winegrowers to the San Francisco area and California began to encourage land investments for vineyards that the wine trade in the U.S. would begin its ascent. In 1861, The Buena Vista winery located in Sonoma, California planted 300 different *Vitis vinifera* varieties that had been shipped from Europe. Ten miles east of Sonoma in the Napa Valley, more of the choice European varieties were planted and the reputation of the wines being grown in the Napa Valley began to spread (Vine, 1997). In spite of the economic and biological



pressures threatening the future of the wine industry in California at this time, other wine pioneers began to establish quality wineries in the Napa Valley region.

At or around 1879, Gustave Niebaum opened the Inglenook winery with the goal of growing the finest grapes possible. Georges Latour opened the Beaulieu Vineyard (BV), and by 1889 many of today's well known wineries such as Beringer, Krug, and Schramsburg were operational (Vine, 1997). In 1933, Ernest and Julio Gallo began their then-modest winery in a warehouse in Modesto, CA. With the help of the University of California at Davis the industry began to make affordable, drinkable, and safe "jug" wines (Kolpan, Smith and Weiss, 2002).

Throughout the 1960's and 1970's, U.S. wine production and consumption grew at an increasing pace. In 1966, Robert Mondavi opened his winery in Oakville, CA, and during the late 60's, Diamond Creek, Fetzer, Chappellet, and Cuvaision also were founded (Kolpan, Smith and Weiss, 2002). The wine scene in California was at an all time high and by the beginning of the 1970's there were several hundred wineries in the Northern California region. In 1976, California wines made their impact on the world by winning a blind taste test held in Paris, France. This accomplishment was probably the most significant event in California wine history (Cal Wineries, 2009). Although California remains the most prominent wine producing state in the U.S., all 50 states, including Alaska, now produce wine (Johnson and Robinson, 2009). The wine world has since undergone many transformations and today there are thousands of producers throughout the world making quality wines (MacNeil, 2001).

World wine trade over the last decade has increased 11 percent. The United States is a significant player ranking as the 5<sup>th</sup> largest exporter, 2<sup>nd</sup> largest importer and 2<sup>nd</sup> largest producer (USDA, 2008). Global competition has ensured prices are competitive and as a result consumers have a greater interest in fine wines (Henderson and Rex, 2007). Wine consumption in the U.S.

has risen over the past twenty years. Annual adult per capita consumption has increased to more than three gallons in 2008, compared to 2.5 gallons in 1980 (Franson, 2008). In addition, the U.S. surpassed Italy in 2007 as the world's second largest wine market (Wine Spectator, 2008). And, since 1999, the number of wineries in the U.S. has increased by 81 percent from 2,688 to 4,867 across all geographic regions (TTB, 2009a). According to the Wine Institute (2008), there are approximately 187 registered American Viticulture Areas (AVAs) in the U.S., over half of which are registered in the state of California. AVAs were established in 1978 by the Bureau of Alcohol, Tobacco and Firearms (ATF) as a way to classify U.S. wine regions (ATF, 2008).

Despite the worldwide economic downturn and recession in the United States, the California wine industry enjoyed a boost in 2008 as consumers turned from high-end brands to moderately priced value wines pushing U.S. per capita consumption to a record high (Downing, 2009). "Even in hard economic times Americans are still buying and drinking wine, both from the U.S. and from other countries and almost three in five Americans are wine buyers" (Wine Business, 2009). Some see the weakening of the world economy as a bonus for wine consumers as prices are slashed in an effort to clear stocks of massive grape harvests from 2008 and consumers are getting better value priced wines (Ninness, 2009). The Wine Market Council's 2009 research on U.S. consumer trends indicates that 30% of core and marginal wine drinkers are changing their spending habits and purchasing lower priced wines (Wine Market Council, 2010). Although this may not be good news for wine makers, consumers are excited about the prospect of finding quality wines at lower prices.

U.S. exports to the European Union (EU) and Canada are forecasted to increase in the coming years due to the weak dollar and an increase in export promotions. Yet, as demand for high quality premium wines continues to soar, imports to the U.S. are filling the gap. Over the

past five years imports rose faster than exports. The EU was the dominant supplier (USDA, 2008). However, the EU's share has been slowly eroding due to a spike in sales from countries like Argentina, Chile, and Spain (Wine Market Council, 2010).

### ***Vitis Vinifera* Grapes**

In the wine world it is commonly known that geography determines the nuances of how a wine tastes. *Terroir*, or the physical environment in which a wine is grown, is a word that is French in origination and is translated to mean the “total impact of any given site, i.e. soil, slope, orientation to the sun and elevation, plus every nuance of climate including rainfall, wind velocity, frequency of fog, cumulative hours of sunshine, average high temperature, average low temperature, and so forth (MacNeil, 2001 p. 21)”. There is no single word in the English language that means quite the same thing. Although a wine's flavor and aroma profile are greatly affected by the *terroir* in which the grapes were grown, there are some obvious characteristics that are more or less guaranteed to be found in any varietally-labeled bottle (Johnson and Robinson, 2009). The grape varieties featured here are some of the best-known varieties of the European *vinifera* species of the *Vitis* genus.

### **Common White Varietal Characteristics**

#### ***Chardonnay***

Known as the “king of white” this varietal originates from the Burgundy region of France and is well known as being the leading white varietal of California. Flavors are typically described as being buttery and lemony. Chardonnay performs well when aged in oak and styles can be divided into non-oaked, which are green and reserved. Lightly oaked results in nutty and oatmeal flavors; and heavily oaked Chardonnays taste of butteriness, tropical fruits, and

butterscotch (MacNeil, 2001; Clarke, 2000). It is the richest and heaviest white grape, and a high percentage of white wine drinkers prefer this full-bodied style (Immer, 2000).

### ***Sauvignon Blanc***

The chief white grape of the Bordeaux region in France, Sauvignon Blanc also grows particularly well in the Marlborough region of New Zealand, California, Washington, and Chile. This varietal is considered to be the epitome of the green and tangy style: medium-bodied with aromas and flavors of grass, nettles, gooseberries and asparagus (MacNeil, 2001; Clarke, 2000). Great Sauvignon Blancs can be found for less than ten dollars making this an everyday wine which is versatile to pair with many foods (Immer, 2000).

### ***Riesling***

The prized grape from Germany is also grown in Alsace, France, Australia, New Zealand, Austria, and the United States where it is known as the white Riesling or Johannesburg Riesling (Immer, 2000). This varietal is never aged in oak; it is light-bodied and typically exhibits a floral, fruity character with some sweetness. Piercing acidity is the most recognizable feature in styles that range from dry to sweet and tastes that range from apple, lime, peaches and honey to pebbles and slate (MacNeil, 2001; Clarke, 2000).

### ***Gewurztraminer***

This grape produces wines that are described as having everything that Riesling does, but with a more pronounced fruit character and a touch of cinnamon spice. Its distinctive spice aroma can easily be tiring, especially if combined with high residual sugar which is sometimes referred to as "being cloying" (Johnson and Robinson, 2009). The best examples come from Alsace where it is most revered for being full-bodied, with flavors and aromas of lychees and

roses. The acidity of this style is key to stop them from being cloying. The Alsatian style tends to lean towards bitterness at the back of the palate, while the New World versions are more likely to be light-to medium-bodied with little to no bitterness (Kolpan, Smith and Weiss, 2002).

## **Common Red Varietal Characteristics**

### ***Cabernet Sauvignon***

This wine is known as the “king of reds” and Cabernet Sauvignon is the top-selling red varietal wine by far (Immer, 2000). Almost every country where wine is made produces Cabernet in its vineyards. Bordeaux is its mother country, but it is also found in southern France, Italy and Spain where it is a blackcurrant style of red wine with a scent of cedar, cigar boxes and lead pencil shavings. California and Australia produce examples that are fruitier, with rich soft tannins and a touch of mint or eucalyptus (MacNeil, 2001; Clarke, 2000). Cabernet’s nature is to be dark and full-bodied with a flavor profile that is considered to be the true paradigm for most of the world’s top quality red wines (Immer, 2000).

### ***Merlot***

Merlot started out as a secondary grape to the prestigious Cabernet Sauvignon in Bordeaux, but it has risen to worldwide popularity. It is a juicy, fruity wine that is lower in tannic bitterness and higher in alcohol than Cabernet Sauvignon. Merlot is medium-bodied, which makes for intense red wine flavor without being too heavy (Immer, 2000). Blackcurrant, black cherry and mint are the trademark flavors. Chile is considered to be “Merlots Heaven”, while California and Washington have more serious aspirations for the grape, and Merlot from New Zealand is considered to be one of their best reds (MacNeil, 2001; Clarke, 2000).

### ***Pinot Noir***

One of the most complex of all varietals, Pinot Noir is full-bodied and rich without being heavy. It is neither acidic nor tannic and yields substantial flavor despite its delicacy. It is the lightest-bodied of the red grapes and it is commonly described as having a soft, velvety texture with a sweet summer-fruit fragrance and taste (Immer, 2000). Pinot's homeland is in the Burgundy region of France. California, Oregon and New Zealand, however, have shown great success in producing this varietal (MacNeil, 2001; Clarke, 2000).

### ***Zinfandel***

Although not considered to be one of the six elite wine grapes, Zinfandel is similar to Cabernet Sauvignon in its nature and can also be described as a dark, full-bodied red wine that gives excellent quality and consistency at every level. California's specialty grape may have originated in Italy, but California likes to claim it as its own. This grape has been most vinified as a white zinfandel which results in a blush colored sweet wine. As a true red, its flavors are reminiscent of blackberry, black pepper, cherry, leather, plum, raspberry, smokey and spice. Zinfandel is a full-bodied, intensely flavored, and firmly tannic wine (MacNeil, 2001; Clarke, 2000).

### ***Syrah/Shiraz***

Originating in the Northern Rhone Valley, Syrah is now planted all over the world. It is an easy-to-love grape that is characterized by black pepper and dark chocolate flavors, notable deep purple color and tannins that provide a savory kick of smoked or cured meats at the end (Johnson and Robinson, 2009; Kolpan, Smith, and Weiss, 2002). Syrah tastes quite different in Australia where it is called Shiraz. It is the country's most planted red grape and well known for

being a dense, rich potent wine in places like Barossa; although, it can still have a hint of black pepper when grown in cooler regions like Victoria (Johnson and Robinson, 2009).

## **Old World versus New World Wine Regions**

Although many of the most common grape varieties originated from *Vitis vinifera* grape vines and typically share some common flavor and aroma characteristics, differences exist in wines produced in what are considered Old World and New World wine regions. Differences are evident not only in production but in laws and regulations associated with the production of grapes.

### **Wines of the Old World**

The major wine-producing countries of the European continent and the Mediterranean basin nurtured and developed many of the vines and wine-making techniques that form the basis for modern practices (Kolpan, Smith and Weiss, 2002). Europe is the birthplace of modern wine making and most of the styles of wine produced in this country and throughout the world have their origins on this continent (Henderson and Rex, 2007). Historically, wine making in this part of the world has been surrounded by secrecy and tradition, but Old World wine makers have had to change or perish in the face of wine making from New World producers. Today, Old World grape growers and wine makers are open to developing their own innovations and adapting to the use of new technology (Kolpan, Smith and Weiss, 2002), resulting in more consumer friendly wine production and commercialization.

#### ***France***

France is the original home to most of the “noble varieties”, the grapes from which the best wines are made (Henderson and Rex, 2007). Historically, France produces more fine wines

than any other country in the world (MacNeil, 2001). Most wine publications devote a majority of their content to France, some giving their wines an almost mythic status. France to this day still supplies wine at a higher level, and in greater variety, than any other country (Johnson and Robinson, 2009). The French method of control is largely responsible for its greatness. French wine-making techniques, viticulture practices, even French grape varieties, have been adopted around the world (MacNeil, 2001). Born in the 1920's, the *Appellation d'Origine Controlée* (AOC) strictly regulates the production of wine in this country as a result of fraud and the *phylloxera* epidemic.

### ***Italy***

The significance of Italy as a wine-producing country cannot be overemphasized. Modern Italy is the world's largest producer of wine (Henderson and Rex, 2007). There is little of Italy that is not wine country; as a result, a multitude of producers have constantly strived to make their mark on the wine world. Because wine is so much a part of everyday life and made by so many people, a variety of names are used on the bottle in an effort to gain originality. Wine labels in this country are unevolved and somewhat confusing to outsiders (Johnson and Robinson, 2009). The Italian wines that knowledgeable wine drinkers get excited about come predominantly from a few major areas. Although Italy's most revered wines are known worldwide, the grape varieties such as Sangiovese, the leading grape of Chianti, or Nebbiolo, the grape that makes Barolo, are rarely found outside of Italy (MacNeil, 2001).

### ***Spain***

Spain is a country that is steeped in culture and tradition. Many Spanish vintners are now making wine using the most recent technological advances (Kolpan, Smith and Weiss, 2002). Yet, for all the modernization that the country has experienced, Spanish winemakers continue to



respect the wisdom of the old ways and the flavors that result from them (MacNeil, 2001).

Spain is best known for the red wines they produce. The Rioja region of Spain is most notable for producing wines using the Tempranillo and Garnacha grapes (Immer, 2000). “Tempranillo is to Spain what Cabernet Sauvignon is to Bordeaux or Sangiovese is to Italy” (MacNeil, 2001, p. 412).

### ***Germany***

In Germany, beer is the alcoholic beverage of choice. On the domestic market, however, there are signs that more and more young people are consuming wines (Kolpan, Smith and Weiss, 2002). Germany is located in the far northerly climate for grape growing. Because of the cool continental climate, red wine grapes do not flourish to the degree that white grapes do (Laloganes, 2010). Riesling is the predominant wine for this region. A small fraction of red wine grapes are grown in Germany, the most notable is the up-and-coming Spätburgunder (also known as Pinot Noir).

### **Wines of the New World**

The term “New World” is widely accepted as the lands settled by Europeans in the past five hundred years and this is no exception in the world of wine. Outside of Europe and the Mediterranean basin, little was known about growing grapes and producing wine until the grapevine was exported by European settlers. Now, wine is a part of every New World country where the climate allows the vine to prosper (Kolpan, Smith and Weiss, 2002). Australia, New Zealand, South Africa, Argentina, Chile, Brazil, Mexico, the United States, and Canada all have successful and healthy wine industries that rival those of the traditional European wine market. New world wines have challenged the traditional wine making methods employed by the Old World by producing wines which are more “fruit forward” and can be drunk immediately, either

on their own or with food. Production in these countries tends towards picking the fruit at the peak of ripeness and using state-of-the-art technology during fermentation and bottling to encourage the fruitiness of their wine. Some purport improvement in irrigation technology as being the single biggest factor in the success of New World wine production (Kolpan, Smith and Weiss, 2002; Laloganes, 2010). Controlled irrigation has transformed large tracts of previously semi-arid and unproductive land into productive and prosperous vineyards.

### *Australia*

Since 1996, Australia has been on track as one of the largest wine producing countries in the world. In 2004, Australia overtook France to become the biggest exporter of wine to the United Kingdom (UK), and set itself a target to do the same in the U.S. (Johnson and Robinson, 2009). Australia exports 60% of its wine sales due to government created tax incentives. Australia has more than doubled its vineyard area to 410,000 acres over the past ten years. Unfortunately, the overabundance of Australia's grape production has taken a toll resulting in instability in its wine market. Roughly half of all Australia's Geographic Indications produce Sauvignon Blanc, Pinot Noir, and Pinot Gris. The average vine age in Australia is notably young as plantings have tended to swing towards trends in commercialization. Australia's most planted variety, Shiraz, is recognized as what Australia does best (Johnson and Robinson, 2009).

### *New Zealand*

New Zealand is known as a newcomer to wine but has developed an image for itself by producing wines that are characterized by piercingly crystalline flavors and refreshing acidity. New Zealand typically exports most of the wine they produce and today Sauvignon Blanc, followed closely by Pinot Noir, is the country's most important grape (Johnson and Robinson, 2009).

### ***South Africa***

Although most South African vines thrive in this country's almost perfect Mediterranean climate, the wine business continues to face adversity due to government regimes, viruses, and war. Against all odds, the structure of the wine industry continues to develop. Young generations of wine producers have recently invested new capital into the country's wine industry promising exciting potential in wine production from this part of the world (Johnson and Robinson, 2009). Chenin Blanc is the most planted variety in this part of the world, but now represents less than one vine in five as today's vintners have a greater awareness of what each vineyard is best at and smaller producers begin to experiment with new grapes and styles.

### ***Chile***

Chile also is well known for its reliable Mediterranean climate, and due to its geographic location, Chilean vineyards have the distinction as being free from the *phylloxera* aphid (Johnson and Robinson, 2009). Chile is a valuable source for inexpensive, fruity, and reliably ripe wines. The Cabernet, Merlot, and Carmenère varietals dominated exports into the late 20<sup>th</sup> century and have now been joined by respectable, mid-priced Syrah, Pinot Noir, Malbec, Sauvignon Blanc, and Chardonnay.

### ***North America***

The North American continent has evolved over the last three decades and is now considered a major producer of quality wines (Kolpan, Smith and Weiss, 2002). Although there is a tendency to think only of California as producing good wine, other areas of the United States, like New Mexico, as well as Canada, have begun to make their presence known. According to the Washington Wine Commission (n.d.), Washington is the United States' second largest wine producer, with 31,000 acres of grapevines and over 530 wineries. Washington first

established its reputation through the success of the Merlot grape varietal and is well known today for producing exceptional Cabernet Sauvignon and Syrah varietals (Henderson and Rex, 2007). New York is North America's third most important vine-growing state, although a majority of its acres of vineyards are planted with *lambrusca* grapes for grape juice and jelly (Johnson and Robinson, 2009). In recent years, New York has focused on reinventing itself as a serious wine producer with almost all new plantings being *vinifera* (Henderson and Rex, 2007). Oregon, the fourth most notable wine producing state within the United States, prides itself on how unlike California and Washington it is (Johnson and Robinson, 2009). The Willamette Valley has been known as Oregon's premier wine region since the late 1960's, and since 1970, Oregon and Pinot Noir have been inextricably linked. Today, Oregon viticulture is distinguished by widespread commitment to sustainable, often organic and sometimes biodynamic, practices.

### **Wine Laws in the United States**

The laws related to the business of wine and alcohol are designed with two principle aims: 1) to collect taxes and 2) to control and limit consumption. The Alcohol and Tobacco Tax Trade Bureau (TTB), which falls under the United States Department of the Treasury, controls the standards of identity, labeling requirements, varietal labeling, appellations of origin, and advertising of wine and wine-related products (TTB, 2009b).

The production, distribution, and sale of wine in the United States are heavily regulated, second only to firearms (Henderson and Rex, 2007). Many agencies at the federal, state, and local level are responsible for the regulations associated with this product. There are numerous laws at every level of government that control wine and there is little uniformity of the statutes between state and local districts which makes the U.S. wine laws confusing. Of concern to many wine producers and consumers are the laws associated with the direct shipment of wine

from wineries to individual consumers. While the Supreme Court's decision in May 2005 held that it is unconstitutional to favor in-state wine and liquor makers over businesses from out-of-state when it comes to wine shipping, wine consumers in some states continue to face legal obstacles related to buying wine directly from out-of-state wineries (Wine Institute, 2005).

## **Wine Classification in the United States**

In America, wine production and sales are regulated by the Bureau of Alcohol, Tobacco, and Firearms (ATF). They are far less regulated, however, than in some European countries where the varieties of the vines planted, the manner in which they are cultivated, maximum yields, and the type of wine made from those yields are strictly controlled (Patterson and Josling, 2005). ATF regulations are aimed at marketing control which limits how wines may be labeled, advertised, promoted, sold, and consumed (Vine, 1997). Wine classification, while unregulated, uses five categories for consumer marketing purposes.

### **Table Wines**

The majority of wine produced in the world is categorized as table wine (Vine, 1997). Table wines which can be white, blush or red, are designed for use at the table to complement food. Table wines may be labeled as generic, proprietary or varietal (TTB, 2009b). Generic labeling is based on the geographic area in which the wine is grown, such as Burgundy, Bordeaux, Champagne, California, or New York State. European wines are typically generic with a geographic identity. Proprietary wines are named according to their vintner. Varietal wines, of which there are hundreds, are labeled for the variety of grape that is predominant in its production. Examples include but are not limited to Chardonnay, Pinot Noir, and Cabernet Sauvignon. The most famous varieties of grapes are cultivated as the true noble wine grape,

*Vitis vinifera*, and are all native to France (Vine, 1997). As of 2009, the leading table wine grapes in the U.S. continue to be Chardonnay and Cabernet Sauvignon (USDA, 2009). Brager (2010) reports Riesling, Pinot Noir and Sauvignon Blanc to be the three fastest growing varieties and names Malbec, Muscato, Petite Syrah and Tempranillo to be the “hot” varieties in 2010.

There are hundreds of wine grapes, but approximately 80 percent of the quality wines sold in the United States stem from six elite wine grapes, three whites and three reds (Immer, 2000). The white grapes are Riesling, Chardonnay, and Sauvignon Blanc. The reds are Pinot Noir, Merlot, and Cabernet Sauvignon.

### **Sparkling Wines**

Sparkling wines are effervescent or have bubbles due to a second fermentation (Vine, 1997). Many people use the terms “Champagne” and “sparkling wine” interchangeably. True Champagne, however, is produced and bottled in the Champagne region in France. Wines coming from any other locations are therefore considered sparkling wine. Sparkling wine imports to the U.S. for consumption have shown a steady decline over the past ten years (ITA, 2009a) and exports from the U.S. have declined indicating a decrease in consumption of sparkling wines worldwide (ITA, 2009b).

