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## **DROWNING IN THE WINE LAKE: DOES CHOICE OVERLOAD EXIST IN WINE RETAIL?**

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**Drowning in the Wine Lake:  
Does Choice Overload Exist in Wine Retail?**

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**Abstract:**

Research by many scholars studying consumer behavior has determined that choice overload can be a demotivating characteristic for consumers faced with a broad array of options. However this has yet to be studied at the wine retail level. Wine is unlike most consumer goods due to the large number of intrinsic characteristics relative to extrinsic ones, and the sheer number of choices in the category a consumer must choose from. Also salient is the general concept that as a wine consumer grows in experience they desire a broader range of choices.

A three-part study was designed to test for the existence of the choice overload effect: first a qualitative survey was sent to 4000 wine consumers (from a retailer's email database) in order to establish a baseline of self-reported behavior in a wine shop environment. Next over 100 customers were observed as they shopped in a group of wine stores. Finally those same customers were interviewed post-purchase about their satisfaction with the wines they purchased.

Analysis of the data generated showed no evidence of the choice overload effect in any of the three phases of the study. An examination of how this retailer was able to mitigate and even eliminate the impact of choice overload was discussed, and points to future research in this field.

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## Chapter 1: Introduction

*It's a beautiful evening in the hills of Valpolicella. As the vines soak up the last of the sun's rays for the day 500 meters above the Po Valley, the winemaker and his wife are putting the finishing touches on a home cooked meal to be served to a few visiting retailers from America. As the courses fade into the night, and the last of the Grappa drunk, the retailers head down the hills wondering if there could be any finer wine experience to be had.*

*The next day, still feeling warm from the previous night, the retailers enter the cacophony of VinItaly. The assault on the senses is merciless, as 4500 producers compete for the attention of 150,000 visitors. The previous night's good feeling is erased, replaced with nothing more than a survival instinct.*

People can get overwhelmed when faced with too many options to choose from (Schwartz, 2004). If our intrepid retailers are able to regain their bearings and successfully navigate the trade show, they may agree on a few wines to send into their wine shops. At that point, the lucky Italian wines join a stack or a shelf or a display with hundreds of other Italian wines, some of which also have winemakers who cooked for the retailers. Others have a rating, ranking or some other signaling cue. Yet others have bold, eye-catching labels that attempt to lure consumers to them. And the entire Italian selection “competes” with the California, France, Spain, South America, Australia and many other sections in the wine shop. When many wine shops carry multiple thousands of individual wine labels, and Total Wine in the US advertises that each of their 70+ stores offers 8000 wines, how do consumers handle the selection? With the explosion of selections available to the wine customer in the past two decades, are they more satisfied with their wine shopping experience? Barry Schwartz says that the effects of expanded choice are the following: “It means that decisions require more effort. It makes mistakes more likely. It makes the psychological consequences of mistakes more severe” (Schwartz, 2004 page 74).

Retailers want happy customers. There are many actions that retailers use to help create unconscious happiness and satisfaction: music, color schemes, price framing, and even subliminal messaging (Areni & Kim, 1993). With a body of research from other disciplines that show customers are less satisfied when presented with too many options, can a wine shop that carries essentially thousands of the same product type (alcohol) tailor their selections to maximize satisfaction? There has to be a balance between carrying too few selections (having one *Bordeaux rouge* for example) and an overload that leads to customer dissonance (offering 87 different *petits chateaux*). Where

do consumers want that balance to be, even if they aren't consciously making the distinction?

A wine shop can be a confusing environment for a customer, even for one who is engaged and knowledgeable about the world of wine. Large supermarkets can even carry thousands of selections from regions, and a large wine shop can carry wines from more than two dozen countries. There is a cacophony of signs, ratings, descriptions, colorful labels that all attempt to draw the consumers eyes to that one special bottle. And of course each of those bottles is entirely different from one year to the next due to the vagaries of the harvest. And wine is an experience good, as the only way to ascertain the qualities of the bottle is to consume it (Dubois & Nauges, 2010).

Without generally having knowledge about the intrinsic knowledge of the wine, consumers need to rely on extrinsic cues (Lockshin, Jarvis, d'Hautville, & Perrouty, 2006). In many cases even the obvious extrinsic markings aren't very helpful; customers may know that the wine comes from the Rhone Valley and is a 2009, but most likely they don't have detailed knowledge of either the weather in that vintage or any winemaking steps taken after harvest. Wine producers, especially from the old-world include no information on the label other than name, region and vintage.

However simply establishing the plethora of choices and information available to a wine consumer is not enough to definitively say that a choice overload situation exists in wine retail. Once a customer reaches a threshold of comfort with the beverage, wine does not have the same consumption and purchasing patterns as other consumer commodities like tomato sauce, toothpaste or televisions. Consumers generally enjoy and seek out new wines to experiences; new regions, grape varieties or producers. Whereas a consumer will often go to the supermarket and purchase the same brands in the same categories week after week, a wine customer will often purchase a "mixed case" of a dozen different wines; and in the next visit try a different dozen.<sup>1</sup> This exploratory behavior would imply a necessity for a selection greater than that of other consumer goods.