### **Dessert Wines**

Dessert wines are those generally consumed with, or instead of, dessert courses. These wines are typically made by the addition of grape brandy to a fermenting juice or must, or to a fermented table wine (Vine, 1997). Examples include Port, Brandy, Madeira, Sherry, and Marsala wine. Other types of dessert wines are the result of variations in production such as late harvest grapes that are covered in a mold, *Botrytis cinerea*, (the great Sauternes of Bordeaux) or

those that are allowed to freeze on the vine, *Eiswein* (Clarke, 2003; Henderson and Rex, 2007). These types of wines are made from grapes picked at a much higher sugar level than grapes used for table wines.

### **Aperitif**

An aperitif is an alcoholic drink that is usually served to stimulate the appetite before a meal (Vine, 1997). It is often served with something small to eat, such as crackers, cheese, pâté, olives, and various types of finger foods. The word is derived from the Latin verb *aperire* which means “to open” (MacNeil, 2001). Examples are: fortified wines, vermouth, liqueurs, and sherry.

### **Pop**

This category has emerged and become popular during the last few decades. Pop wines are similar to aperitif wines with the difference being in the essences which are typically exotic, boldly pronounced fruit, and/or berry flavors added to pop wines. The name pop wine was derived from the word popularity, as these types of wines are “popular” among young adults and ethnic groups (Vine, 1997). Examples include wine coolers and fruit flavored wines.

## **Wine Sales and Consumption**

Wine is enjoyed by hundreds of millions of consumers around the world. According to Mayo, Nohria and Singleton (2007), the United States is poised to become the global wine leader overtaking France and Italy as the world’s largest consumer of table wines. This growth in demand in wine and the reduction in consumption in many of the major wine producing countries has added pressure on wine marketers to capture the attention of the US wine consumer

(Wine Institute, 2004). As the world wine market increases, the role of marketing has become more important.

Americans are enjoying the taste of wine more as each year passes. In the last 30 years, per capita consumption in France and other Old World European countries, such as Spain and Italy, saw their domestic markets reduced by nearly half, while wines from New World upstarts, namely, America and Australia, began to invade the Old World's traditional export markets (Anderson, 2003). Wine Spectator (2008) forecast American wines to outpace imports until at least 2015 and the Wine Market Council's 2008 Consumer Tracking Study reports that table wine consumption in the U.S. has grown to an all time high of 2.97 gallons per person (Wine Market Council, 2009). The Adams Beverage Group reports that the United States will be the largest wine market in the world by 2010 (Saad, 2009).

The first of many factors responsible for the growth in the wine market is favorable demographics. "Wine now appeals to a broad spectrum of the population; including the much sought-after Millennials" (Wine Business, 2007, "U.S. Wine Consumption Rises," para. 7). Generally viewed as "children of the Baby Boomers," the Millennials are considered to be the largest consumer group in the history of the US in terms of their buying power and may represent the future market for most consumer brands (Harris Interactive, 2001). Eric Schmidt, Research Director at Adams Beverage Group, reports that Millennials and Baby Boomers accounted for over half of the wine consumers in 2006 (Wine Business, 2007). It's the younger generation, however, on which marketers are focusing the most attention. The Millennials are the future of the wine industry and their wine consumption continues to rise. On average Millennials consume nearly three glasses of wine per occasion compared to 2.41 for Generation-Xers and 2.13 for Baby Boomers (Wine Market Council, 2009). That Millennials and other demographic



groups are embracing wine is evident is reported in a recent Gallup poll. This report indicated that of the two thirds of consumers who drink alcohol in the U.S., those who prefer wine has increased to 34%, up from 31% in 2008 (Gallup, 2009). Since 2000, the number of core wine drinkers (people who drank wine at least once a week) had increased by 60 percent, while the marginal drinking group (those consuming a minimum of one glass of wine per month) had leveled off (Wine Market Council, 2009).

Consumption patterns for wine have changed in recent decades. As of 1970, adult per capita consumption of table wines in the U.S was just over one gallon; 2.5 gallons in 1982; and in 2007, hit a new record of 2.97 gallons (Wine Market Council, 2009). The wine industry's expansion continued in 2008, marking it as the fifteenth consecutive year of sales growth (Goldschmidt, 2009). Broken down by types of wine sold, sales of commercial premium bottled wine, which retails for \$5 to \$8, were growing at dramatic rates compared with super premium wines, those costing more than \$8, while sales of previously popular jug wines, less than \$5, plummeted (Anderson, 2003). Of the 745 million gallons of wine sold in the U.S. in 2007, table wine sales were 650 million gallons; dessert wine 62 million gallons; and sparkling wine 33 million gallons (Hodgen, 2008). Of the 650 million gallons of table wine sales, consumers are now drinking more red wine than white or blush. Reds now account for 43 percent of wines sold at retail; whites, 42 percent; and blush, 15 percent, compared to ten years ago when consumers drank 25 percent reds, 41 percent whites, and 34 percent blush wine (Hodgen, 2008).

In 2007, the U.S. Department of Commerce estimated that California accounted for 61 percent of all wine sold on the U.S. market; imported wines accounted for 26 percent; and other U.S. state wines accounted for 13 percent (Hodgen, 2008). This trend is expected to continue as sales data report imported wines dropped 1.8 percent, while domestics rose 1.9 percent in 2008

(Goldschmidt, 2009). American wines are now forecast to outpace imports until at least 2015 (Wine Spectator, 2008).

## **Consumer Intentions and Behaviors**

The focus of the present study is to understand the attitudes and behaviors of Millennial consumers and their intent to purchase wine in casual dining restaurants. Consumer behavior research is typically based on the assumption that purchases are preceded by a decision process (Chaney, 2000); yet, others disagree and conclude a significant percentage of consumers of particular products or services do not engage in pre-purchase activities (Olshavsky and Granbois, 1979). Chang and Wildt (1994) examined factors that affect the purchase behaviors of potential customers including product features and price. Their research sought to determine what conditions price and perceived quality combine to yield favorable purchase intentions. Results indicated that there is a positive relationship between price and perceived quality, a trade-off between perceived price and perceived quality leads to perceived value which leads to purchase intention suggesting that for consumers, price or quality perception alone may be a sufficient determinant of purchase, but that marketers need to be aware of consumers' internal price standards.

Increasingly wide income disparities, higher levels of education, and greater awareness of other cultures' ideas of the good life have given rise to a new class of American consumer. To meet this need, a new category of products and services, including automobiles, apparel, food, wine, and spirits, has developed. Silverstein and Fiske (2003) call it the "new luxury" category. Lastly, Dubois, Czellar, and Laurent (2005) proposed an international segmentation of consumers based on their attitudes toward luxury and concluded that there are three latent

consumer segments: elitist, democratic, and distant and that each group's view toward luxury and who should have access to it are different.

Hollywood, Armstrong, and Durkin (2007) determined that it is important to identify consumer behavior throughout the purchasing process to establish how a company can market their offerings toward what a consumer actually needs. Different groups of consumers have varying wants and needs. To successfully market a product, an understanding of those needs is necessary so products can be tailored to particular market segments (Hughson, Ashman, De La Hueriga, and Moskowitz, 2004). Hollywood, Armstrong, and Durkin (2007) concluded that a future strategy focusing on consumer behavior and segmentation should be utilized. Because the wine market is increasing today in all consumer segments, it is important to understand what the focus of wine marketing should be and what information consumers want and need to purchase wine.

## **Consumer Intentions and Behaviors Related to Wine Purchasing**

### **Label Information**

Several studies have been conducted in the area of consumer intentions and behaviors related to wine purchasing. Purchasing a bottle of wine can be a daunting task and to most consumers the multitude of choices is overwhelming. Many studies have attempted to ascertain how the purchasing decision is made and have determined that the information found on a wine bottle's label had the most influence on the purchase decision. Keown and Casey (1995) surveyed consumers in six different liquor stores and established that label information was the most influential commercial indicator, country of origin was the most important label characteristic, followed by brand name and grape varietal. Gil and Sanchez (1997) surveyed

wine consumers in Spain and determined that label information related to country of origin was a determining factor in their purchase decision.

Barber, Almanza, and Donovan's (2006) research at two retail shops and five wineries, conducted almost ten years later, supported Keown and Casey's and Gil and Sanchez's findings that label information was still most important to consumers making wine purchases. Consumer research in Italy provided additional support. Rocchi and Stefani (2005) through personal interviews at wineries in Italy established that wine bottle and label attributes represented the main factors underlying wine packaging perceptions and consumers used these as the first signal when assessing alternative products and choosing among them. Barber and Almanza (2006) determined consumers were more likely to purchase a bottle of wine based upon the wine packaging; i.e. bottle shape, color, size, and closure, but that differences in these preferences existed based on gender, income, and age. Lastly, Barber, Ismail, and Taylor (2007) surveyed retail customers in wine shops and wineries and found that consumers considered the information on the front label of the bottle as an important information source and an integral part of the wine-purchasing decision.

## **Experience and Knowledge**

Although research conducted in liquor stores and wineries indicated that initial wine purchases were typically based on exterior factors such as label, varietal and country of origin, other researchers have studied the effects of experience and knowledge of the purchaser in the wine selection decision process for varying situations. Olsen, Thompson and Clarke (2003) considered levels of consumer self-confidence in making wine-purchasing decisions. Participants in their study were part-time Master of Business Administration (MBA) evening students between the ages of 30 and 50. Three different situations were posed in this study that

varied in terms of perceived risk and possible intimidation for consumers: purchasing wine for a business dinner, purchasing wine for consumption at home or purchasing wine as a gift. Results showed that respondents were most likely to order a known wine brand during a business dinner, but purchase a new brand to give as a gift or when choosing a wine to enjoy at home.

Dodd, Laverie, Wilcox and Duhan (2005) surveyed wine consumers to examine the decision process for wine selection in a store and in a restaurant based on the effects of experience, subjective knowledge (what you think you know) and objective knowledge (what you actually know). Their findings indicated that consumers use different sources of information when purchasing wine in a store versus a restaurant. For retail purchases, consumers look at the bottle of wine and prefer to use their own experiences, or the recommendations of friends, family and salespersons before making a purchase. In a restaurant setting, consumers can only look at the menu or point of sale information; they cannot look at the wine bottle and the label.

### **Point Of Sale Marketing**

Point-of-Sale (POS) advertising is designed to target consumers at the place of purchase by drawing attention to the advertised brand. Typically, point-of-sale materials are placed alongside the product that is intended for sale (Monaghan, Derevensky, and Sklar, 2008). Research related to the effectiveness of POS marketing materials has been studied extensively with tobacco, food, and alcohol, providing evidence that POS promotional activities were effective techniques used to increase sales and consumption (Woodside, 1999; Wen et al., 2005; Thorogood, Simera, Dowler, Summerbell, and Brunner, 2007).

Research related to POS marketing materials and wine sales has been limited. Chaney (2000) randomly selected 500 respondents from the UK telephone directories in an effort to study the consumer information process associated with purchasing a bottle of wine. These

consumers cited POS materials as being the most important information source used in wine purchasing and reading the labels on the wine bottles as being the second most important information source.

## **Quality**

Others researchers suggest that wine quality is key to understanding consumer preferences and needs in relation to purchase intent. Quality in this case refers to the taste and aroma of wines' flavors. Lattey, Bramley, Francis, Herderich, and Pretorius (2007) analyzed data from untrained red wine consumers in Australia to determine how wine quality was perceived. Their findings indicated that particular wine attributes such as bitter, pepper, vegetal and earthy were least liked and wines destined for wide appeal should be produced using grapes that are low in these characteristics. Charters and Pettigrew (2007) examined Australian wine drinkers' perceptions of quality to better understand the complexity of this concept. Their study suggested that quality was perceived by consumers in various ways depending on involvement level with the product. Those who were most highly involved with the product focused on more cognitive dimensions, like a wine's structural balance and complexity. The less involved wine consumer felt that a wine's quality was related to packaging and sensory attributes, such as taste, mouth feel, and body.

## **Cohorts**

Additional research has examined "cohorts", or segments, of wine consumers in an attempt to provide marketing and advertising firms, and wine producers and retailers with knowledge related to each groups' wine-related behaviors. The importance of understanding customer segments cannot be underestimated. Segmentation of a market enables tailored

products and a tailored marketing mix to be developed for different groups of people. Hall and Winchester (2000) conducted a telephone survey in Melbourne, Australia, from a random sample of respondents found in a residential telephone book. They found a number of market segments were based on consumer's perceived benefits of wine consumption practices, social status, wine tasting and appreciation practices and that these segments were associated with a more elite and higher class consumer. Hall and Winchester's research aim was to empirically test and confirm wine industry segments that were developed in 1991. Spawton's (1991) study included connoisseurs or purchasers of high quality wines who were knowledgeable, consumed wine regularly, and were not concerned with price. The second group was aspirational drinkers who purchased wine to enhance their status and reputation, and the third group were beverage wine consumers or those who made purchase decisions based on recommendations of sales staff, experts and friends, and enjoyment oriented who bought wines that were cheaper, enjoyable wines which enabled them to relax and enjoy wine in the company of others. Hall and Winchester's findings indicated that there are differences in consumers' product needs and that wine marketers should understand these differences to improve long term viability and increase profitability.

Miller and Bruwer (2006) studied gender differences as a basis for wine preferences on the premise that wine marketing should be more gender-based and both winemakers and growers should produce styles of wine that appeal to these groups. Unfortunately, their findings were not able to support specific recommendations because the results were inconclusive. They reported that females preferred sweeter wines, but they also preferred medium to full bodied wine, characteristics more common in red wines. They further reported that females preferred white to red wine, but their preferences overall were equally divided between white and red wine. These

mixed results make it difficult to recommend to winemakers that wine marketing should be gender-based.

A preliminary study in Australia sought to explore the relationship between Australian consumers' wine expertise and wine-related behaviors, such as wine purchasing and consumption, to generate distinct consumer segment profiles. The study revealed that high wine expertise consumers purchased more wine and drank wine more frequently than other less knowledgeable consumers and consequently spent more money on wine than their counterparts. Segmenting consumers by education revealed the importance of wine education initiatives for the Australian wine industry (Johnson and Bastian, 2007).

Bruwer and Li (2007) segmented consumers by wine-related lifestyles (WRL), finding that the South Australian wine market was continuing to evolve and consisted of five WRL segments each differing in size and level of involvement with wine: 1) Conservative, knowledgeable wine drinkers who were older wine drinkers, typically male, well educated, and frequently drank wine, usually red wine; 2) Enjoyment-oriented, social wine drinkers who were younger, predominantly females who enjoyed wine on a night out with friends and were more likely to drink white or sparkling wines; 3) Basic wine drinkers who were predominantly male consumers who drank wine because they enjoyed it, and either drank red or white wines with a slight preference for red wines; 4) Mature time-rich wine drinkers who were usually male who have been drinking wine for a long time and were interested in learning more about wine and enjoyed trying new and different wines; 5) Young professional wine drinkers who were employed in a professional capacity and more likely to be female; this type of connoisseur was interested in the provenance of the wine, sought information when purchasing wine and was spontaneous in purchasing behavior; these consumers also preferred red wines.



Charters and Pettigrew (2007) sought to group consumers based on how they perceived quality in wine and by their important quality dimensions. They found that wine consumers can be categorized as 1) high-involvement consumers or those who were more interested in discovering the distinctiveness and complexity in wines as a basis for quality; 2) medium-involvement consumers who were more interested in the taste and appearance of wine as determinants of quality; and 3) low-involvement consumers who weren't concerned with the importance of a wine's distinctiveness but were more likely to believe that appearance, taste, and smoothness were most associated with quality.

Research studying cohorts of consumers has shown that multiple segments exist in the wine market suggesting that marketers can use this information to focus on influencing specific groups' purchasing behaviors. In an effort to develop marketing strategies geared toward specific age groups, researchers are now focusing on the generational cohorts to identify factors related to wine consumption.

## **Generational Segments**

Many marketing researchers have conducted wine focus groups with consumers segmented by generation (McGarry-Wolf and McVey, 2001; Thach and Olsen, 2006; Cuneo, 2000; Olsen, Thach and Nowak, 2007; Barber, Dodd, and Ghiselli, 2008; Qenani-Petrela, McGarry-Wolf, and Zuckerman, 2007). Four generational categories are most often used which are further defined by distinct identities.

### **Traditionalists**

Born between 1900 and 1945, the 75 million Traditionalists include corporate CEOs, company founders, board members, managers, and skilled veterans. Actually made up of two

generations (The Greatest Generation, 1900-1924; and The Silent Generation, 1925-1945) with similar values, they are the creators of many of our great institutions and the upholders of corporate cultures and traditions. While disciplined, patriotic, fiscally conservative, and with a strong appreciation for top-down hierarchies, their key trait is loyalty (Lancaster and Stillman, 2002). Traditionalists are in fact “traditional” when it comes to the consumption of alcohol, preferring to drink spirits during the “cocktail hour” and having wine with dinner (Olsen, Thach, and Nowak, 2007).

### **Baby Boomers**

Born between 1946 and 1964, the 80 million Baby Boomers are gradually taking over the reins of American business and are the largest generation ever to enter the American workforce (Lancaster and Stillman, 2002). While idealistic, competitive, and ambitious, their chief quality is optimism. Boomers have a unique set of tastes and lifestyle choices that are different from the tastes and choices of the generations preceding them. Wine is their preferred form of beverage alcohol (Wine Market Council, 2009).

### **Generation Xers**

Born between 1965 and 1980, Gen X’ers now in their 30’s and early 40’s are independent, techno-literate and entrepreneurial. Though they comprise a much smaller population than their predecessors, they have pushed hard to make their presence known and to carve out an identity separate from the Boomers (Lancaster and Stillman, 2002). Although Gen X’ers initially failed to incorporate wine into their lifestyles, they are now drinking wine in significant numbers (Wine Market Council, 2009).

## **Millennials**

Born between 1981 and 1999, these are the 76 million members of the second great baby boom. Various known as the Echo Boom, Generation Y, the Baby Busters, or Generation Next, this group is best described as realistic, pragmatic and participative (Lancaster and Stillman, 2002). Millennials prefer wine as their alcoholic beverage of choice and their numbers are so great as to make their dominance in the market inevitable, offering the wine industry the potential for growth not seen in more than thirty years (Wine Market Council, 2009). The seventy million people ages 21 to 30 who make up the Millennial generation are changing perceptions of wine. Though Millennials aren't as sophisticated about wine as earlier generations, they are willing to experiment with lower-priced wines (Goldschmidt, 2009). Mass marketing to this group should be smart, funny, and have a slight edge (Feld, 2008). Millennials are very market savvy when it comes to brands (Moriarty, 2004), and value quality products when sold at a fair price (Key Findings, 2004). Also, the Millennials care about the environment and social responsibility, because they have grown up in an age when diversity was taught in school and one third of their generation is non-Caucasian (Key Findings, 2004). As a result they are attracted to, and expect to see, advertising that includes diversity of race and gender (Thach, and Olsen, 2006).

### **Wine Consumers Segmented by Generation**

To date, a multitude of generational studies have been conducted in the United States looking at wine preferences and purchasing behaviors. Beginning in the mid 90's, most studies focused on how to market wine to Generation X'ers who were at the time the leaders shaping the market. Walker (2002) established that the Generation X consumer chose beer over wine and the

wine industry needed to do a better job of marketing, lowering prices, and reducing the pretentiousness surrounding wine to entice this generation of beer drinkers.

Hoffrichter, Wildes, and Parks (1999) found that wine was not the beverage of choice for Generation X'ers, but that the wine industry was beginning to refocus its marketing efforts to erase the image of wine as a product of snobs. McGarry-Wolf and McVey (2001) researched Generation X'ers in California finding that the Generation X wine consumer differed from the Non-Generation X consumer; although the participants defined themselves as wine consumers. The results indicated that Gen X'ers were more likely to purchase beer and were less loyal to wine as a choice for an alcoholic beverage. Although Generation X wine consumers purchased a smaller volume of wine than Non-Generation X consumers, they were more likely to purchase premium and red wines resulting in the same amount of dollars expended on alcoholic beverages. As a result of this study, McGarry-Wolf and McVey (2001) recommended targeting wine marketing campaigns to each generation because it may be more effective than broad marketing campaigns.

At or around 2000, researchers began to hone in on the next generation of wine consumers, the seventy million-strong progeny of the Baby Boomers called the Millennial generation. A Wine Market Council (2006) national survey of wine drinkers showed that Millennials were making history as “nearly 40 percent of Millennial wine drinkers were already core wine consumers, meaning they enjoy wine at least once a week” and in 2008 the Millennial generation showed additional growth reporting a nearly 23 percent increase in wine consumption (Wine Market Council, 2009). As a result, the Wine Market Council's public relations program is now completely focused on this consumer segment calling them the future of the wine industry. As Millennials became the focus for industry-related research, academic

researchers began to take notice and sought to establish a framework for improved marketing toward this wine-drinking population. Thach and Olsen's (2006) empirical study of Millennials indicated that there was a need for greater wine advertising to this group, which is different from advertising that was conducted toward past generations. The 2008 Wine Market Council survey reported that Millennials associated wine with fun times, were more likely than other generations to purchase wines costing \$20 or more, and were more apt to visit wine bars than those in older age groups. Thach and Olsen's earlier study (2006) concurred and also found that this younger, less conventional segment required more innovative packaging and labels, while focusing on value, taste enhancements and environmental emphasis, such as the natural or organic way in which wine is made and the use of sustainable grape-growing practices.

In 2007, Olsen, Thach and Nowak explored how U.S. wine consumers were socialized to wine, finding a difference in motivations in cohort preferences (between Traditionalists, Baby Boomers, Generation X'ers and Millennials), thereby creating a need for change in how marketers and advertisers stimulate these diverse groups. Olsen et al (2007) provided invaluable data related to how the four cohorts of U.S. wine consumers were first introduced to wine, their wine consumption preferences, and their attitudes about wine and its image. Meaningful to the present study was the finding that all four cohorts started to drink wine because they believed that wine fit better with food and that they liked the taste of wine better than beer or mixed drinks. Millennials were most likely to agree that they started to drink wine because their friends, family, and co-workers drink wine indicating that this generation saw wine consumption as a social experience and would therefore be more likely to order wine in a restaurant. Additionally, Olsen et al (2007) found that all groups agreed that the most popular situation in which to consume wine was with meals, either at home or in restaurants, and that when doing so,

dry red wine was the varietal they preferred. They also found that the Millennial generation has a strong preference for sweet white wines.

Qenani-Petrela, McGarry-Wolf, and Zuckerman (2007) collected data from a random sample of 447 respondents in San Luis Obispo, California. Their research focused on the wine consumption patterns of three generations of wine consumers: Baby Boomers, Generation X and Generation Y (Millennials). Results showed that significant differences existed among the three generations and their attitudes about wine. Premium quality products and the potential health benefits of wine were more important to Baby Boomers. Both Generation X and Generation Y consumers felt that a creative label, wine high in alcohol, and wine that was good for a date were important considerations when purchasing wine. Both Generation X and Y consumers were more likely to purchase their wine at a liquor store, while Baby Boomers were more likely to purchase their wine through a wine club.

Barber, Dodd and Ghiselli's (2008) study of both the Millennial generation and Generation X focused on the importance of market segmentation and consumer characteristics such as product knowledge, purchase confidence, and generational differences during the purchase decision. Their findings indicated that there were differences in how the younger generations viewed information sources. Generation X consumers preferred serious, more direct and informative advertisements that provided ratings and reviews from wine critics. Millennials believed wine should be portrayed in different social consumption and purchase situations that reflected images of friends sharing wine.

It has been established that younger people are drinking more wine than ever in the U.S. and that marketing to younger generations is in need of a change. Entire websites and wine blogs have been created which are devoted to reaching out to Millennial wine consumers, and

there is a plethora of scholarly data which suggests why Millennials drink wine, what type of wine they are drinking and where wine consumption is preferred. This surge in wine consumption by a generation deemed to be the largest consumer group in the U.S. (Harris Interactive, 2001) provides an opportunity for researchers to focus on what drives Millennials' interest in wine and how the wine industry, marketers and restaurant owners can tap into this potential surplus of revenue. Research is, therefore, needed to determine how casual dining restaurant operators can capitalize on the Millennial generation's interest in wine consumption and what marketing techniques they can employ to promote the sale of wine in their restaurants to increase sales and revenue.

### **Restaurant Wine Sales**

In restaurants across Europe, wine is typically the beverage that accompanies a meal, and that custom is catching on in the United States. The National Restaurant Association's restaurant industry forecast reported that as for beverages, wine was becoming increasingly popular at restaurants which are responsible for about 20% of all U.S. wine sales. Among fine dining operators, 65 percent expected wine to represent a larger proportion of sales in 2007, while 50 percent of casual dining and 37 percent of family dining operators expected the same (NRA, 2006).

Although many U.S. consumers are cutting back on eating out due to the economic downturn, the casual dining segment holds a trump card because it has the ability to entertain guests and provide a special occasion experience, something fast food restaurants can't do (Nation's Restaurant News, 2009). In addition, as patrons eat out less and spend less, fine dining establishments have been especially hard hit (Intel, 2009). Although Americans are choosing to trade down to less expensive restaurants, they eat 20 million meals a week at casual-dining

chains (Technomic, 2009) and they want the feeling of eating at a fine dining establishment with the upscale options and a wine list. American diners have become wine smart and are looking for better, inexpensive wines to complement their dining experience, albeit less expensive casual dining (NRA, 2009). Academic researchers Yang and Lynn (2009) determined that the average check in a restaurant in the U.S. is less than \$7 a person, indicating that fine dining is a small percentage of the restaurant business and the casual dining statistic is the one that matters. Results of this study indicate that casual dining restaurants, therefore, may be able to boost wine sales by offering a greater number of lower cost wines.

Wansink, Cordua, Blair, Payne, and Geiger (2006) determined that increase in wine sales is affected by promotions as simple as table tents which emphasize selected wines. During this economic downswing, the restaurateur needs to find innovative ways to keep costs in line by purchasing better wines at the right price point and, thereby passing along the savings to the savvy, value seeking customers who frequent these types of establishments (Walker, 2002).

According to the National Restaurant Association, wines by the glass and signature drinks are hot trends in restaurants. More than 1,600 chefs surveyed by the Association said mixologists/signature cocktails, functional cocktails and food-alcohol pairings were the biggest trends in beverage-alcohol service in 2009. And, nearly nine out of 10 table service operators determined that wine by the glass will become more popular in restaurants this year (NRA, 2009). In response, restaurant operators have begun to offer higher-end beers and expanded wine lists to draw guests to bar items even while they are on a budget. As the ongoing economic slump continues, restaurateurs can give guests a reason to toast with wines, beers and spirits (Thorn, 2009). Understanding customers and providing variety and value in line with needs are the keys to building relationships and profits through alcohol sales (Popp, 2005). According to



the Wine Economist (2008), the importance of wine in restaurants continues to grow as evidenced by over 70% of restaurants reporting that wine was a larger percentage of their total sales in 2007 compared with 2006. More restaurants are now focusing attention on wine and wine-drinkers and increasing sales accordingly.

As an example of wine sale success in casual dining restaurants, restaurateurs can follow the lead of Olive Garden Restaurants, which sells more wine than any other restaurant chain in the United States. Its sales and educational programs were a positive part of the transformation of American wine culture. Olive Garden has been the optimistic future of American restaurant wine sales (Wine Economist, 2009). The educational process at Olive Garden begins with staff, the people who are best placed to influence customer choice. Specially selected staff travel to Italy each year to live, shop, eat, drink, cook and in general soak up knowledge and experience that can be used and shared with customers and is an employee incentive program that pays off in increased wine sales (Olive Garden, 2009).

### **Millennials and Casual Dining Restaurants**

Casual dining restaurants are defined as restaurants that attract middle-income individuals who enjoy dining out, but who do not want the formal atmosphere and high price found in fine dining restaurants (Chon and Sparrows, 2000). “The atmosphere is casual, the mood relaxed, and the price midrange at these restaurants” (Gregoire, 2010, p.12). The total restaurant industry includes about 500,000 restaurants with combined annual revenue of almost \$400 billion (Hoover’s, 2009). According to the Census Bureau Economic Census (2002), there were 195,659 casual dining restaurants with 3,904,628 paid employees and they generated approximately \$144,649,964 in annual revenue.

It is important to understand the Millennials and their use of foodservice, because it is the latest generation to make their presence felt in society. They are touted as being the most important group of present and future customers for restaurants and other foodservice operations (Muller, 2009). According to Phillips (2009), Millennials spend a disproportionate amount of their income on food, food away from home and alcoholic beverages. Phillips' research also indicates that Millennials prefer casual dining restaurants over quick service restaurants (QSR's) and were the only age group to show a decline in the average number of meals eaten at QSR's between 2007 and 2008. With their absolute size and aggregate income expected to exceed that of Baby Boomers, it is critical for marketers to understand how Millennials think about their food and wine choices. At this time, no research has been found related to Millennials and their wine purchasing behaviors in casual dining restaurants.

### **The Theory of Planned Behavior**

Previous research has sought to predict and explain human behavior. Ajzen and Fishbein (1977) determined that the best predictor of a person's behavior is his or her intention to perform the behavior. They called this the Theory of Reasoned Action (TRA). The TRA is a theory that states that a behavior intention (BI) is based on the attitude (ATT) toward the behavior (B) and a subjective norm (SN). Attitude is conceptualized as an overall positive or negative evaluation of behavior, while subjective norm is defined as one's perception that those who are important to the person think he/she should or should not perform the behavior in question (Fishbein and Azjen, 1975). The Theory of Reasoned Action, however, was limited in the prediction of behaviors by assuming that a person had the ability to choose. Azjen (1981, 1985, and 1988) extended the theory by suggesting that one's behavioral intention also may be explained by one's

perceived behavioral control (PBC) in addition to their attitudes and subjective norms. PBC is considered to influence behavior directly and/or indirectly via intentions (Ajzen, 1991).

According to Ajzen (1977), the TPB can be used to predict behavioral acts including attending a meeting, using birth control pills, buying a product, donating blood, and so forth. A single behavior is determined by the intention to perform the behavior in question. A person's intention is in turn a function of his attitude toward performing the behavior and of his subjective norm. It follows that a single act is predictable from the attitude toward that act, provided that there is a high correlation between intention and behavior. The TPB has been reported extensively in literature as a method for predicting addictive behaviors such as smoking (e.g., Godin, Valois, LePage, and Desharnais, 1992), and drinking (e.g., Johnston and White, 2002). It has been used to predict weight reduction success among college women (e.g., Schifter and Ajzen, 1985), and to predict dishonest intentions and actions, such as cheating, shoplifting and lying (e.g., Beck and Ajzen, 1991).

In a meta-analysis of the efficacy of the Theory of Planned Behavior, Armitage and Connor (2001) found that TPB was a useful model for predicting a wide range of behaviors and behavioral intentions. Other researchers have used the TPB as a marketing tool to predict behaviors related to coupon usage (e.g., Shimp and Kavas, 1984) and recycling (e.g., Tonglet, Phillips, and Read, 2004). Sutton, Balch, and Lefebvre (1995), successfully used the TPB to develop a program entitled "Five a Day for Better Health". In this study researchers discovered that the target audience perceived people who ate five servings of fruits and vegetables a day as less capable, dependable, gentle and friendlier than themselves. These insights helped the program planners design and develop materials that could counter these negative attitudes as they formed the image of the program. Karjaluoto and Alatalo (2007) used the TPB to investigate factors that

affect consumer attitudes towards mobile marketing. Their results indicated that subjective norms were positively related to intention to participate in mobile marketing and that perceived behavioral controls were not associated with intention.

To better appreciate consumer behaviors it is important to identify their attitudes, subjective norms and perceived behavioral controls about purchasing wine. The Theory of Planned Behavior (TPB) can be used to identify these concepts because it is a psychological model that examines the behavior of individuals (Ajzen, 1985, 1991). This theory states that the best predictor of a person's behavior in any given situation is their intention to perform the behavior and proposes that a person's behavioral intention is based upon three antecedents: attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). More specifically, to predict whether a person intends to do something it is necessary to know whether or not the person is in favor of doing it (attitude), how much the person feels social pressure to do it (subjective norm), and whether the person feels in control of the action in question (perceived behavioral control).

### **Conjoint Analysis**

Conjoint analysis (CA) is a statistical technique that is used in a wide variety of consumer research and is used in the present study to support the TPB results. CA is not a statistical model, but it is more of a mathematical model because it has no statistical error term. Most often CA is used as a market research tool for developing effective product design. Specifically, CA is used to analyze product preference data and simulate consumer choice (SAS, 1993). Hughson, Ashman, De La Hueriga, and Moskowitz (2004) state that "conjoint analysis involves providing consumers with a large set of product descriptions and requiring them to rate whether each description would or would not appeal to them". Hughson explains that a regression analysis of

the rating scores illustrates how each particular element either adds or detracts from the liking of a particular product. Chambers (2010) describes CA as a statistical method that enables the researcher to hit the “hot buttons” related to the product being studied. CA is essential for understanding which combinations of a product’s features potentially provide the best response, such as liking, purchase intent, ease of use, etc. This type of methodology provides the power to predict an outcome that can then be rank-ordered with the “best” possible combination of factors that most influences a consumer’s decisions. CA also can be useful for determining purchase intent and behavioral responses to products.

Although this methodology has not been widely used in wine marketing, a few research references have been found (Gil and Sanchez, 1997; Sanchez and Gil, 1998; Orth and Krška, 2002). Most of these researchers used CA to study the behavior of consumers’ related purchase intent, wine attribute preferences, and wine quality signals and price setting. Martínez-Carrasco Martínez, Brugarolas Mollá-Bauzá, Del Campo Gomis’ and Martínez Poveda (2006) however, used CA to determine the relative importance of a set of attributes which influence purchase decision of quality wine such as Designation of Origin (DO), or where the wine was made, type of wine, price, and occasion.

Additionally, their research sought to investigate the combined influence of purchase place and consumption frequency (habitual, occasional, and sporadic) on consumers’ preferences about quality wine and was conducted in Southeast Spain where quality wine is distributed mainly through two distinct channels: restaurants and retailers. Their primary hypothesis was that consumer preferences toward quality wine in restaurants would be different than in retail stores. Martínez-Carrasco Martínez, Brugarolas Mollá-Bauzá, Del Campo Gomis’ and Martínez Poveda (2006) surveyed consumers from the province of Alicante in Spain. CA was used in the

design and analysis of the results. To collect the data, different stimuli were shown to consumers: in this case wine bottles with varying attributes based on type of wine, DO, price and consumption occasion. Results indicated that the attribute most valued by consumers in restaurants is the DO, followed by type of wine, price, and occasion. When wine is bought in shops, the type of wine is more important than the DO; price is less important in shops than in restaurants.

Gil and Sanchez (1997) sought to examine and compare wine attribute preferences within and between two different Spanish regions by using the weighted least squares approach in conjunction with a conjoint designed experiment. This study used three attributes in the conjoint design: price, origin, and grape vintage year and CA which allowed the researchers to explain how consumer preferences are formed. The methodology in this case included the selection of attributes and attribute levels which together made up alternative product concepts. When the attributes and attribute levels were combined, nine different hypothetical wine profiles were shown to consumers. Respondents were then asked to assign preference ratings to the products. The results of the analysis determined that consumers from various regions in Spain do have different wine attribute preferences. The potential result from this type of analysis is significant in that it enabled the researchers to identify market segments based on consumer preferences and socio-demographic characteristics. Wine producers in this part of Spain were then able to determine that urban consumers assigned higher utility values to price, while rural consumers assigned higher utility values to the origin of the wine. Finally, the study was able to conclude that rural consumers would prefer a locally produced, cheap wine, while, in other segments, wine from the Rioja region, as well as more expensive wines, would have market opportunities.

Orth and Krška (2002) introduced an approach to estimate optimal prices for wines which display information related to receiving awards. This study sought to determine the importance of selected wine exhibitions as award origins and determining the partial utilities of selected awards based on a conjoint experiment. A consumer survey was conducted in wine shops in several cities and towns of the Czech Republic. Three groups of nine wine bottles were displayed. The respective wines were selected to cover the medium and high-priced wines as well as different colors (one red and two white varieties). They were displayed with their regular labels, and three different prices (low, medium and high) for each wine in the study. Consumers were asked to choose one wine varietal and to rank the nine bottles according to their preferences. Likert-scale results indicated that the most important attributes to these wine buyers was varietal, followed by country of origin, and region of origin. Exhibition awards (the focus of this study) rated equally important as color or price and appeared to be a somewhat important attribute. The aggregated results of the conjoint experiment confirmed that the importance of an award and the price of the wine were equally regarded by consumers. Additionally, consumers exhibited a preference for particular awards and, in all cases, respondents indicated the least preference for wines without awards.

Hughson, Ashman, De La Huerga and Moskowitz (2002) used conjoint measurement to study consumer reactions to different attributes of red and white wine. The paper was part of an effort to create a large-scale beverage database called Drink It! The research focused on discovering what factors consumers like and dislike about wine. A secondary issue was to establish whether meaningful segments of wine consumers existed. The research was conducted in Toronto, Canada, through an open e-mail invitation. The method included a bank of phrases, called elements, that would later be combined into concepts. The study used 36 elements

relating to the physical attributes, accompanying mood, and emotional, and brand benefits, for both red and white wines, respectively. Through the use of CA the researchers were able to determine that four consumer mind-sets exist, with each mind-set comprising a different set of communication drivers for concept acceptance. “Classics” were those individuals’ who preferred traditional-style wines. “Elaborates” liked wines that generate a range of sensations such as “fizzy”. “Imaginers” were interested in wines that are branded and enjoy the celebratory aspects of wine, and “No frills” consumers, who were only interested in red wines, preferred simple wines that are easy to drink. Most respondents reported that they were most likely to consume wine with friends and family and that they often drink either to relax or celebrate, though the most important reason for wine consumption was as an accompaniment to food.



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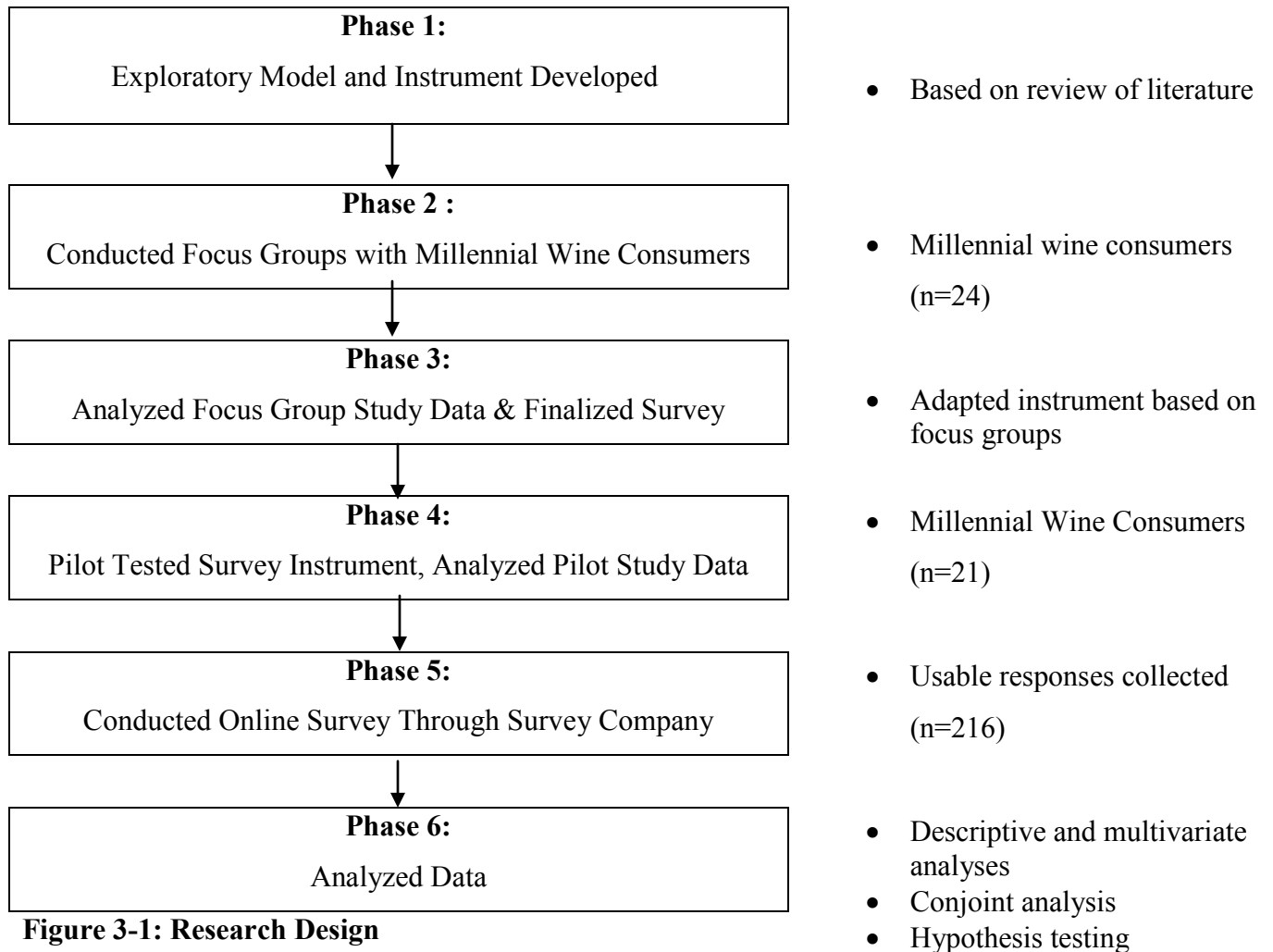
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# CHAPTER 3 - METHODOLOGY

## Introduction

This chapter describes the research design and data analysis procedures used in the present study. The purpose of this study was to investigate the antecedents that affect Millennial consumers' decision to purchase wine in a casual dining restaurant (CDR). The research procedures for this study are outlined in Figure 3.1. The flow chart relates to the population and sampling frame, detailed steps included in the methodology, and concludes with the statistical analyses that were used.



**Figure 3-1: Research Design**

## **Population and Sample**

The population for this study included Millennial wine consumers in the United States. The sample was obtained from the database of a professional survey company (e-Rewards Market Research, Inc., 2010). The goal was to obtain at least 208 respondents with 50% being female and 50% male, ranging in ages from 21-31. The sample size for optimal power was calculated based on a margin of error of  $\pm 5\%$  (Murphy and Myors, 2004).

## **Instrument Development**

To accurately measure the constructs developed in this research, a research instrument was developed. The survey instrument and model used in this study was based on the Theory of Planned Behavior (TPB) developed by Ajzen and Fishbein (1980). The present study used an online survey questionnaire to examine Millennial consumers' attitudes, behaviors and beliefs related to their intent to purchase wine in a casual dining restaurant. Attitudes, subjective norms, and perceived behavioral controls can be accessed directly by asking respondents to rate each construct on a set of scales (Ajzen, 2002). Direct measures are typically low in reliability, so it is, therefore, necessary to measure these predictors indirectly using corresponding beliefs (Ajzen, 2002). These indirect measures allow the researcher to understand what drives behaviors. This research, therefore, only included indirect measures to predict why people held certain attitudes, subjective norms, and perceptions of behavioral control (Ajzen, 2002).

The basis for Ajzen and Fishbein's (1980) TPB assumes that consumers' attitudes, subjective norms, and perceived behavioral controls are based on corresponding sets of beliefs. To identify these beliefs Ajzen (2002) suggested the use of an elicitation study (focus groups). Through the focus groups, a list of commonly held beliefs were developed and used as a basis for constructing a standard questionnaire. The instrument was designed to facilitate quantitatively

measured responses in a simple, online format. The survey questions used a seven-point Likert scale to measure item responses.

### **Conjoint Analysis**

This research also employed the use of conjoint analysis (CA). CA is used to determine the main effects and first order interaction between the constructs. CA is not typically used to negate a previously determined theory, but rather to support the results indicated by the theory and in this study assisted in further understanding the Millennials attitudes, behaviors, and beliefs related to purchasing wine in a casual dining restaurant. CA was employed to determine the relative importance of a set of attributes which influence the purchase decision of wine in restaurants. Similar to the TPB, focus group information was useful for determining the menu attributes that are most important to the consumer's decision about purchasing wine. This information was then translated into product preference data for determining preferred wine information on the menu in CDR's.

### **Focus Groups**

Several focus groups were conducted with 12 male and 12 female Millennial generation students from Kansas State University. The majority of the students were recruited from the Introduction to Wines class and were therefore considered to be wine consumers. The focus groups were based on guidelines suggested by Azjen (2002). Participants responded to five open-ended questions that asked about ordering wine in a casual dining restaurant. Specific questions are displayed in Table 3.1.



**Table 3.1: Focus Group Interview Questions for Each TPB Construct**

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**Behavioral Beliefs**

- Can you please describe some good things that could result from ordering wine in a casual dining restaurant?
- What are some bad things that could result from ordering wine in a casual dining restaurant?

**Normative Beliefs**

- List all of the people you think care (either approve or disapprove) about whether or not you order wine in a casual dining restaurant.

**Control Beliefs**

- What makes it easier for you to order wine in a casual dining restaurant?
  - What makes it difficult for you to order wine in a casual dining restaurant?
- 

The results were similar for each group and Table 3.2 summarizes the outcomes of the interviews. The most often mentioned positive behavioral beliefs were that casual dining restaurants would be a good place to gain wine experience and experiment with new wines. Negative behavioral beliefs were centered on the lack of food and wine pairing information on the menu.

Control beliefs that would make ordering wine in a casual dining restaurant easier included more wine flavor notes information, reasonable prices, and wine recommendations by a wine expert. Control beliefs that made ordering wine more difficult included lack of wine information and wine specials as well as the stereotype that wine is more commonly ordered in fine dining establishments and beer is more suitable for casual dining. For normative beliefs, others included friends, significant others, family, and restaurant employees.

**Table 3.2: Focus Group Behavioral Beliefs: Results of the Focus Group Study (N = 24)**

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<b>BELIEFS</b>	
<b>BEHAVIORAL BELIEFS</b>	
<b>POSITIVE</b>	
	Good place to start trying wines
	Gain experience
	Experiment
	Less expensive
	Good way to try wines with food
<b>NEGATIVE</b>	
	Menus don't provide enough information about food and wine pairings
	Poor quality wine options
	Food/wine don't complement each other
	Servers have no knowledge – can't make recommendations
<b>CONTROL BELIEFS</b>	
<b>EASIER</b>	
	If typical wine flavor notes were provided
	Food/wine pairing info on menu
	Good wine selection
	Sommelier for entire company, to reassure that someone at the top has picked out the best wine and matched it with the food
	Use commercials and specials to advertise this information
	Reasonable prices
	Staff is knowledgeable
	Server can pronounce wines
<b>DIFFICULT</b>	
	Feel wine is more reserved for special occasions
	Advertising
	No drink specials or posters with info about wines
	No information on the menu
	No table tent information
	Limited varieties available
	Stereo-type
	Wine with fine dining
	Beer with casual dining

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**Table 3.2:** Focus Group Behavioral Beliefs: Results of the Focus Group Study (N = 24)  
(Continued)

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**NORMATIVE BELIEFS**

- Friends
  - Significant others
  - Family
  - Restaurant Employees
  - Depends on who you are with and what they know about wine
- 

**Behavioral Beliefs**

Eight behavioral beliefs were identified in the focus groups and were measured by asking the respondent to rate the extent to which they agreed with the belief statements using a 7-point Likert-type scale from (1) *strongly disagree* to (7) *strongly agree*. For each of the eight beliefs, two questions were asked, one that addressed the behavioral belief ( $bb_i$ ) and one that measured the associated outcome evaluation ( $be_i$ ). These beliefs related to the feelings one has when ordering wine in a casual dining restaurant and included feeling good about oneself, having food taste better, having more exciting food, increasing the enjoyment of food, feeling healthy, feeling sophisticated, feeling smart, and increasing personal wine knowledge. Outcome evaluations were measured by asking respondents to rate how undesirable or desirable the beliefs were as each related to ordering wine in a CDR on a 7-point Likert-type scale from (1) *extremely undesirable* to (7) *extremely desirable*. To obtain an overall behavioral belief measure, the behavioral beliefs were summed and multiplied by the outcome evaluations ( $\sum bb_i be_i$ ).

**Normative Beliefs**

Nine referent groups or individuals (friends who drink wine, friends who don't drink wine, mother, father, siblings, grandparents, significant others, co-workers, and wait staff) were

identified through the literature review and focus group study. Normative beliefs were measured by asking two questions, one for each normative belief and one for motivation to comply. Normative beliefs ( $nb_i$ ) were measured by asking the respondent to rate on a seven point Likert-type scale whether or not the referent group or individual approved or disapproved of their decision to order wine. Motivation to comply ( $mb_i$ ) was addressed by having respondents evaluate how much they care what the referent group or individual thinks on a 7-point scale from (1) *not at all* to (7) *very much*. Thus, normative beliefs represented the overall sum of the belief strength multiplied by the motivation to comply ( $\sum nb_i mc_i$ ).

### **Control Beliefs**

Twelve control beliefs (menu lacks information related to a wine's flavor descriptions, menu lacks food-wine pairing information, lack of food-wine pairing information on the table, lack of quality wine selection, lack of reasonable prices, lack of knowledgeable wait staff, lack of wine expert recommendations, lack of wine specials, lack of free samples, lack of time, the stereotype that casual dining restaurants are not for special occasions, the stereotype that wine is for fine dining) were identified in the literature and through the focus group study. Control beliefs ( $cb_i$ ) were measured by asking respondents to rate their level of agreement that the belief makes ordering wine in a casual dining restaurant difficult on a 7-point scale ranging from (1) *strongly agree* to (7) *strongly disagree*. The perceived power ( $pp_i$ ) of those control beliefs was measured by asking respondents how often not having the variable affects their decision to order wine. Respondents rated perceived power on a 7-point Likert-type scale from (1) *very rarely* to (7) *very frequently*. The belief based perceived behavioral control then represented the sum of the control beliefs multiplied by the perceived power ( $\sum cb_i pp_i$ ).

## Conjoint Measurement

The focus group results also provided content that was used to develop the menu profiles for the conjoint analysis. Table 3.3 summarizes the factors and attributes that would influence consumers' purchasing decisions. A conjoint experiment was designed and administered through a self-completion questionnaire. The conjoint experiment in this questionnaire was designed to determine Millennials' preference for wine information on the menu in CDR's.

Data collection employed conjoint analysis using the multiple factor full-concept method. In the full concept method the respondents were asked to rank a set of menu profiles according to their preference (SAS, 1993). On each menu profile, all factors of interest were represented in a different combination of factor levels (features). The factors were the general attribute categories of the menu. A 2x2x4 factorial design was created resulting in the use of 16 different menu combinations. The menu profiles were added into the questionnaire in a randomized order based on a Latin square design. Sixteen survey links were created to account for the randomization of the menu concepts. Participants were asked to evaluate menu options for how likely they were to order wine with the menu shown, responses were based on a score from 1 = not at all to 100 = I would order wine.

**Table 3.3:** Menu Attributes and Levels Included in the Factorial Design of the CA

Attributes	Levels
Wine and Food Pairing	Suggested wine pairing with food Suggested wine pairing on wine list
Wine Attributes	Short description Long description

Price	\$5 - 7
	\$8 - 10

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**Figure 3.2:** Conjoint Menu Example



How likely are you to order wine with this menu?

1 = not at all.....100 = I would order wine

### **Pilot Study**

The initial research instrument, developed based on the focus group study and the review of literature, was tested for understandability of questions, wording, and flow. The pilot study was administered through Axio Survey, Kansas State University’s online survey system. Ninety

seven undergraduate hospitality management students were sent the survey link and the opportunity to complete the survey. A \$50 Olive Garden gift card was used as an incentive. The students received a cover letter, questionnaire, and feedback form. A total of 21 of the 97 students completed the questionnaire for a 22% response rate. The participants made recommendations for the questionnaire related to wording and flow.

### **Final Questionnaire**

Based on previous research, the results of the focus groups and the pilot study, changes in the questionnaire wording and design were implemented. The initial version of the questionnaire included 16 conjoint analysis menu concepts, respondents indicated confusion due to the repetitive nature of the menu items, the menus were reduced by half to eight menu concepts by combining the price options to include a range rather than individual price points. The final version of the instrument included 38 questions in total (some with multiple parts). Seven questions related to casual dining restaurant experiences; seven questions to measure three TPB constructs (61); nine questions related to wine knowledge (12); and seven respondent demographic information questions. For the CA, there were eight survey links that accounted for the randomization of the menu concepts for a complete random block design ( $2 \times 2 \times 2 = 8$ ) (Appendix A).

### **Demographics and Additional Measures**

Seven questions requested demographic information about the participants and included gender, age, educational level, geographic location, and ethnicity. In addition, respondents were asked questions related to their experiences at casual dining restaurants (dining frequency, dollars typically spent, types of beverages typically ordered, and how much they would be

willing to spend on a glass or bottle of wine). Eight questions asked about wine knowledge and three questions assessed the level of the participants' knowledge.

### **Data Collection Procedures**

This research was conducted using an online survey questionnaire distributed by a private marketing research firm e-Reward (2010). A total of 208 Millennial wine consumers were to complete the survey which was the pre-determined minimum quota (Murphy and Myors, 2004). The participants were pre-screened to have been born between 1979 and 1989 to satisfy the Millennial generation requirement and to ensure that they were wine consumers by indicating they consume wine on average at least once a month. The participants represented all socio-economic groups and were a cross-section of the population of Millennial wine drinkers in the U.S.

### **Research Compliance**

The research protocol was reviewed and approved by Kansas State University's Institutional Review Board for Research with Human Subjects as documented by the approval letter in Appendix B.

### **TPB Data Analysis**

Data analyses were performed using the Statistical Package for the Social Sciences (SPSS, Version 17.0, 2002; SPSS, Inc., Chicago: IL). The initial development of the survey was analyzed using exploratory factor analysis to ensure that the questions asked related to the constructs being measured (Field, 2005). Descriptive statistics computed included frequencies,



means, and standard deviations. Cronbach's alpha (1951) was used to determine construct reliability. A threshold of .70 was used to demonstrate consistency.

Regression analysis was used to examine the relationship between the dependent variable (behavioral intentions) and the independent variables of behavioral beliefs, normative beliefs, and control beliefs. T-tests and analysis of variance were used to examine differences between item means for selected demographic categories.

### **Conjoint Data Analysis**

Conjoint analysis was performed using the SAS software package (SAS<sup>®</sup> 9.2, Cary, NC, USA). All data were analyzed using the PROCTTRANSREG procedure which provided analysis of variance (ANOVA) to treat all factors as categorical variables, and then with a regression analysis which treated the variables as continuous. Analysis of the data resulted in a utility score, called a part-worth, for each factor level. These utility scores, analogous to regression coefficients, provided a quantitative measure of the preference for each factor level, with larger values corresponding to greater preference. Part-worths are expressed in a common unit, allowing them to be added together to give the total utility, or overall preference, for any combination of factor levels. The part-worths can then be used as a model for predicting the preference of any product profile. The regression coefficients (or part worths) were used to identify the relative importance of each of the three factors (price, location, length). The predicted values for the different factor combinations (utilities) were used to identify the best liked of the eight menu combinations.

Conjoint analysis determined both the relative importance of each attribute as well as which levels of each attribute were most preferred (utilities). Utility values of  $< 0$  indicated the attribute detracts from the strength of the concept, whereas values from 0-5 indicated the

attribute added strength to the concept. Pearson's  $R$  tested the actual and predicted preferences for each respondent, to determine if they were correlated and tests this correlation for statistical significance. Pearson's  $R > 0.6$  implied a strong linear relationship (Harraway, 1993). To the degree that the participants were consistent in their ratings, a high value for  $R (\geq 0.66)$ , which measured the goodness of fit of the model, was required (Moskowitz *et al.*, 2005) and indicates the participants menu preferences.

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# **CHAPTER 4 - THE MILLENNIAL GENERATION: WINE PURCHASING BELIEFS IN CASUAL DINING RESTAURANTS USING THE THEORY OF PLANNED BEHAVIOR**

## **Introduction**

### **Wine Research in the United States**

In the latter part of the nineteenth century, wine production in the New World became commercially important. Today wine is enjoyed by hundreds of millions of consumers and according to Mayo, Nohria, and Singleton (2007), the United States (U.S.) is poised to become the global wine leader overtaking France and Italy as the world's largest consumer of table wines. This growth in demand in wine and the reduction in consumption in many of the major wine producing countries has added pressure on wine marketers to capture the attention of the U.S. wine consumer (Wine Institute, 2004). As the world wine market increases, the role of marketing has become an important issue.

The intention behind consumers' decisions to purchase wines in wine shops and grocery stores has been investigated. Almost one-quarter of wine consumers feel overwhelmed by the sheer volume of choices in the number of wineries, wine brands, labels, bottle shapes, style, and type of closures (Progressive Grocer, 2008). Research conducted over the past twenty years has sought to determine which of these commercial indicators is most important to consumers when making wine purchasing decisions. Keown and Casey (1995) and Gil and Sanchez (1997) were the first to establish that label information was the most influential commercial indicator that consumers used when making wine purchase decisions. More current research found that consumers placed a great significance on the overall label and bottle packaging when selecting a bottle of wine, but that differences existed in these preferences based on factors of gender,

income and age (Barber, Ismail, and Taylor, 2007; Barber and Almanza, 2006; Barber, Almanza, and Donovan, 2006).

### **Wine Consumers**

It has been established that U.S. consumers are interested in wine and marketing. Research over the past two decades has determined which product attributes consumers consider most important when purchasing a bottle of wine. Recent research, however, has focused more on “cohorts” of wine consumers in an attempt to provide knowledge related to these groups’ wine-related behaviors so that marketers can tailor products and advertisements for the different groups. One design used by researchers is to segment consumers based on the generation in which they were born. Four generational categories have been developed (Lancaster and Stillman, 2002): Traditionalists (born between 1900 and 1945); Baby Boomers (between 1946 and 1964); Generation X’ers (between 1965 and 1980); and Millennials (between 1981 and 1999).

Olsen, Thach and Nowak (2007) studied core U.S. wine consumers by generations to determine how these consumers were socialized to wine. All four cohorts began to drink wine because they thought wine complemented food and that the most popular way to consume wine was with meals, either at home or in restaurants. Barber, Dodd and Ghiselli (2008) reported that Millennials and Generation X’ers purchased more wine than Baby Boomers and Traditionalists. Unlike any generation in the past, Millennials were choosing to drink wine over beer and hard liquors. Thach and Olsen (2006) discovered that Millennials were especially interested in wine and, thus, marketing should focus on innovation and value.

Generally viewed as children of the Baby Boomers, the Millennials may be the largest consumer group in the history of the U.S. in terms of their purchasing power and represent the

future market for most consumer brands (Harris Interactive, 2001). If the Millennial generation is developing as a new wine consumer segment, it is imperative that restaurant operators understand how this generation makes the choice to purchase wine and what behaviors contribute to their purchase decisions. Wine purchased in fine dining establishments is a typical scenario, but how can restaurateurs in the casual dining segment of foodservice tap into this generation of wine enthusiasts to generate more revenue in a slumping financial environment? Only one study was found in which consumers were asked about their decisions to purchase wine in a restaurant setting. Wansink, Cordua, Blair, Payne and Geiger (2006) studied wine promotions in a mid-priced chain restaurant and found three factors were associated with an increase in wine sales: selected wine recommendations, food-wine pairing recommendations, and wine tastings.

### **Wine Sales in Restaurants**

Although several studies have been conducted defining wine consumer segments and factors important to consumers when purchasing wine in wine shops and grocery stores, few studies have attempted to relate wine purchase intention to the food service industry, especially casual dining restaurants. Casual dining restaurants are defined as restaurants that attract middle-income individuals who enjoy dining out, but who do not want the formal atmosphere and high price found in fine dining restaurants (Chon and Sparrows, 2000). “The atmosphere is casual, the mood relaxed, and the price midrange at these restaurants” (Gregoire, 2010, p.12).

Restaurant industry professional organizations, such as the National Restaurant Association, forecast that wine is becoming increasingly popular at restaurants; restaurants are responsible for about 20% of all U.S. wine sales. Among fine dining operators, 65 percent expected wine to represent a larger proportion of sales in 2007, while 50 percent of casual dining

and 37 percent of family dining operators expected the same (NRA, 2006). According to the Wine Economist (2008), the importance of wine in restaurants continues to grow; over 70% of restaurants reported that wine was a larger percentage of their total sales in 2007 compared with 2006. Although, the most recent reports indicated that as a result of the economic downturn, wine sales in casual dining restaurants have decreased by 14% nationally (Robertiello, 2010).

Casual dining restaurant owners, Darden Restaurants Inc., see the benefit of promoting wine in its operation and attribute 50 consecutive quarters of positive U.S. same-restaurant sales growth to its commitment to delivering a genuine Italian dining experience. Olive Garden operators believe that wine plays a key role in their genuine Italian dining experience. They are committed to on-going wine education and training for their team members in addition to their innovative wine sampling program (DRI, n.d.).

Academic researchers Yang and Lynn (2009) determined that the average check in a restaurant in the U.S. is less than \$7 a person, indicating that fine dining is a small percentage of the restaurant business and that the casual dining statistic is the one that matters. Results of their study indicated that casual dining restaurants may be able to boost wine sales by offering a greater number of lower cost wines. Future research is needed to determine which factors may affect wine sales: e.g. server training and targeted merchandising programs.

Millennials spend a disproportionate amount of their income on food purchased for home consumption, food eaten away from home, and alcoholic beverages. They are the main drivers in growth in the beer, wine, and bourbon categories (Phillips, 2009). Phillips' research also indicates that Millennials prefer casual dining restaurants over quick service restaurants (QSR's) and were the only age group to show a decline in the average number of meals eaten at QSR's between 2007 and 2008. Because of their potential purchasing power, their preference for casual

dining restaurants and their interest in wine, the present study applies the Theory of Planned Behavior (TPB) to investigate the relationships among Millennial consumers' attitude, subjective norms, and perceived behavioral controls to explore factors that encourage the purchase of wine in casual dining restaurants (Ajzen, 1985).

TPB (Ajzen, 1985; Ajzen, 1991) can be used to identify these concepts because it is a psychological model that examines the behavior of individuals. This theory states that the best predictor of a person's behavior in any given situation is his or her intention to perform the behavior and proposes that a person's behavioral intention is based upon three antecedents: attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). More specifically, to predict whether a person intends to do something it is necessary to know whether or not the person is in favor of doing it (attitude), how much the person feels social pressure to do it (subjective norm), and whether the person feels in control of the action in question (perceived behavioral control). Yet, an in-depth review of the literature did not reveal any consumer behavioral research that had been conducted to address attitudes, subjective norms and perceived control behaviors and their relationship to the intention to purchase wine in casual dining restaurants.

### **Purposes**

The purpose of the present study was to use the Theory of Planned Behavior to identify millennial generation consumers' attitudes, subjective norms, and barriers that affect purchasing of wine in casual dining restaurants.

### **Research Questions**

1. Does knowledge about wine impact Millennials decision to purchase wine in casual dining restaurants?



2. Does educational level impact Millennials decision to purchase wine in casual dining restaurants?
3. Is there a difference in the intention of Millennials to purchase wine based on their gender?
4. Is there a difference in the intention of Millennials to purchase wine based on their geographical location?

### **Hypotheses**

The following hypotheses were proposed:

H<sub>1</sub>: Millennials' attitudes about wine will affect their intent to purchase wine in casual dining restaurants.

H<sub>2</sub>: Millennials' subjective norms will affect their intent to purchase wine in casual dining restaurants.

H<sub>3</sub>: Barriers will affect Millennials' intention to purchase wine in casual dining restaurants.

### **Methods**

#### **Sample**

The population for this study included Millennial wine consumers in the United States. The sample was obtained from the database of a professional survey company (e-Rewards Market Research, Inc., 2010). The goal was to obtain 208 respondents with 50% female and 50% male, ranging in ages from 21-31. The sample size for optimal power was calculated based on a margin of error of  $\pm 5\%$  (Murphy and Myors, 2004).

This research was conducted using a survey questionnaire developed by the authors and distributed by a private marketing research firm (e-Rewards). A total of 216 Millennial wine consumers fully completed the survey satisfying the minimum requirement of 208. The participants were pre-screened for birth years between 1979 and 1989, to satisfy the Millennial generation requirement, and to ensure they were wine consumers by indicating they consume wine at least once a month. The participants represented a geographic cross-section of the population of Millennial wine drinkers in the U.S.

### **Instrument Development**

The questionnaire was developed based on the Theory of Planned Behavior (TPB) (Ajzen, 1985) illustrated in Figure 1. TPB can be used to identify beliefs that prevent individuals from performing behaviors. In the present study, the behavioral outcome is the intent to purchase wine in casual dining restaurants (CDRs). The TPB posits that a person's behavioral intention is based upon three antecedents: his/her attitude, subjective norm, and perceived behavioral control (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975).

Focus groups were conducted with a convenience sample of 24 Millennial college students from a mid-western university to determine underlying beliefs about their intent to purchase wine in casual dining restaurants. The focus groups identified the commonly held beliefs which provided the basis for constructing the survey questionnaire.

The questionnaire was pilot-tested through an online survey distributed by e-mail. Ninety seven undergraduate hospitality management students were sent the survey link and asked to complete the survey. A \$50 restaurant gift card was used as an incentive. The students received a cover letter, a questionnaire, and a feedback form. A total of 21 of the 97 students completed the questionnaire for a 22% response rate. The participants made recommendations

for the questionnaire related to wording and flow. The pilot study data were analyzed for internal consistency using Cronbach's alpha (1951). A threshold of .70 was used to demonstrate consistency (George and Mallory, 2003) and it was found that all scales had a threshold above .70. The final version of the questionnaire included 68 questions to measure the components of the TPB, consumers' wine knowledge and demographic information.

**Part I** of the instrument included the indirect measures of the TPB. Although typical TPB research collects both direct and indirect measures, indirect measures were the primary focus of this study because indirect measures such as behavioral, normative, and control beliefs assist researchers in understanding what drives behaviors, provide a focus for intervention (or marketing) messages, are belief-based and play a central role in the theory of planned behavior. They are assumed to provide the cognitive and affective foundations for attitudes, subjective norms, and perceptions of behavioral control (Ajzen, 2002).

Eight behavioral beliefs were identified in the focus groups and were measured by asking the respondent to rate the extent to which they agreed with the belief statements using a 7-point Likert-type scale from (1) *strongly disagree* to (7) *strongly agree*. These beliefs related to the feelings one has when ordering wine in a CDR and included feeling good about oneself, having food taste better, having more exciting food, increasing the enjoyment of food, feeling healthy, feeling sophisticated, feeling smart, and increasing personal wine knowledge. Outcome evaluations were measured by asking respondents to rate how undesirable or desirable the beliefs were as each related to ordering wine in a CDR on a 7-point Likert-type scale from (1) *extremely undesirable* to (7) *extremely desirable*. An overall belief score was calculated by multiplying the behavioral beliefs scores by the outcome evaluations to compute a total behavioral belief score, which was then summed across all respondents.

Friends who drink wine, friends who don't drink wine, parents, siblings, grandparents, significant others, co-workers, and wait staff were identified through the literature review and focus groups as important normative beliefs. The strength of these beliefs was measured by asking respondents to rate how much each referent group or individual would approve or disapprove of their decision to order wine in a casual dining restaurant using a 7-point Likert-type scale from (1) *disapprove* to (7) *approve*. The motivation to comply was evaluated by asking respondents how much they care what the referent group or individual thinks on a 7-point Likert-type scale from (1) *not at all* to (7) *very much*. A total normative belief score was calculated by multiplying the individual normative beliefs by the motivation to comply to obtain an overall belief score, which was then summed across all respondents.

Control beliefs or items that potentially make it difficult to order wine in a CDR included 1) lack of menu information related to wine's flavor descriptions, 2) menu food/wine pairing information, 3) food/wine pairing information on the table, 4) quality wine selection, 5) reasonable prices, 6) wine knowledge by wait staff, 7) wine specials, 8) free samples, 9) time to enjoy wine; 10) the stereotype that casual dining restaurants are not for special occasions, 11) the stereotype that wine is for a special occasion and 12) the stereotype that wine is for fine dining and beer is for casual dining. These were measured by asking respondents to rate their agreement with the belief that it makes ordering wine difficult on a 7-point Likert-type scale from *strongly disagree* (1) to *strongly agree* (7). The power of these factors to impact behavior was then measured by indicating how often the beliefs influenced their decision to order wine in CDRs, from (1) *very rarely* to (7) *very frequently*. A total control belief score was calculated by multiplying the individual control beliefs scores by the power of those control beliefs to derive an overall belief score which was then summed across all respondents.

**Part II** asked participants three questions about their wine knowledge. **Part III** included six demographic questions: consumers' age, gender, educational level, geographic location, and ethnicity. The questionnaire and research protocol were reviewed and approved by the Human Subjects Committee for the Institutional Review Board (Kansas State University, Manhattan, KS).

### **Data Analysis**

All data analysis procedures utilized the Statistical Package for the Social Sciences (SPSS, Version 17.0, 2002, SPSS, Inc., Chicago: IL). Descriptive statistics, including means, standard deviations and frequencies were calculated. Independent samples t-tests and ANOVA determined differences in item mean scores based on knowledge, gender, education, and geographic location. Exploratory factor analysis with varimax rotation determined item loading on factors. The number of factors represented by the instrument was determined based on a minimum eigenvalue of 1.0. Reliability coefficients were computed using Cronbach's alpha with the recommended value of 0.70 as the threshold to demonstrate consistency (Cronbach, 1951). All factor scores ranged from one to seven and were computed by summing items and dividing by the number of items. Multiple linear regression determined relationships among factors. Alpha levels of  $\leq .05$  were considered as significant.

## **Results**

### **Respondent Characteristics**

A total of 216 Millennial wine consumers were included in the analysis which exceeds the minimum requirement of 208 for statistical significance. Respondent characteristics are presented in Table 4.1. An equal number of males (49.5%) and females (50.5%) responded and 44.4% were between 21-25 years and 55.6% between 26 and 31 years. A majority had some

college or held college degrees (95.8%) were white (81%), and lived in urban neighborhoods (80.6%). Zip code information was collected and indicated that 26% of consumers were from the Eastern U.S., 25% from the South, 28% from the North, and 20% from the West. In addition, 85% of consumers lived within 500 miles of a wine producing region.

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Insert Table 4.1

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### **Instrument Item Responses**

The indirect behavioral belief measures presented in Table 4.2 indicated that Millennial wine consumers had fairly high intentions to order wine in casual dining restaurants ( $M = 4.9 \pm 1.37$ ). These results are supported by previous research which found that Millennial generation consumers are core wine consumers who prefer to enjoy wine with food, either at home or in restaurants (Olsen, Thach, and Nowak, 2007).

Millennial wine consumers in this study generally believed ordering wine would increase their enjoyment of food ( $M = 4.97 \pm 1.34$ ) and that ordering wine would make the food more exciting ( $M = 4.56 \pm 1.43$ ) and taste better ( $M = 5.02 \pm 1.50$ ). Participants also rated significant others ( $M = 5.86 \pm 1.27$ ), friends who drink wine ( $M = 5.83 \pm 1.22$ ), and the waitstaff ( $M = 5.73 \pm 1.28$ ) as the top three important supporters who approved of their ordering wine in a casual dining restaurant. Control beliefs (barriers when ordering wine) ranked the highest included: menus' lack of information related to wine flavor descriptions ( $M = 5.45 \pm 1.28$ ), menus' lack of food and wine pairing information ( $M = 5.36 \pm 1.37$ ), and casual dining restaurants' lack of a quality wine selection ( $M = 5.28 \pm 1.37$ ). Participants indicated that the stereotype wine is for

fine dining and beer is for casual dining ( $M = 4.03 \pm 1.90$ ) and that CDRs are not a place for special occasions and wine is for special occasions ( $M = 3.92 \pm 1.76$ ) were the least rated items.

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Insert Table 4.2

Independent samples t-tests and ANOVA were not significant for differences in intention to purchase wine based on knowledge, educational level, gender or geographic location. This can most likely be attribute to the homogeneity of the participants that completed this survey as they were mostly white, college-educated, and lived in urban areas of the U.S.

### **Instrument Validity**

To determine if the developed instrument measured the constructs intended, reliability testing and exploratory factor analyses were conducted. Exploratory factor analysis for the constructs related to behavioral beliefs (attitudes) resulted in the extraction of two factors which accounted for approximately 75% of the variance. Component 1 included the items feeling good about oneself, feeling healthy, feeling smart, knowledgeable, and sophisticated. Component 2 related to having food taste better, be more exciting, and more enjoyable as a result of ordering wine in a CDR.

Normative beliefs (or subjective norms) resulted in the extraction of one component which accounted for 70% of the variance. This component indicated which individuals influence Millennials' decision to order wine in a CDR. Component 1 included: friends who drink wine, friends who don't drink wine, mother, father, siblings, grandparents, and coworkers; significant others and waitstaff were removed.

Control beliefs, which reflect perceived barriers to ordering wine in CDRs, resulted in the extraction of three factors, accounting for 72% of the variance. Component 1 included: lack of a

knowledgeable waitstaff and lack of expert recommended wine pairing information on the menu. Component 2 related to the lack of low prices for wine, lack of wine specials, lack of free samples, and the lack of time needed to enjoy a glass of wine. The third component related to perceived behavioral control is associated with the stereotypes that wine is for fine dining and beer is for casual dining and that casual dining restaurants are not a place for special occasions because wine is reserved for special occasions.

Exploratory factor analysis for two of the three constructs resulted in more than one component. A regression model was then developed to determine if there was a relationship between the new factors and the intent to order wine in a CDR (Table 4.3). Results of the analysis indicated that the regression model was significant for the new factors of self (feels good about self, feels healthy, sophisticated, smart, and knowledgeable) and food (food tastes better, is more exciting and enjoyable) and predicted intent to purchase wine in CDRs. The new factor for subjective norms was also a significant indicator for intention to order wine in a CDR. Of the three new combined factors for barriers: 1) information (lack of knowledgeable waitstaff and lack of expert wine recommendations on the menu); 2) time and money (lack of low prices, specials, free samples, and time to enjoy wine); and 3) stereotypes, stereotypes was the only significant indicator of intention to purchase wine (Figure 4.1).

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Insert Table 4.3

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Insert Figure 4.1

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## Discussion

This research surveyed 216 Millennial wine drinkers from across the United States. Gender demographics were reflective of the population within the United States based on the most recently published Census data with 49.5% of the respondents being male and 50.5% being female (Smith and Spraggins, 2000). The respondents were educated (82.4% had a college degree) and were primarily white (81%) which is similar to data collected by the National Institutes of Health (Dawson, 2000). They reported that compared to Blacks, Hispanics, and Native Americans, whites drank proportionately more wine. The results of this study also are supported by the research of Briggs, Levine, Bobo, Haliburton, Brann and Hennekens (2002) who reported for all men who drank wine, white men had a higher level of education than men of other ethnicities.

The purposes of this research were to use the Theory of Planned Behavior to identify Millennial generation consumers' attitudes, subjective norms, and barriers that affect purchasing of wine in casual dining restaurants and to develop an effective instrument to test the proposed model. Statistical analysis indicated that the instrument used in this study was effective at measuring the proposed constructs and could be useful in future studies to identify purchase intentions. Also, the indirect measures of the TPB used in the present study appeared to provide factors that determine the beliefs having the greatest influence on intentions to purchase wine in CDRs.

Results of the present research identified commonly held behavioral beliefs shared by the target population. Hypothesis one: Millennials' attitudes about wine will affect their intent to purchase wine in casual dining restaurants was supported. Two factors were significant for their intention to purchase wine: 1) feeling good about oneself and 2) improving the enjoyment of food. These factors were consistent with other research which reported that Millennial

respondents were interested in wine because they believed it paired better with food (Olsen, Thach and Nowak, 2007). CDRs may, therefore, consider showcasing wine and food in their future marketing efforts.

Hypothesis two: Millennials' subjective norms will affect their intent to purchase wine in casual dining restaurants, was also supported. Friends who drink wine, friends who don't drink wine, parents, grandparents, siblings and co-workers significantly affected Millennials' intent to purchase wine. Previous research supports the finding that this generation views wine consumption as a social experience (Olsen, Thach, and Nowak, 2007) and that differences exist in how to market to this generation (Barber, Dodd and Ghiselli, 2008). Interestingly, although the individual mean scores for significant others and waitstaff indicated they were influential to Millennials' intent to purchase wine in CDR's, the factor analysis deleted these from the final model. This sample of Millennials may think that they already know the opinion of their significant other and, therefore, it does not influence their intent. The waitstaff may be useful for making recommendations about wine, but it is not important to these consumers that the wait staff approves of their intent to purchase wine.

Control beliefs reflected items that potentially made it more difficult to purchase wine in CDRs and provided insight into the types of changes CDRs can implement to increase wine sales and customer satisfaction. Hypothesis three, barriers will affect Millennials' intention to purchase wine in casual dining restaurants, was partially supported. The factor of stereotypes, which associated wine with fine dining and special occasions, but not casual dining, was significant indicating that participants' intent to purchase wine in CDRs is limited by their preconceived notions. CDR operators can influence this behavior by promoting their operations as a place for celebration. Millennials can then in turn influence CDR's by considering CDR's

as a place for celebration and wine. Based on these results, CDR owners and operators may want to develop marketing schemes which focus on consumers celebrating special occasions in their establishments and redesigning their menus to offer affordable quality wines and provide information about food and wine pairing options (Wansink, Cordua, Blair, Payne and Geiger, 2006).

Based on results obtained from focus groups in the present study and previously published research, it was surprising that the control beliefs for information (lack of knowledgeable waitstaff and lack of expert wine recommendations on the menu) and time and money (lack of low prices, specials, free samples, and time to enjoy wine) were not significant for intention to purchase wine. Previous studies have found that wine waitstaff training offered by restaurants (Gultek, Dodd, and Guydosh, 2006), offering more wines at lower prices (Yang and Lynn, 2009), and selected wine recommendations, food-wine pairing recommendations and wine tastings were related to an increase in wine sales (Wansink, Cordua, Blair, Payne and Geiger, 2006). One reason for the lack of significance in this study may be that previous studies were not focused on Millennials and the respondents in this study were more concerned with or influenced by the stereotypes associated with wine and fine dining and not about information on the menu or prices.

### **Conclusions and Implications**

The survey for this research was offered to Millennial wine consumers throughout the United States. Even though, the participants were screened to be of a certain age and to drink wine at least once a month, they were not screened for educational level or ethnicity. The results indicated that Millennial wine drinkers in this sample were white and educated and therefore could not be generalizable to the population.

Overall, the results of this research determined the beliefs of Millennial generation wine consumers about purchasing wine in casual dining restaurants. The revised model used in this study adequately measured attitudes, subjective norms, and some perceived behavioral controls as being significant indicators of these Millennials' intent to purchase wine in casual dining restaurants (Table 4.3, Figure 4.1).

Millennial participants in this study agreed that ordering wine with their meal in a casual dining restaurant would make their food more exciting and taste better. In addition, they believed that ordering wine made them feel sophisticated and smart while providing them the opportunity to increase their wine knowledge. Participants indicated the approval of their significant others and the waitstaff as being important to them, yet more significance was placed on friends who drink wine, siblings, co-workers and their parents as being most influential in their decision to purchase wine in CDRs.

Surprising to this research was that the menu was not a significant barrier for intention to purchase wine. Respondents of this study were interested in drinking wine, they believed wine is a good complement to food and enjoy drinking wine while socializing with friends and family (Thach and Olsen, 2006), but they do not consider casual dining restaurants as a place to drink wine. The respondents in this study were interested in ordering wine in casual dining restaurants, however, the significant results indicated that there are stereotypes surrounding the idea that wine is for fine dining and special occasions and casual dining restaurants are more associated with beer and not considered a place for special occasions. These stereotypes may need to be addressed to increase participants' intention to order wine in CDRs.

Wine sales in casual dining restaurants began to see an increase around the year 2006, but sales have tapered off as a result of financial instability in the U.S. This research will be useful in

understanding the future of the casual dining segment and the Millennial consumer. Casual dining restaurant owners and operators may want to begin developing marketing strategies toward this consumer segment. Millennials want to see advertising promotions that show food and wine being enjoyed together, while highlighting the experience with groups of friends and family and times of celebration. DRI, Inc. (n.d) is at the forefront of this type of marketing. The Olive Garden concept, which promotes the “Italian Dining Experience” in their restaurants featuring wine on every table, has resulted in an increase of customers trusting the restaurant company with their everyday dining visits and important special occasions with family and friends, resulting in 50 consecutive quarters of sales growth.

Although this study’s intent was not to focus on a specific ethnicity or educational level, the respondents were mainly white and educated. Future studies are necessary to determine wine purchasing preferences based on other ethnicities and those with less education. Additionally, it may be interesting to conduct this study with other age cohorts to determine if there are differences by generation. Other studies could be conducted to 1) identify what types of information Millennials prefer on the menu as it relates to food and wine pairings, 2) understand how consumers’ experience and knowledge affect their intent to purchase wine in CDRs, and 3) focus on specific casual dining restaurants and their wine marketing practices.

### **Limitations**

In interpreting the results of this study, certain limitations are acknowledged. First, although the results of this study can be considered generalizable due to the representativeness of the population geographically, the majority of the respondents were white and educated. Future researchers may want to determine wine purchasing preferences based on other ethnicities and those with less education.

Second, the conceptual instrument for the present study was tested with samples that were limited to those who were members of the e-Survey database and had access to a computer. Additional research may be needed to focus on participants who are not members of a marketing research survey company in order to refute or support these findings.

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**Table 4.1: Respondent Demographics (N = 216)**

<b>Respondent Characteristics</b>		<b>n</b>	<b>%<sup>a</sup></b>
<b>Age</b>	21 – 25	96	44.4
	26 - 31	120	55.6
<b>Gender</b>	Male	107	49.5
	Female	109	50.5
<b>Geographic Location</b>	East	57	26.0
	West	55	20.0
	South	43	25.0
	North	61	28.0
<b>Proximity to Wine Producing Region</b>	0 – 100 miles	120	55.6
	101 – 250 miles	39	18.1
	251 – 500 miles	24	11.1
	> 500 miles	33	15.3
<b>Neighborhood</b>	Urban	174	80.6
	Rural	42	19.4
<b>Education</b>	No BS/BA Degree	48	24.0
	BS/BA Degree	152	76.0
<b>Ethnicity</b>	White	175	81.0
	Other	41	19.0

*Note:* <sup>a</sup> Frequency of response percentages may not equal to 100% due to rounding

**Table 4.2: Attitudes, Subjective Norms, and Barriers for Purchasing Wine in CDRs.**

<b>Attitude – Behavioral Beliefs (BB)<sup>1</sup></b> (Reliability: <i>Cronbach's alpha .89</i> )	<b>M<sup>2</sup></b>	<b>SD<sup>3</sup></b>
Ordering wine will increase the enjoyment of food.	4.97	1.34
Ordering wine with a meal will make the food taste better.	4.73	1.50
Ordering wine will make food more exciting.	4.56	1.43
Ordering wine will make me feel sophisticated.	4.53	1.60
Ordering wine in a CDR will make me feel good about myself.	4.06	1.52
Ordering wine in a CDR will increase my wine knowledge.	4.04	1.67
Ordering wine will make me feel healthy.	3.77	1.52
Ordering wine will make me feel smart.	3.76	1.62
<b>Attitude – Outcome Evaluation (OE)</b> (Reliability: <i>Cronbach's alpha .86</i> )		
Increasing the enjoyment of food	5.04	1.36
Better tasting food	5.02	1.36
Increasing wine knowledge	4.86	1.44
Feeling good about myself	4.72	1.26
More exciting food	4.67	1.38
Feeling healthy	4.52	1.40
Feeling sophisticated	4.32	1.40
Feeling smart	3.93	1.50
<b>Subjective Norms – Normative Beliefs (NI)<sup>4</sup></b> (Reliability: <i>Cronbach's alpha .89</i> )		
Significant Others	5.86	1.27
Friends who drink wine	5.83	1.22
Wait-staff	5.73	1.28
Siblings	5.48	1.44
Co-workers	5.45	1.34
Mother	5.28	1.60
Father	5.23	1.54
Friends who don't drink wine	5.03	1.46
Grandparents	4.95	1.74
<b>Subjective Norms – Motivation to Comply (MI)</b> (Reliability: <i>Cronbach's alpha .95</i> )		
Significant Others	4.26	2.20
Mother	3.73	2.13
Friends who drink wine	3.64	2.11
Father	3.60	2.10
Grandparents	3.44	2.07
Siblings	3.41	2.01
Co-workers	3.33	1.90
Friends who don't drink wine	3.12	1.91
Wait staff	2.40	1.72
<b>Barriers to ordering wine in CDRs<sup>5</sup></b> (Reliability: <i>Cronbach's alpha .80</i> )		
Menu lacks information related to wine flavor descriptions	5.45	1.28
Menu lacks food/wine pairing information	5.36	1.37
Lack of quality wine selection	5.28	1.37
Lack of knowledgeable wait staff	5.23	1.28

Lack of wine specials	5.17	1.36
Lack of food/wine information on the table	5.15	1.44
Lack of reasonable prices	5.11	1.46
Lack of free wine samples	5.10	1.58
Menu lacks expert recommended food/wine pairing information	4.94	1.42
Lack of time to enjoy wine	4.32	1.70
Stereotype that CDRs are not a place for special occasions and wine is for special occasions	4.03	1.76
Stereotype that wine is for fine dining and beer is for CDRs	3.92	1.90
<b>Strength of barriers to ordering wine in CDRs (Reliability: Cronbach's alpha .89)</b>		
Reasonable prices	5.45	1.52
Wine specials	5.20	1.61
Quality wine selection	4.99	1.60
Free wine samples	4.89	1.89
Having time to enjoy wine	4.75	1.63
Knowledgeable wait staff	4.68	1.58
Menu offers information related to wine flavor descriptions	4.56	1.67
Menu offers food/wine pairing information	4.47	1.66
Food/wine information is provided on the table	4.40	1.73
Menu offers expert recommended food/wine pairing information	4.30	1.66
CDRs are not a place for special occasions and wine is for special occasions	3.44	1.85
Wine is for fine dining and beer is for CDRs	3.39	1.80

Note:

<sup>1</sup>Scale value ranges from 1 = strongly disagree to 7 = strongly agree

<sup>2</sup>M = mean

<sup>3</sup>SD = standard deviation

<sup>4</sup>Scale value ranges from: 1 = disapprove to 7 = approve

<sup>5</sup>Scale value ranges from: 1 = strongly disagree to 7 = strongly agree

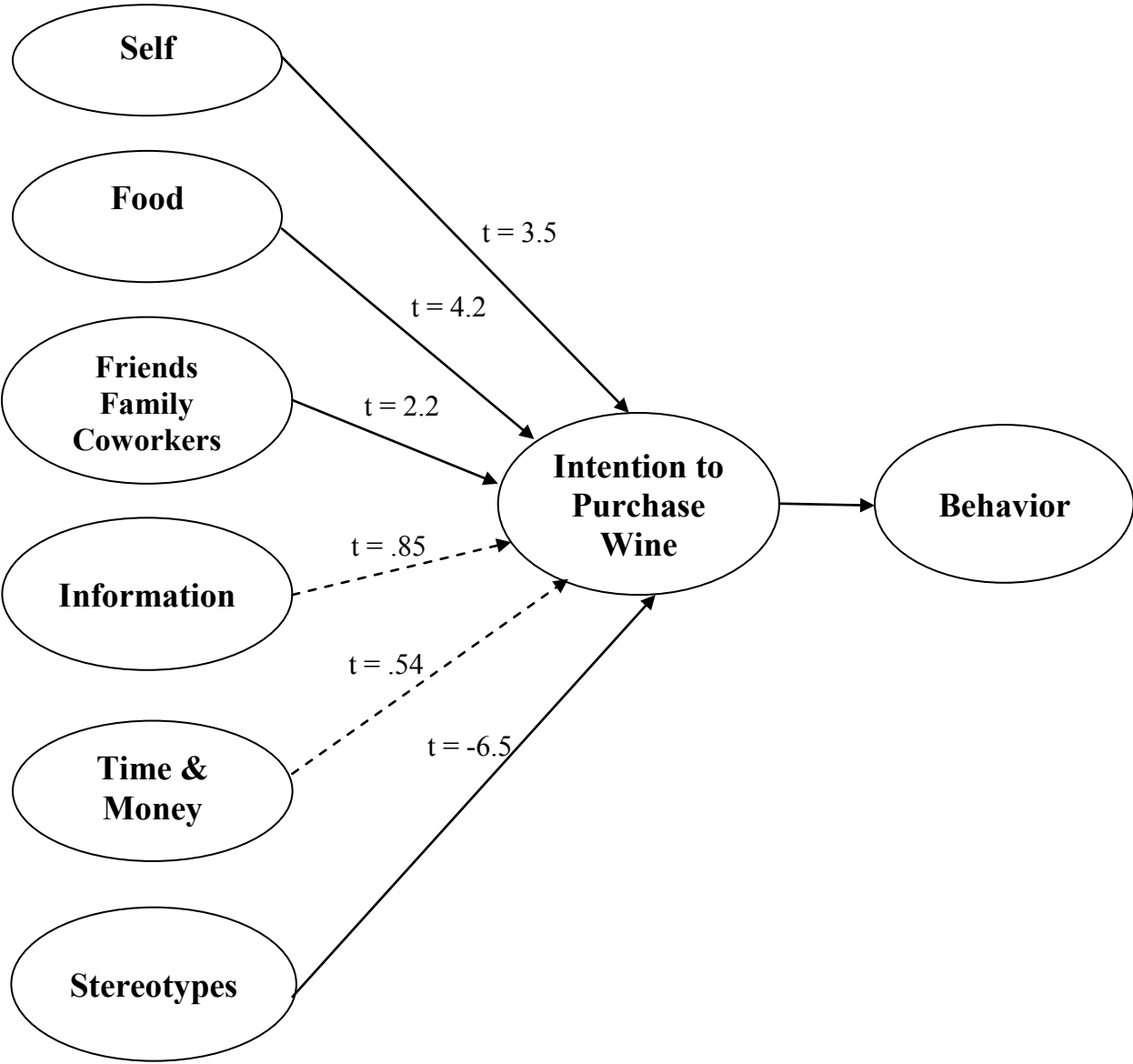
**Table 4.3:** Multiple Regression Model for Predicting Behavioral Intention Based on Indirect Measures

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Significance</b>
Regression	126.973	6	21.162	21.208	<b>.000</b>
Residual	207.552	208	.998		
Total	334.525	214			

<b>Model</b>	<b>Beta</b>	<b>t</b>	<b>Significance</b>
(Constant)			<b>.00</b>
Attitude - Self	.264	3.486	<b>.01</b>
Attitude - Food	.290	4.227	<b>.00</b>
Subjective norms	.143	2.148	<b>.03</b>
Barriers - information	.057	.849	.40
Barriers – time and money	.035	.535	.60
Barriers - stereotypes	-.397	-6.518	<b>.00</b>

p < .05 in bold font

**Figure 4-1:** Revised TPB Model



## **CHAPTER 5 - MILLENNIAL GENERATION PREFERENCES FOR WINE INFORMATION ON THE MENU: A CONJOINT APPROACH**

### **Introduction**

Restaurant industry professional organizations such as the National Restaurant Association have found that wine is becoming increasingly popular at restaurants which are responsible for approximately 20% of all United States (U.S.) wine sales. Among fine dining operators, 65 percent expected wine to represent a larger proportion of sales in 2007, while 50 percent of casual dining and 37 percent of family dining operators expected the same (NRA, 2006). And, according to the Wine Economist (2008), the importance of wine in restaurants continues to grow; over 70% of restaurants reported that wine was a larger percentage of their total sales in 2007 compared with 2006. Darden Restaurants Inc., owner of Olive Garden casual dining restaurants, attributes 50 consecutive quarters of positive U.S. same-restaurant sales growth to its commitment to delivering a genuine Italian dining experience. Olive Garden operators believe that wine plays a key role in the customer's satisfaction and are committed to on-going wine education and training for team members in addition to its innovative wine sampling program that allows guests to sample all wines available on the menu (DRI, n.d.).

U.S. consumers are interested in purchasing wine and research has focused on "cohorts" of wine consumers to provide marketing and advertising firms, and wine producers and retailers with knowledge targeted to each groups' wine purchasing behaviors (Thach and Olsen, 2006). The differences in the segments of consumers enable marketers to tailor products and advertisements for each group. Current researchers have begun to divide consumer groups based on age. Four generational categories have been developed and include: Traditionalists: born



between 1900 and 1945; Baby Boomers: 1946 and 1964; Generation X'ers: 1965 and 1980; and Millennials: 1981 and 1999 (Lancaster and Stillman, 2002).

Wine research that has focused on the Millennial generation has found that this generation is developing as a new wine consumer segment in the United States (Olsen, Thach and Nowak, 2007; Barber, Dodd and Ghiselli, 2008), and may be the largest consumer group in the history of the U.S. in terms of their purchasing power (Harris Interactive, 2001). Also, this generation has a preference for eating out and prefers casual dining restaurants over quick service restaurants (QSRs) (Phillips, 2009). Casual dining restaurants are defined as restaurants that attract middle-income individuals who enjoy dining out, but who do not want the formal atmosphere and high price found in fine dining restaurants (Chon and Sparrows, 2000). "The atmosphere is casual, the mood relaxed, and the price midrange at these restaurants" (Gregoire, 2010, p.12). The total restaurant industry includes about 500,000 restaurants with combined annual revenue of almost \$400 billion (Hoover's, 2009). According to the Census Bureau Economic Census (2002), there were 195,659 casual dining restaurants with 3,904,628 paid employees and they generated approximately \$144,649,964 in annual revenue.

It is important to understand the Millennials and their use of foodservice, because it is the latest generation to make their presence felt in society. They are touted as being the most important group of present and future customers for restaurants and other foodservice operations (Muller, 2009). With their size and aggregate income expected to exceed that of Baby Boomers, it is critical for marketers to be knowledgeable about Millennials and their food and wine choices. Understanding consumers and providing variety and value in line with needs are the keys to building relationships and profits through alcohol sales (Popp, 2005). Yet, Millennials

are different than other generations in their marketing needs, because they require more innovation and a focus on value.

It is important, therefore, for casual dining restaurateurs to understand how this generation makes purchasing decisions about wine, what types of menu information contribute to these decisions and how they can tap into the Millennial's wine enthusiasm to generate revenue in a slumping financial environment. Wansink, Cordua, Blair, Payne and Geiger (2006) found three factors associated with an increase in wine sales in mid-priced restaurants: 1) pre-selected wine recommendations, 2) food-wine pairing recommendations, 3) and wine tastings. Yang and Lynn (2009) indicated that casual dining restaurants may be able to boost wine sales by offering a greater number of lower cost wines and that future research is needed to determine what factors may affect wine sales, such as server training and targeted wine menu merchandising programs.

Millennials spend a disproportionate amount of their income on food purchased for home consumption, food eaten away from home, and alcoholic beverages. They are the main drivers in growth in the beer, wine, and bourbon categories (Phillips, 2009). Because of their potential purchasing power, their preference for casual dining restaurants, and their interest in wine, the present study was designed to determine what menu information is important to Millennials in their decision to purchase wine in casual dining restaurants.

This study used conjoint analysis to analyze menu preference data and simulate consumer choice. Conjoint analysis (CA) is one of the most popular marketing research tools used in academic and business research (Green and Srinivasan, 1990) and has emerged as a contemporary research technique to reveal consumers preference about choosing a particular product (Koo, Tao, and Yeung, 1999). Conjoint analysis has been used to analyze food products such as Spanish wine (Gil and Sanchez, 1997), U.S. olives (Moskowitz, Silcher, Beckley,

Minkus-McKenna, and Mascuch, 2005), and Lebanese yogurt (Haddad, Haddad, Olabi, Shuayto, Haddad, and Toufelli. 2007). CA answers questions such as: Which product attributes are important or unimportant to the consumer and what levels of product attributes are the most or least desirable in the consumer's mind?

Conjoint analysis typically involves participants rating, ranking, or choosing among various options that differ by several attributes to elicit consumer preference. The most commonly used approach is to combine different levels of a number of attributes into a factorial design and present the different combinations to the study group. Each consumer is asked to score his/her degree of liking or purchase intent for each of the combinations (Naes, Lengard, Bolling-Johansen, and Hersleth, 2010).

In this study, CA data were collected by asking subjects about their wine menu preferences and their responses were then used to decompose the judgment data into components based on qualitative attributes of the menu. These attributes provided the "hot buttons" necessary for tailoring menus to the Millennial generation and determined exactly which menu attributes: food/wine pairing information, wine descriptors, and/or price affects consumers' intent to purchase wine.

### **Purpose**

The purpose of the present study was to use CA to analyze menu options deemed most important to Millennial consumers when making wine purchasing decisions in casual dining restaurants. Specific hypotheses were:

H<sub>1</sub>: Millennials will prefer casual dining restaurant menus that offer food and wine pairing information placed next to the food.

H<sub>2</sub>: Millennials will prefer casual dining restaurant menus that offer information related to wine descriptors.

H<sub>3</sub>: Millennials will prefer casual dining restaurant menus that offer lower priced wines.

## **Methodology**

### **Sample**

The population for this study included Millennial wine consumers in the United States. The sample was obtained from the database of a professional survey company (e-Rewards Market Research, Inc., 2010). The objective was to obtain a sample with 50% being female and 50% male, ranging in ages from 21-31, and geographically distributed across the country.

### **Data Collection**

The research data were collected using a survey questionnaire electronically distributed by a private marketing research firm (e-Rewards). The participants were pre-screened to 1) have been born between 1979 and 1989, to satisfy the Millennial generation requirement, and 2) to ensure they were wine consumers by indicating they consumed wine at least once a month.

### **Focus Groups**

Focus groups were conducted with a convenience sample of 24 Millennial college students from a mid-western university to determine underlying beliefs about their preferences for wine information on the menu. The majority of the focus group participants indicated that casual dining restaurants lacked pertinent information on their menus including: 1) typical wine flavor notes, 2) food/wine pairing information, 3) a selection of quality wines, 4) expert wine recommendations to match food and wine, and 5) reasonable prices.

## **Conjoint Analysis**

For conjoint analysis, the first step was to develop the alternative product concepts described as a set of attribute levels (Ness and Gerhardy, 1994). The menu concepts were developed based on previous literature and focus group data. On each menu profile, all factors of interest were represented in a different combination of factor levels (features). The factors were the general attribute categories of the menu. The first attribute “location” identified the menu location for food wine pairing information and placed the wine descriptors with either the food (level 1) or the wine list (level 2). The second attribute “description” was used to designate description length for the wine characteristics and was categorized as either short (level 1) or long (level 2). The third attribute, “price” established the price for a glass of wine; \$3 (level 1), \$5 (level 2), \$8, (level 3), and \$10 (level 4).

Once the attribute levels were selected, they were combined forming different hypothetical menus for survey respondents to assign preference ratings. A Latin square design was used to randomize the menu attributes to minimize order effect. A 2x2x4 factorial design was created resulting in the use of 16 different menu combinations. The menu profiles were added into the questionnaire in a randomized order based on a Latin square design. Participants were asked to evaluate menu options for how likely they were to order wine with the menu shown, responses were based on a score from 1 = not at all to 100 = I would order wine.

## **Pilot Test**

A pilot questionnaire was administered through an online survey system. Ninety seven undergraduate hospitality management students were sent one of the 16 survey links and asked to complete the survey. A \$50 restaurant gift card was used as an incentive. The students received a cover letter, questionnaire, and feedback form. A total of 21 of the 97 students completed the

questionnaire for a 22% response rate. Because the respondents indicated confusion due to the repetitive nature of the menu items; the menus were reduced by half to eight menu concepts by combining the price options to include a range rather than individual price points. The final menu attributes included eight ( $2 \times 2 \times 2 = 8$ ) hypothetical menus, which is considered appropriate for presentation to consumers (Koo, Tao, and Yeung, 1999) (Table 5.1).

**Table 5.1:** Menu Descriptions

<b>Factors</b>	<b>Attribute</b>	<b>Levels</b>
I	A. Food and wine pairing information location on menu	(1) With food (2) On the wine list
II	B. Length of description	(1) Short (2) Long
III	C. Price	(1) \$5.00 - \$7.00 (2) \$8.00 - \$10.00

Insert Figure 5.2

### **Data Analysis**

The data were analyzed by Statistical Analysis Software (SAS®, version 9, SAS® Institute, Inc., Cary, NC) using PROC TRANSREG, which provided analysis of variance (ANOVA) to treat all factors as categorical variables, and then with a regression analysis which treated the variables as continuous. The regression coefficients (or part worths) were used to identify the relative importance of each of the three factors (price, location, length). The predicted values for the different factor combinations (utilities) were used to identify the best liked of the eight menu combinations.

## Results

### Respondent Characteristics

A total of 200 Millennial wine consumers were included in the analysis. Respondent characteristics are presented in Table 5.2. An equal number of male (49.5%) and female (50.5%) Millennial consumers responded and 44.4% were between 21-25 years with 55.6% between 26 and 31 years. A majority had a college degree (76%), were white (81%), and lived in urban neighborhoods (80.6%). Zip code information was collected and indicated that 26% of consumers were from the Eastern U.S., 25% from the south, 28% from the north, and 20% from the west (Figure 5.1). In addition, 85% of consumers lived within 500 miles of a wine producing region.

**Table 5.2:** Respondents Demographics (*N* = 200)

<b>Respondent Characteristics</b>	<b>Categories</b>	<b><i>n</i></b>	<b>%<sup>a</sup></b>
<b>Age</b>	21 – 25 years	90	44.4
	26 – 31 years	110	55.6
<b>Gender</b>	Male	107	49.5
	Female	109	50.5
<b>Geographic Location</b>	East	52	26.0
	West	40	20.0
	South	50	25.0
	Midwest	56	28.0
<b>Proximity to Wine Producing Region</b>	0 – 100 miles	112	55.6
	101 – 250 miles	36	18.1
	251 – 500 miles	22	11.1
	> 500 miles	30	15.3

**Table 5.2: Respondents Demographics (Cont.)**

<b>Neighborhood</b>	Urban	162	80.6
	Rural	38	19.4
<b>Education</b>	No BS/BA Degree	48	24.0
	BS/BA Degree	152	76.0
<b>Ethnicity</b>	White	162	81.0
	Other	38	19.0

*Note:* <sup>a</sup> Frequency of responses percentages may not equal 100% due to rounding

### Conjoint Analysis

Conjoint analysis was performed for the overall respondents. CA provided individual part-worth utilities for each level of each attribute. These part-worths were used to calculate the individual relative importance of each attribute related to location (for the food wine pairing information), length (short or long wine descriptor), and price (low and high). The data were analyzed using the TRANSREG procedure in SAS which averaged all respondents' relative importance and part-worths providing an overall average importance utility score.

Table 5.3 shows the conjoint analysis output for the data. Conjoint analysis can determine both the relative importance of each attribute as well as which levels of each attribute are most preferred (utilities). Utility values of  $< 0$  indicate the attribute detracts from the strength of the concept, whereas values from 0-5 indicate the attribute adds strength to the concept. Pearson's  $R$  tests the actual and predicted preferences for each respondent to determine if they are correlated and tests this correlation for statistical significance. Pearson's  $R > 0.6$  is required which implies a strong linear relationship and measures the goodness of fit of the model (Harraway, 1993; Moskowitz *et al.*, 2005). The  $R$  value goes beyond reliability to validity, because the statistic measures how well the independent variables account for the variation in the data. Figure 5.3 shows the distribution of the  $R$  values for the respondents in this study. The



majority of the goodness of fit statistics were  $\geq 0.66$  and more than 65% of the individuals reflected a high *R* statistic. These results suggested the quality of the data at the individual respondent level was acceptable.

The averaged importance results indicated attribute importance (factors were ordered in importance). Attribute importance was shown by the relative range (1-100) of utility scores for an attribute. The averaged importance scores at 35.5, 34.5, and 31.1, respectively, indicated that these respondents found that location, price, and length are equally important on the menu.

Utility scores (preference) are assumed to be based on the value placed on each of the levels of the menu attributes (factors) and combines all scores to determine the preferred combination of attributes. The attributes with higher (positive) utility values are preferred over those with lower (negative) values. Utility scores from this study indicate that Millennial consumers prefer wine descriptors to be placed with the food (1.67), at a lower price (3.28), and with a long description (3.13).

**Table 5.3:** Conjoint Analysis Results

<b>Averaged Importance</b>	<b>Utility (Partworths)</b>	<b>Attributes</b>	<b>Attribute Levels</b>
35.5	-1.67 1.67	<b>Location</b>	<b>Location of Wine Descriptor</b>
			Wine list With food
34.5	-3.28 3.28	<b>Price</b>	<b>Price Range Of Wine</b>
			High (\$8.00-\$10.00) Low (\$5.00-\$7.00)
31.1	3.13 -3.13	<b>Length</b>	<b>Length of Wine Descriptor</b>
			Long Short

### **Discussion**

Two hundred Millennial wine drinkers were surveyed for this research. Demographics were reflective of the population within the United States based on the most recent Census data with 49.5% of the respondents being male and 50.5% female (Smith and Spraggins, 2000). The population was skewed, however, in level of education and ethnicity as 76% of respondents had a college degree, and 81% were white. Proportions are similar to findings of other studies with wine drinkers (Dawson, 2000; Briggs, Levine, Bobo, Haliburton, Brann and Hennekens, 2002).

The purpose of this research was to use conjoint analysis to analyze Millennial consumer's preference for wine information on the menu in casual dining restaurants. Hypothesis one was supported based on the utility scores which indicated a preference for wine descriptors located next to menu items. Palmer (2001) found that many consumers expressed high levels of intimidation when it came to making wine purchases. Olsen and Thompson (2003) stated that consumers often doubt their ability to choose the appropriate wine for a particular setting. Based on the results of this study, offering wine-food pairing

recommendations and wine descriptors with the menu item may increase Millennial consumers' confidence to choose and purchase the appropriate wine in casual dining restaurants.

Hypothesis two stated that Millennials will prefer casual dining restaurant menus that offer information related to wine descriptors was supported. Millennial wine consumers in this study were interested in wine information on the menu and in fact preferred the long wine description over the short description. This is supported by previous research by Yuan, So and Chakravarti (2005) who reported that wine enthusiasts were interested in information that highlighted a wine's characteristics.

Hypothesis three which related to consumers' preferences for low wine prices in casual dining restaurants was supported and indicated that consumers in this study preferred the \$5-7 price range over the \$8-10 dollar price range. These results were confirmed by other studies which had found that consumers preferred lower priced wines (Gil and Sanchez, 1997) and Millennial consumers were focused on brands of wine that provided quality at a fair price (Thach and Olsen, 2006).

Data results which determined the relative importance of each attribute indicated that the participants in this study placed equal importance on the location and length of the food/wine pairing information and price. This demonstrates that the attributes were equally important to these consumers and they saw wine descriptions, food-wine pairing information, and price as key menu attributes.

In addition, even though the relative importance of the three attributes was equal, respondents of this study showed a preference for more detailed wine information on the menu next to the food at a lower price. These results indicate that if casual dining restaurants provided this type of information on their menus, Millennial wine consumers might be more willing to

purchase wines. Also, price may need to be in line with the menu options. For example, if the CDR offers hamburgers on their menu, they would need to offer an informative wine description next to the hamburger listing with a comparable price.

Future studies would need to be conducted in casual dining restaurants to determine if menu designs incorporating these results affect wine sales. Other studies may seek to incorporate sensory testing with Millennials to determine what type of information to include in the wine descriptor. Additional research could include the use of exploratory factor analysis (EFA) to determine individual differences in acceptance patterns and how these differences relate to demographic characteristics such as gender, educational level, and geographic location thereby allowing restaurant operators to design menus that focus on the type of consumer who is most prevalent in their geographic location.

### **Research Limitations/Implications**

In interpreting the results of this study, certain limitations are acknowledged. First, although the results of this study can be considered generalizable due to the representativeness of the population geographically, the majority of the respondents were white and educated.

Second, the conceptual instrument for the present study was tested with samples that were limited to those who were members of the e-Rewards database and had access to a computer. Additional research may be needed to focus on participants who are not members of a marketing research survey company in order to refute or support these findings.

The results indicated that price, location, and descriptor length were equally important to respondents. No question was asked, however, to determine if the respondents of this study preferred this information on the menu. A future study may want to ask if this type of information would increase their intent to purchase wine in casual dining restaurants.

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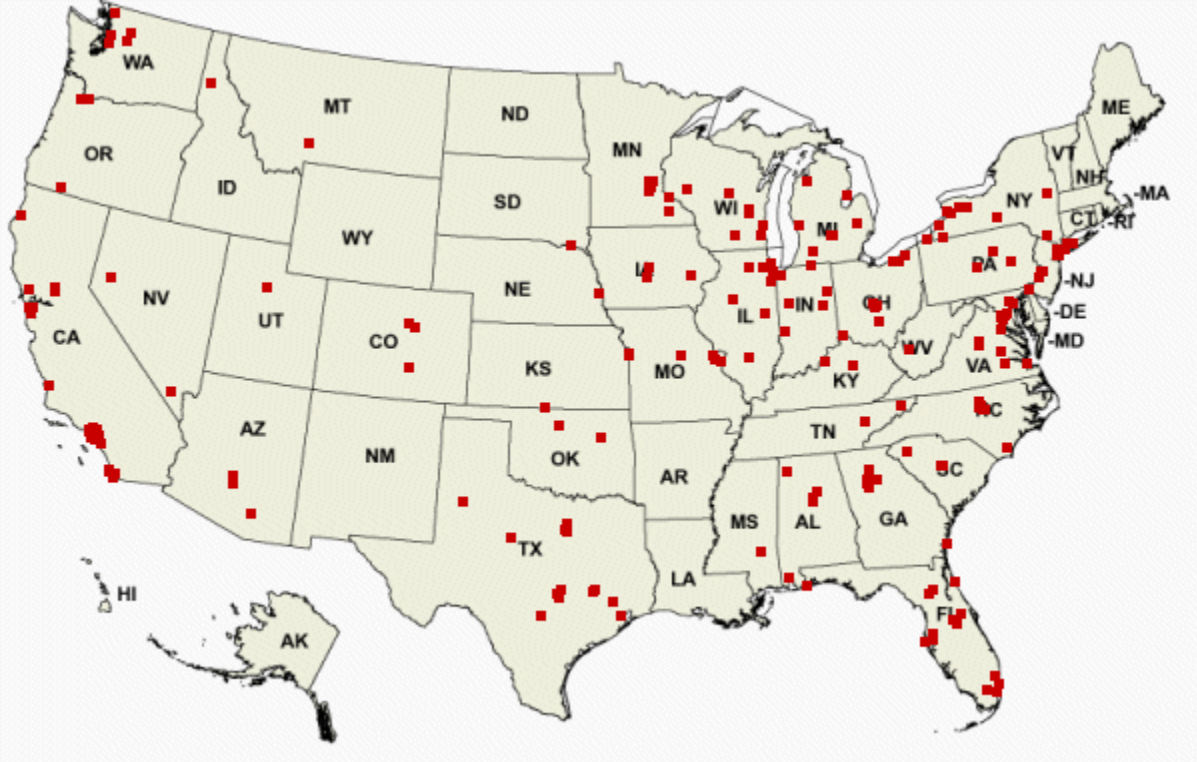
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Figure 5-1: Survey Participants Geographic Location



**Figure 5-2:** Preferred Menu Profile

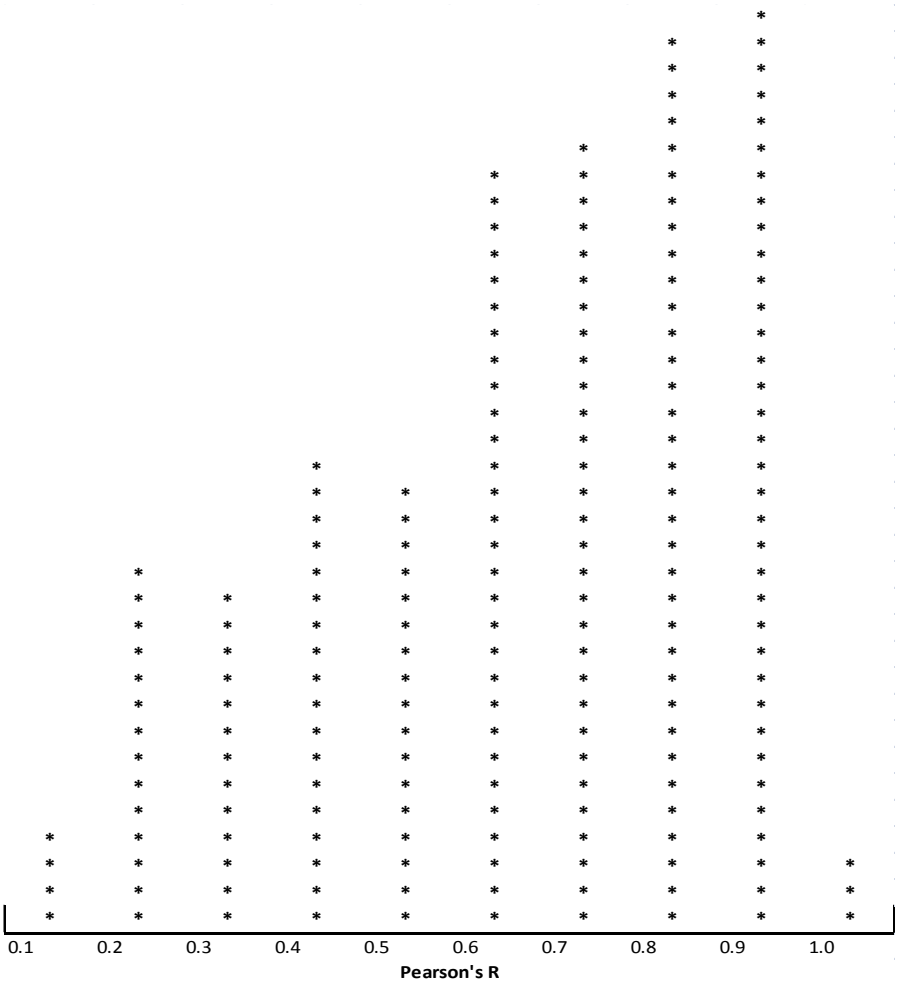
*9 oz. House Sirloin*  
*A juicy, tender steak seasoned with Cajun Spices and served with sautéed onions and mushrooms.*  
*Our wine expert recommends that this be paired with a Red Zinfandel: A plummy and intense full-bodied wine, tasting of red berry fruits with cedar and vanilla. **Add \$5 - \$7***

*Garlic Herb Chicken*  
*Seasoned grilled chicken breast served in a garlic herb sauce. Accompanied by garlic mashed potatoes, country gravy and seasonal vegetables.*  
*Our wine expert recommends that this be paired with a Pinot Grigio: A food friendly, slightly acidic white wine with flavors of pepper, citrus fruits, and other fruits. **Add \$5 - \$7***

How likely are you to order wine with this menu?

1 = Not at all.....100 = I would order wine

**Figure 5-3:** Distribution of the R Statistic for Restaurant Menus



## **CHAPTER 6 - SUMMARY AND CONCLUSIONS**

Wine research in the United States is on the rise due to the increased interest in consumption of wine and has sought to determine what influences consumers' purchase decisions. Studies related to how consumers make decisions to purchase wine in wine shops and grocery stores have focused on bottle closure, varietal style, origin, and label information (Keown and Casey, 1995; Gil and Sanchez, 1997; Barber, Almanza, and Donovan, 2006; and Barber, Ismail, and Taylor, 2007). No current studies, however, have looked at wine purchasing in restaurants. Historically, wine has been popular in many fine dining restaurants in the United States (U.S.), but in the last two years the economic environment has become unstable and as a result many consumers have chosen to trade high priced dinners in fine dining restaurants for lower priced options in casual dining restaurants (Wine Market Council, 2009). Although wine has not been considered a typical beverage of choice in casual dining restaurants, more operators and owners are focusing on improving their wine lists with value wines geared toward the price conscious consumer (Popp, 2005).

Previous research has sought to segment wine consumers based on the generation in which they were born (Thach and Olsen, 2006). Studies have reported the Millennial generation as the most important segment due to their relative size and forecasted spending dollars (Olsen, Thach and Nowak, 2007; Barber, Dodd and Ghiselli, 2008). This generation, unlike any in the past has shown an increased interest in wine. Millennials like wine and actually prefer wine as their beverage of choice over beer and mixed drinks. Not only do Millennials prefer wine, they also enjoy eating out with friends and family (Barber, Dodd and Ghiselli, 2008; Thach and Olsen, 2006) and choose casual dining restaurants (CDRs) more often than fast food or fine dining (Phillips, 2009).

The purposes of the present research were to ascertain which behaviors had the most influence on Millennials' intent to purchase wine in casual dining restaurants and their preferences for wine information on the menu. This study was developed and analyzed in two parts. Part I used the Theory of Planned Behavior (TPB) to assess beliefs and perceptions of Millennials about their wine purchasing behaviors in casual dining restaurants. Part II applied conjoint analysis to investigate the types of wine information Millennials prefer on a CDR menu.

### **Part I – Theory of Planned Behavior**

Using the Theory of Planned Behavior, the perceptions about attitudes, subjective norms, and perceived behavioral controls were examined as they related to purchasing wine in casual dining restaurants. Independent variables included knowledge, gender, educational level, and geographic location within the U.S.

A primary objective of this study was to develop a research instrument that would accurately measure each TPB construct. The questionnaire was developed based on the review of literature and results from four focus groups with Millennial wine consumers. The instrument was then pilot tested to determine understandability of the questions, wording, and flow. The final version of the instrument included 68 questions that measured the components of the TPB and demographic information. The sample included 216 U.S. Millennial wine consumers who completed an online survey through an e-commerce research company. The survey company offered the questionnaire to its members until the desired number of participants was reached

Cronbach's alpha (1951) was used to determine construct reliability among the indirect measures. A threshold of .70 was used to demonstrate consistency. The reliability coefficients for behavioral beliefs, normative beliefs, perceived behavioral controls, and behavioral intention

were 0.89, 0.89, 0.95, and 0.87, respectively; thus indicating that the scales in this study successfully measured the constructs of interest.

## **Major Findings**

Exploratory factor analysis with varimax rotation was combined with multiple linear regression to test the hypotheses. Results of the hypotheses testing for Part I are summarized below:

- Hypothesis 1: Millennials' attitudes about wine will affect their intent to purchase wine in casual dining restaurants.

Hypothesis one was supported. The factor analysis identified two factors for attitudes. Both factors had significant, positive associations between behavioral beliefs (attitudes related to food and self) and intention. Results indicated that when the respondents purchased wine in casual dining restaurants it made them feel better about themselves and they believed it would improve the enjoyment of their food. This finding was also consistent with Olsen, Thach, and Nowak's (2007) findings, which found that Millennials believed that wine complemented food better than other types of alcoholic beverages.

- Hypothesis 2: Millennials' subjective norms will affect their intent to purchase wine in casual dining restaurants.

Hypothesis two was supported. A significant, positive association was found between Millennials' subjective norms and intent. Similar to previous research by Olsen, Thach, and Nowak (2007), the present findings indicated that Millennials in this study enjoyed wine and food in a social setting, whether it is with their friends and family, or co-workers.

- Hypothesis 3: Millennials' perceived behavioral controls will affect their intent to purchase wine in casual dining restaurants.

Hypothesis three was partially supported. Barriers related to stereotypes surrounding wine and casual dining restaurants were the only behavioral controls that were significant in the prediction of behavioral intention. Information (including lack of knowledgeable wait staff and lack of expert wine recommendations on the menu), and time and money (including lack of low prices, specials, free samples, and time to enjoy wine) were not significant.

### **TPB Research Conclusions**

This research used a model and research instrument based on the Theory of Planned Behavior to determine Millennial wine consumer's attitudes, subjective norms, and barriers related to their intent to purchase wine in casual dining restaurants. Results indicated that the respondents of this study affirmed that purchasing wine in CDRs would make them feel good about themselves and increased their enjoyment of food. They generally considered the influence of others when deciding to purchase wine in CDR's and placed the greatest importance on the opinions of their family, friends, and co-workers, but not on wait staff and significant others.

Two of the three factors for perceived behavioral controls were not significant in the regression model. Results indicated that Millennials in this study were interested in enjoying wine and food together, but they did not believe a CDR is the appropriate place to purchase wine and ordering wine may be better for fine dining. They also indicated that wines are to be consumed for celebrations and special occasions and a CDR is not considered a place for celebrations.

Independent sample t-tests and ANOVA tests found no significant differences in intention to purchase wine based on knowledge, educational level, gender or geographic

location. This may be attributed to the homogeneity of the participants who completed this survey, as they were mostly white, college-educated, and lived in urban areas of the U.S.

Overall, attitudes and subjective norms were significant predictors of behavioral intention; barriers were only partially significant. Based on the results of this study, if Millennial generation consumers have positive attitudes and their important referents approve of their decision to purchase wine, they are more likely to purchase wine in casual dining restaurants. Marketing to this generation of consumers may want to focus on showing that casual dining restaurants are a place for celebration and wine consumption to increase wine sales and improve customer satisfaction of Millennials.

## **Part II – Conjoint Analysis**

Part II sought to determine Millennials' preferred price range, location, and length of wine descriptors on casual dining restaurant menus by using conjoint analysis (CA). The sample population included the same 216 U.S. Millennial wine consumers as reported in Part I. Due to some participant inaccuracies in the data, the conjoint data was analyzed with 200 of the 216 consumer respondents.

The survey questionnaire was developed based on the review of literature and results of the focus groups. The instrument was pilot tested to determine understandability of the questions, wording, and flow. The original instrument included 16 hypothetical casual dining menus. The menu attributes consisted of three factors: the location of wine descriptors (either beside the food or within the wine list); the length of the wine descriptors (either short or long); and four price options (\$3, \$5, \$8, and \$10). Pilot study participants determined that the menu section of the survey was too long and cumbersome. As a result, menu options were reduced by changing the price attributes to include a range (\$5.00 to \$7.00 and \$8.00 to \$10.00) rather than



individual prices. The final survey questionnaire resulted in eight hypothetical menus that measured Millennial wine consumers' preferences.

## **Major Findings**

CA provided individual part-worth utilities for each level of the attributes. These part-worths were used to calculate the individual relative importance of each attribute related to location (for the food wine pairing information), length (short or long wine descriptor), and price (low and high). Results of the hypotheses testing for Part II are summarized below:

Hypothesis <sub>1</sub>: Millennials will prefer casual dining restaurant menus that offer food and wine pairing information next to the food.

Hypothesis one was supported. The utility scores which indicated a preference for the location of the wine descriptors showed that participants preferred that the food and wine pairing information be placed next to menu items, rather than within the wine list. Oftentimes consumers are unsure or lack the confidence to make the appropriate wine selection (Holter, 2009; Olsen and Thompson, 2003). Providing wine recommendations and descriptors may, therefore, increase consumers' confidence and provide the knowledge necessary to make an informed decision to purchase wine.

Hypothesis <sub>2</sub>: Millennials will prefer casual dining restaurant menus that offer information related to wine descriptors.

Hypothesis two was supported. Millennial wine consumers in the present study indicated an interest in wine information on the menu and in fact preferred the long wine description over the short wine description. Previous research by Yuan, So and Chakravarty (2005) reported that wine enthusiasts were interested in information that highlights a wine's characteristics.

Additional research has shown that Millennials with more knowledge prefer to seek information

sources outside of friends or family (Barber, Dodd and Ghiselli, 2008), because they don't want to be seen as ordering the wrong type of wine or not making the right decision (Holter, 2009). Although Dodd *et al.*'s research focused on external sources of information, such as magazines and published materials, menu descriptors also can be viewed as an information source.

Hypothesis 3: Millennials will prefer casual dining restaurant menus that offer lower priced wines.

Hypothesis three was supported. Millennials in this study preferred the price range of \$5.00 to \$7.00 over the price range of \$8.00 to \$10.00. Millennials are financially savvy (Harris Interactive, 2001) and they seek brands that provide quality at a fair price (Thach and Olsen, 2006).

Conjoint analysis also provided results that determined the importance of the menu attributes related to location of wine descriptors, length of wine descriptors and price of wine (attributes are ordered in importance). Attribute importance was indicated by the relative range of utility scores for an attribute. The averaged importance scores at 35.5, 34.5, and 31.1, respectively, indicated that the study respondents found location, price, and length all equally important.

### **Conjoint Analysis Research Conclusions**

The present study results indicated that even though the relative importance of the price, location, and length of wine descriptors was equal, the respondents in this study showed a preference for more detailed wine information on the menu next to the food at a lower price. If casual dining restaurants provided this type of information on their menus, Millennial wine consumers might be more willing to purchase wines in casual dining restaurants.

## **Bottom Line Impact**

Findings of the current study and previous studies have found that Millennials are interested in wine unlike any other generation in the past. They like the taste of wine as well as the experience; it makes them feel sophisticated and increases the enjoyment of their food. Millennials like the social aspect of wine and prefer to enjoy it with their friends and family in social settings such as restaurants. This generational segment wants wine information on the menu to include food and wine pairing recommendations and wine descriptors. But, this generation has stereotyped casual dining restaurants as places where you don't drink wine. They do not see CDRs as a place for special occasions; they think wine is for special occasions and should be reserved for fine dining.

To break down the stereotypes that are affecting Millennials behaviors casual dining restaurant marketing efforts may want to promote their restaurants as a place for special occasions and celebration with friends and families, especially in today's economy. The results of this study indicated that casual dining restaurants could make wine a part of their culture to increase revenue. Putting wine-food pairing information and wine descriptors on their menus, coordinating tastings and free samples, and offering quality wines at affordable prices will entice this generation of consumers to change their behaviors and purchase wine which should increase sales and profits.

## **Future Studies**

Future researchers may want to determine wine purchasing preferences of Millennial consumers based on multiple ethnicities and various educational levels. Observation-type research may provide insight into how Millennials make their decisions when ordering alcoholic beverages in casual dining restaurants versus fine dining restaurants. A lexicon of Millennials'

preferred wine characteristics may be determined through sensory analysis testing and would be useful for menu developers and marketers advertising towards these groups.

Additionally, it may be interesting to conduct this study with other age cohorts to determine if there are differences by generation. Other studies could be conducted to 1) identify what types of information Millennials prefer on the menu as it relates to food and wine pairings, 2) understand how consumers' experience and knowledge affect their intent to purchase wine in CDR's, and 3) focus on specific casual dining restaurants and their wine marketing practices.

## **Limitations**

A major limitation in the present study is the homogeneity of the sample. The majority of respondents were white and educated. The results, then, may be difficult to generalize to the entire U.S. population. While the findings may be reflective of the Millennial generation wine consumers, there is presently no data to refute these findings. Future studies would need to be conducted with other demographic groups to determine whether or not similar findings would cut across all four generational cohorts of wine consumers in the U.S.

Second, the conceptual instrument for the present study was tested with samples that were limited to those who were members of the e-Rewards database and had access to a computer. Additional research may be needed to focus on participants who are not members of a marketing research survey company in order to refute or support these findings.

Finally, the survey for this research was offered to Millennial wine consumers throughout the United States. Even though, the participants were screened to be of a certain age and to drink wine at least once a month, they were not screened for educational level or ethnicity. The results indicated that Millennial wine drinkers in this sample were white and educated. Marketing to

this generation may need to focus on specific segments of the overall population to affect their behaviors.

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## **Appendix A - Survey Cover Page**

You will be asked to respond to questions about your experience dining in a casual dining restaurant. Please carefully read each question and do not leave any items blank. Your participation in this research study is completely voluntary and you may refuse to participate at anytime without penalty. By completing this survey, you indicate to the researcher your willingness to participate in this research. Your responses are completely anonymous. Please be assured that your responses will be confidential and all data will be reported as aggregated (group) data. For further information about this study, contact Kelly Thompson, 785-532-5513, or [thmpsnkl@ksu.edu](mailto:thmpsnkl@ksu.edu). If you have questions about Kansas State University's policies regarding this research, please contact the University Research Compliance Office (URCO), 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, 785-532-3224, or [comply@ksu.edu](mailto:comply@ksu.edu).



## Appendix B - Survey Instrument

### THE MILLENNIAL GENERATION AND WINE PURCHASING BELIEFS IN CASUAL DINING RESTAURANTS

#### Opening Instructions

The following survey relates to wine consumption in **casual dining restaurants**. Please take your time when completing the survey, answering all questions to the best of your ability.

#### Question 1

Please paste your unique survey code below. This code can be found on the e-Rewards page that you clicked on to reach the survey:

Characters Remaining:

#### Question 2 **\*\* required \*\***

My age is:

- Under 21
- 21 - 25
- 26 - 31
- 32 - 35
- 36 - 41
- Over 41

---

**Question 3** *\*\* required \*\**

I drink wine:

- I do not drink wine
- More than once a week
- Once a week
- More than once a month
- Once a month

Please answer the following questions based on your experiences in **CASUAL DINING RESTAURANTS**.

**CASUAL DINING RESTAURANTS** are defined as restaurants that attract middle-income individuals who enjoy dining out but do not want the formal atmosphere and high price found in fine dining restaurants. The atmosphere is casual, the mood relaxed, and the price mid-range at these restaurants.

Restaurants such as Chili's, Applebee's or Houlihan's are examples of casual dining restaurants.

**Question 4**

---

1. I typically dine in casual dining restaurants

- 1-3 times a month
- 4-6 times a month
- 7-10 times a month
- More than 10 times a month
- Other:

**Question 5**

2. When dining in a casual dining restaurant my part of the bill is typically:

- 0 -\$10.00
- \$10.00 - \$20.00
- \$20.00 - \$30.00
- \$30 - \$40.00
- More than \$40.00
- Other:

**Question 6 *\*\* required \*\****

When dining in a casual dining restaurant, what types of beverages do you typically order:

1 - Never | 2 - Rarely | 3 - Sometimes | 4 - Frequently  
5 - Every time

	1	2	3	4	5
6.1 Beer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2 Wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3 Mixed drinks (contains spirits)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4 Soft drinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.5 Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 7** *\*\* required \*\**

When dining in a casual dining restaurant, if you order wine how often do you order the following:

1 - Never | 2 - Rarely | 3 - Sometimes | 4 - Frequently  
5 - Every time

	1	2	3	4	5
7.1 Red wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2 White wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3 Blush wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 8** *\*\* required \*\**

How much would you be willing to spend on a **GLASS** of wine in a casual dining restaurant? (Choose all that apply)

- 0 - \$5.00
- \$5.00 - \$7.00
- \$7.00 - \$10.00
- More than \$10.00

**Question 9** *\*\* required \*\**

How much would you be willing to spend on a **BOTTLE** of wine in a casual dining restaurant? (Choose all that apply)

- I am not willing to purchase a bottle of wine in a casual dining restaurant
- 0 - \$10.00
- \$10.00 - \$15.00
- \$15.00 - \$20.00
- \$20.00 - \$25.00
- more than \$25.00

**Question 10 *\*\* required \*\****

Which of the following sources of information is most important to you for learning about wine specials/events at your local casual dining restaurant.

1 - Not Important | 2 - - | 3 - - | 4 - - | 5 - - | 6 - -

7 - Extremely important

	1	2	3	4	5	6	7
10.1 Social networking sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2 Text messaging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3 Email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.4 From the waitstaff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5 Information on the table (table tent)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6 The Menu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following set of statements asks for your opinion regarding a typical dining experience in a casual dining restaurant. There are slight differences in the wording, so please read each question carefully.

**Question 11 *\*\* required \*\****

Please indicate the extent to which you **AGREE** with the following statements:

1 - Strongly Disagree | 2 - - | 3 - - | 4 - - | 5 - - | 6 - -

7 - Strongly Agree

	1	2	3	4	5	6	7
11.1 Ordering wine in a casual dining restaurant may make me feel good about myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.2 Ordering wine with a meal may make the food taste better.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.3 Ordering wine may make food more exciting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.4 Ordering wine may increase my enjoyment of the food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11.5 Ordering wine may make me feel healthy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.6 Ordering wine may make me feel sophisticated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.7 Ordering wine may make me feel smart.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.8 Ordering wine in a casual dining restaurant may increase my wine knowledge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 12 *\*\* required \*\****

**Please complete the following sentences based on your feelings about ordering wine in a casual dining restaurant:**

1 - Extremely Undesirable | 2 - - | 3 - - | 4 - - | 5 - - | 6 - -

7 - Extremely Desirable

	1	2	3	4	5	6	7
12.1 Feeling good about myself when ordering wine is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.2 Having my food taste better because I ordered wine is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.3 Having more exciting food because I ordered wine is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.4 Ordering wine to increase my enjoyment of food is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.5 Feeling healthy about what I am drinking is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.6 Feeling sophisticated because I ordered wine is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.7 Feeling smart because I ordered wine is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.8 Increasing my wine knowledge is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 13** *\*\* required \*\**

**Please consider what the following individuals would think about your decision to order wine in a casual dining restaurant.**

1 - Disapprove | 2 - - | 3 - - | 4 - - | 5 - - | 6 - -

7 - Approve

	1	2	3	4	5	6	7
<b>13.1</b> My friends who drink wine would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.2</b> My friends who don't drink wine would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.3</b> My mother would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.4</b> My father would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.5</b> My siblings would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.6</b> My grandparents would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.7</b> My significant other would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.8</b> My co-workers would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>13.9</b> The wait staff would.....of my decision to order wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 14 **\*\* required \*\***

How much do you **CARE** what the following people think about your decision to order wine in a casual dining restaurant.

1 - You don't care what they think | 2 - - | 3 - - | 4 - - | 5 - -  
6 - - | 7 - You care very much what they think

	1	2	3	4	5	6	7
14.1 My friends who drink wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2 My friends who don't drink wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3 My mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.4 My father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.5 My siblings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.6 My grandparents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.7 My significant other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.8 My co-workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.9 The wait staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**Question 15 *\*\* required \*\****

The following items have been identified as potentially making it more difficult to order wine in casual dining restaurants.

Please indicate the extent to which you **AGREE** that the following statements make it difficult to order wine in casual dining restaurants.

1 - Strongly Disagree | 2 - - | 3 - - | 4 - - | 5 - - | 6 - -

7 - Strongly Agree

	1	2	3	4	5	6	7
<b>15.1</b> Menus lack information related to the wine's flavor descriptions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.2</b> Menus lack food/wine pairing information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.3</b> Lack of food/wine pairing information on the table (flip chart, table tent).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.4</b> Lack of a quality wine selection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.5</b> Lack of reasonable prices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.6</b> Lack of wine knowledge by waitstaff.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.7</b> Lack of information on the menu about food and wine pairings recommended by a wine expert.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.8</b> Lack of wine specials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.9</b> Lack of free wine samples.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.10</b> Lack of time to enjoy wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.11</b> The stereotype that casual dining restaurants are not for special occasions and wine is for a special occasion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>15.12</b> The stereotype that wine is for fine dining and beer is for casual dining.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 16**

Please indicate how **OFTEN** the following **INFLUENCES** your decision to purchase wine in casual dining restaurants.

1 - Very Rarely | 2 - - | 3 - - | 4 - - | 5 - - | 6 - -

7 - Very Frequently

	1	2	3	4	5	6	7
<b>16.1</b> Menu offers wine flavor descriptors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.2</b> Menu offers food/wine pairing information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.3</b> Food/wine pairing information on the table(flip chart/table tent).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.4</b> Restaurant offers quality wine selection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.5</b> Restaurant offers reasonable wine prices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.6</b> Wait staff that is knowledgeable about wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.7</b> Wine expert recommended food/wine pairing information on the menu.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.8</b> Restaurant offers wine specials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.9</b> Restaurant offers free wine samples.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.10</b> Having time to enjoy wine.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.11</b> The thought that casual dining restaurants are not for special occasions and wine is for a special occasion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>16.12</b> The thought that wine is for fine dining and beer is for casual dining.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 17 **\*\* required \*\***

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Please rate your level of agreement with the following statements:

1 - Strongly Disagree | 2 -- | 3 -- | 4 -- | 5 -- | 6 --

7 - Strongly Agree

	1	2	3	4	5	6	7
17.1 I want to order wine in a casual dining restaurant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.2 I intend to order wine in a casual dining restaurant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.3 I will order wine the next time I dine in a casual dining restaurant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please answer the following questions based on knowledge you have related to wine.

Question 18 **\*\* required \*\***

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What is the white wine from Germany that can be described as dry or sweet and is a good wine to consume with spicy, Asian foods?

- Chardonnay
- Sauvignon Blanc
- Riesling
- Pinot Grigio

**Question 19** *\*\* required \*\**

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**What is the red varietal that is best served with steaks?**

- Syrah/Shiraz
- Zinfandel
- Cabernet Sauvignon
- Merlot

**Question 20** *\*\* required \*\**

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**Which is the lightest and fruitiest of all red wines?**

- Shiraz
- Chianti
- Pinot Noir
- Merlot

**Question 21** *\*\* required \*\**

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**What is a true American red wine that complements hamburgers?**

- Pinot Grigio
- Zinfandel
- Tempranillo
- Chardonnay

**Question 22** *\*\* required \*\**

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**The Shiraz grape is grown in \_\_\_\_\_.**

- New Zealand
- United States
- Australia
- Italy

**Question 23** *\*\* required \*\**

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**A wine's quality is indicated by\_\_\_\_\_.**

- A wines balance
- Type of closure (cork, screwtop, etc.)
- The label
- A wines aroma

**Question 24** *\*\* required \*\**

A wine varietal refers to \_\_\_\_\_.

- Type of grape that is used in the wine
- Year the wine was produced
- Type of soil where the grape is grown
- Region where the wine was produced

**Question 25** *\*\* required \*\**

Please consider your level of wine knowledge for the following questions:

1 - I have no knowledge | 2 -- | 3 -- | 4 -- | 5 -- | 6 --

7 - I am extremely knowledgeable

	1	2	3	4	5	6	7
25.1 How would you rate your knowledge about wine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.2 How would you rate your knowledge about food and wine pairings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Question 26** *\*\* required \*\**

Have you had any formal wine education? Examples include: college courses, wine tastings or classes at a restaurant etc.

- Yes
- No
- Other, please provide information in the comment box.

**For the next 8 questions you will see different menu concepts.**

**Please consider the following scenario: You are dining at a casual dining restaurant and you see the following on the menu. How much would this influence your purchase of a glass of wine?**

**Based on a scale from 1 to 100, please put your number in the box provided.**

**Question 27 \*\* required \*\***

*9 oz. House Sirloin  
A juicy, tender steak seasoned with Cajun Spices and served with sautéed onions and mushrooms.  
Please refer to the wine list for our expert recommended wine pairings.*

*Garlic Herb Chicken  
Seasoned grilled chicken breast served in a garlic herb sauce. Accompanied by garlic mashed potatoes, country gravy and seasonal vegetables.  
Please refer to the wine list for our expert recommended wine pairings.*

*HOUSE WINE LIST*

***Dry Red Wines \$8 - \$10/glass***  
***Pinot Noir*** ~ a light-bodied wine that pairs with chicken and salmon dishes.  
***Merlot*** ~ a medium-bodied, that pairs with pasta and steak.  
***Red Zinfandel*** ~ a plummy and intense, full-bodied red wine that pairs with steaks, burgers, and ribs.  
***Cabernet Sauvignon*** ~ a dark, full-bodied, and tannic wine that pairs with steak.

***Dry White Wine \$8 - \$10/glass***  
***Sauvignon Blanc*** ~ a crisp, elegant and fresh white wine that pairs with fish, cheese and spicy foods.  
***Pinot Grigio*** ~ a food friendly, slightly acidic white wine that pairs with chicken and pasta.  
***Chardonnay*** ~ a rich, buttery oaked-style of wine that pairs with chicken and pork.  
***Riesling*** ~ an aromatic, semi-sweet wine that pairs with fish, pork, and spicy foods.

How likely are you to order wine with this menu?

1 = not at all.....100 = I would order wine

Question 28 **\*\* required \*\***

*9 oz. House Sirloin  
A juicy, tender steak seasoned with Cajun Spices and served with sautéed onions and mushrooms.  
Please refer to the wine list for our expert recommended wine pairings.*

*Garlic Herb Chicken  
Seasoned grilled chicken breast served in a garlic herb sauce. Accompanied by garlic mashed potatoes, country gravy and seasonal vegetables.  
Please refer to the wine list for our expert recommended wine pairings.*

*HOUSE WINE LIST*

***Dry Red Wines \$5 - \$7/glass***

*Pinot Noir ~ pairs with chicken and salmon dishes.  
Merlot ~ pairs with pasta and steak.  
Red Zinfandel ~ pairs with steaks, burgers, and ribs.  
Cabernet Sauvignon ~ pairs with steak.*

***Dry White Wine \$5 - \$7/glass***

*Sauvignon Blanc ~ pairs with fish, cheese and spicy foods.  
Pinot Grigio ~ pairs with chicken and pasta dishes.  
Chardonnay ~ pairs with chicken and pork.  
Riesling ~ pairs with fish, pork, and spicy foods.*

How much does this menu influence you to order wine?

1 = not at all.....100 = I would order wine

Characters

Remaining:



Question 29 **\*\* required \*\***

*9 oz. House Sirloin*  
*A juicy, tender steak seasoned with Cajun Spices and served with sautéed onions and mushrooms.*  
*Our wine expert recommends that this be paired with a Red Zinfandel, a dry red wine. Add \$8 - \$10*

*Garlic Herb Chicken*  
*Seasoned grilled chicken breast served in a garlic herb sauce. Accompanied by garlic mashed potatoes, country gravy and seasonal vegetables.*  
*Our wine expert recommends that this be paired with a Pinot Grigio, a dry white wine. Add \$8 - \$10*

How much does this menu influence you to order wine?

1 = not at all.....100 = I would order wine

**Question 30 \*\* required \*\***

*9 oz. House Sirloin  
A juicy, tender steak seasoned with  
Cajun Spices and served with sautéed  
onions and mushrooms.  
Please refer to the wine list for our  
expert recommended wine pairings.*

*Garlic Herb Chicken  
Seasoned grilled chicken breast  
served in a garlic herb sauce.  
Accompanied by garlic mashed  
potatoes, country gravy and seasonal  
vegetables.  
Please refer to the wine list for our  
expert recommended wine pairings.*

**HOUSE WINE LIST**

***Dry Red Wines \$5 - \$7/glass***  
***Pinot Noir*** ~ a light-bodied wine that pairs well with  
chicken and salmon dishes.  
***Merlot*** ~ a medium-bodied, that pairs well with pasta and  
steak.  
***Red Zinfandel*** ~ a plummy and intense, full-bodied red wine  
that pairs well with steaks, burgers, and ribs.  
***Cabernet Sauvignon*** ~ a dark, full-bodied, and tannic wine  
that pairs well with steak.

***Dry White Wine \$5 - \$7/glass***  
***Sauvignon Blanc*** ~ a crisp, elegant and fresh white wine  
that pairs well with fish, cheese and spicy foods.  
***Pinot Grigio*** ~ a food friendly, slightly acidic white wine  
that pairs well with chicken and pasta.  
***Chardonnay*** ~ a rich, buttery oaked-style of wine that pairs  
well with chicken and pork.  
***Riesling*** ~ an aromatic, semi-sweet wine that pairs well  
with fish, pork, and spicy foods.

How likely are you to order wine with this menu?

1 = not at all.....100 = I would order wine

**Question 31 \*\* required \*\***

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*9 oz. House Sirloin  
A juicy, tender steak seasoned with  
Cajun Spices and served with sautéed  
onions and mushrooms.  
Please refer to the wine list for our  
expert recommended wine pairings.*

*Garlic Herb Chicken  
Seasoned grilled chicken breast  
served in a garlic herb sauce.  
Accompanied by garlic mashed  
potatoes, country gravy and seasonal  
vegetables.  
Please refer to the wine list for our  
expert recommended wine pairings.*

*HOUSE WINE LIST*

***Dry Red Wines \$8 - \$10/glass***

*Pinot Noir ~ pairs with chicken and salmon dishes.  
Merlot ~ pairs with pasta and steak.  
Red Zinfandel ~ pairs with steaks, burgers, and ribs.  
Cabernet Sauvignon ~ pairs with steak.*

***Dry White Wine \$8 - \$10/glass***

*Sauvignon Blanc ~ pairs with fish, cheese and spicy  
foods.  
Pinot Grigio ~ pairs with chicken and pasta dishes.  
Chardonnay ~ pairs well chicken and pork.  
Riesling ~ pairs with fish, pork, and spicy foods.*

How likely are you to order wine with this menu?

1 = not at all.....100 = I would order wine

**Question 32 \*\* required \*\***

*9 oz. House Sirloin  
A juicy, tender steak seasoned with Cajun Spices  
and served with sautéed onions and  
mushrooms.  
Our wine expert recommends that this be paired  
with a Red Zinfandel: A plummy and intense  
full-bodied wine, tasting of red berry fruits with  
cedar and vanilla. Add \$8 - \$10*

*Garlic Herb Chicken  
Seasoned grilled chicken breast served in a  
garlic herb sauce. Accompanied by garlic  
mashed potatoes, country gravy and seasonal  
vegetables.  
Our wine expert recommends that this be paired  
with a Pinot Grigio: A food friendly, slightly  
acidic white wine with flavors of pepper, citrus  
fruits, and other fruits. Add \$8 - \$10*

How likely are you to order wine with this menu?

1 = not at all.....100 = I would order wine

Question 33 **\*\* required \*\***

*9 oz. House Sirloin*

*A juicy, tender steak seasoned with Cajun Spices and served with sautéed onions and mushrooms.*

*Our wine expert recommends that this be paired with a Red Zinfandel: A plummy and intense full-bodied wine, tasting of red berry fruits with cedar and vanilla. **Add \$5 - \$7***

*Garlic Herb Chicken*

*Seasoned grilled chicken breast served in a garlic herb sauce. Accompanied by garlic mashed potatoes, country gravy and seasonal vegetables.*

*Our wine expert recommends that this be paired with a Pinot Grigio: A food friendly, slightly acidic white wine with flavors of pepper, citrus fruits, and other fruits. **Add \$5 - \$7***

How likely are you to order wine with this menu?

1 = not at all.....100 = I would order wine



Question 34 **\*\* required \*\***

*9 oz. House Sirloin*

*A juicy, tender steak seasoned with Cajun Spices and served with sautéed onions and mushrooms.*

*Our wine expert recommends that this be paired with a Red Zinfandel, a dry red wine. Add \$5 - \$7*

*Garlic Herb Chicken*

*Seasoned grilled chicken breast served in a garlic herb sauce. Accompanied by garlic mashed potatoes, country gravy and seasonal vegetables.*

*Our wine expert recommends that this be paired with a Pinot Grigio, a dry white wine. Add \$5 - \$7*

How likely are you to order wine with this menu?

1 = not at all.....100 = I would order wine

Please answer the following questions honestly and to the best of your ability. Your responses are completely confidential.

**Question 35** *\*\* required \*\**

What is your current age?

Characters Remaining:

**Question 36** *\*\* required \*\**

What is your zip code?

Characters Remaining:

**Question 37** *\*\* required \*\**

How far do you live from a wine producing region?

- 0 to 100 miles
- 101 to 250 miles
- 251 to 500 miles
- I don't live within 500 miles of a wine producing region.

**Question 38 *\*\* required \*\****

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Is the neighborhood in which you live characterized as urban or rural?

An urban area is characterized by higher population density. Urban areas may be cities or towns.

Rural – Sparsely populated and characterized by large distances or with low population density

Please characterize your neighborhood:

- Urban
- Rural

**Question 39 *\*\* required \*\****

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What is your gender?

- Male
- Female

**Question 40 *\*\* required \*\****

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Which of the following best describes your educational level?

- Less than High School Degree
- High School Degree/GED
- Some College
- Associates Degree
- Bachelors Degree
- Graduate Degree



**Question 41** *\*\* required \*\**

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**What is your ethnicity?**

- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or other Pacific Islander
- White
- Other

**Congratulations! You have fully qualified and completed this research study.  
Your account will be credited the full credit amount within 7-10 business days.  
Thank you for your time and your opinions!**


- End of Survey -

# Appendix C - Institutional Review Board (IRB) Approval Letter



TO: Elizabeth Barrett  
HMD  
107 Justin

Proposal Number: 5363

FROM: Rick Scheidt, Chair   
Committee on Research Involving Human Subjects

DATE: February 19, 2010

RE: Proposal Entitled, "The Wine Purchasing Behaviors of Millenials in Casual Dining Restaurants"

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written - and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, **45 CFR §46.101, paragraph b, category: 2, subsection: ii.**

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.