Wine may not be a "regular" consumer product, but neither is wine a collectable good (other than a few number of individual labels like the Bordeaux first growths). 99% of all wine is consumed within 24 hours of being purchased (SupremeCorq, 2012). Unlike collectable plates, figurines or sports memorabilia wine consumers do not try and collect *everything* in a specific category, checklist-style. Where someone may try and seek out all 300+ pieces in a collectible village set, that behavior isn't seen in a wine shop.

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<sup>1</sup> This is based on professional experience and observation rather than empirical data

Wine is therefore a hybrid good, with characteristics that are neither those of a normal consumable commodity nor that of a collectible good.

This paper will attempt to address the question of whether the choice overload phenomenon exists in a wine retail environment. First I will undertake a review of current literature on both choice overload and consumer behavior in a wine retail environment. Second will explain my hypotheses relating to the main question. Next will explain the methodology and design of the study created to prove or disprove the hypotheses. Then I will discuss results and findings, and relate those findings back to my hypotheses. The final section attempts to elucidate implications for managers, lastly followed by thoughts for further research.

## Chapter 2: Review of Literature

### 2.1 Consumer choice overload

Choice overload was first described by Alvin Toffler in his 1970 book, "Future Shock." He called it "overchoice" and referred to the vastly growing amount of choices consumers faced in the post-industrial markets. As he describes it; "[Overchoice takes place when] the advantages of diversity and individualization are canceled by the complexity of buyer's decision-making process." (Toffler, 1970).

The concept of choice overload is an accepted part of the study of consumer behavior (Schwartz, 2004; Airely, 2008). When presented with too many options, people have a difficult time cognitively processing all the possibilities, leading to them either walking away from the transaction, or being less satisfied about the transaction than they would have been with fewer options. Iyengar *et al* (2000) studied consumer behavior sampling jams in a supermarket setting. When presented with a selection of six different flavors of jam to sample, 30% of the consumers eventually bought a jam. On another day the authors set up a tasting of 24 varieties of the same producer's jam. Only 3% of sampling customers purchased jam, a 90% decrease in purchasing volume. Within the same paper, the authors also describe a choice study involving college students selecting Godiva chocolates under the pretense of helping Godiva conduct market research. Half of the students selected from six choices and the other half from two dozen different chocolates. After the selection was made and the students allowed to sample their selection, they were told that for compensation they could receive either

\$5 in cash or a Godiva gift box with a value of \$5. Among the students who saw six chocolates, nearly half (48%) chose the gift box. However only 12% of the students with the larger selection chose the box, signifying a psychological unease with chocolates in general after seeing the larger choice.

Expanding on Iyengar *et al's* research, Gourville and Soman (2005) went a level deeper and categorized items as either “alignable” or “non-alignable.” Alignable good assortments are products in which the differences vary only in one respect: car models that are identical other than engine size, or jeans that vary just in the waist measurements. Non-alignable goods vary among different dimensions and involve trade-offs by the consumer choosing among them. These include choosing computers with different hard drive sizes, RAM memory and graphics processors, or politicians with differing views on economic and foreign policy views. They find that having alternatives in alignable goods does not lead to an overchoice effect, but non-alignable goods will create that effect as consumers are forced to give up something that may be desirable in order to choose another attribute they want. This has implications for the wine retailer depending on whether wine is considered an alignable or non-alignable good. More research is needed on if consumer’s see a selection of wines as choosing among one attribute (alcohol at the top level, or Cabernets at the secondary level), or having to choose between Old World and structured and Cabernet and 90 points for example.

While most of the literature concerning choice overload only includes studies where people were asked to choose among a selection of goods, adding the option to choose none of the items (the “no-choice” option) changes the dynamics of consumer behavior (Dhar & Simonson, 2003). As this is the most common situation in the real world their research has implications for practical use. They find that when given the no-choice option consumers choose the least-risky option (when simply not choosing at all) over items that have one asymmetrical attribute, like a restaurant that’s known to have great food, but lousy service. This presents the likelihood of disappointment, considered the “safe” choice. This would indicate that consumers would be more likely to select the “safer” well-known, branded wine that’s assumed to be unexciting but less risky over an unknown but interesting-looking wine label.

In an interesting exploration of the subsets of choice overload, Polman (2010) separates choosing for oneself versus choosing for someone else, as in selecting a gift. In the only study this author is aware of directly concerning the effects of choice in a wine retail environment, Polman interviewed customers leaving two wine shops in the same city in New York. One of the wine shops was 400 square feet in size, representing a small-choice option

and the other ten times as large, representing a large choice selection. When asked how satisfied they were with their purchase on a scale of 1-11, customers who were purchasing for themselves from the smaller store self-rated as more satisfied than the customers from the larger store. Contrarily, customers who were purchasing for another were happier with their transactions from the larger store than the smaller. It should be noted that the sample size was quite small (68 customers in the two stores) but it does lead to interesting questions for the wine industry, as many purchases are meant as gifts to be brought to dinners, holiday presents, etc. In Polman's study 30% of the transactions were reported as being for others. Should that percentage hold up in further studies, it implies a risk in tailoring assortment for one group that may decrease transactional satisfaction for another large group of customers.

In an attempt to look at mitigating factors which might ease the onset of Choice Overload, Haynes (2009) varied assortment selections with time constraints given subjects in which to make a selection. He discovered that having more time in which to choose does in fact lessen the Choice overload impact and allow subjects to feel more satisfied with their choices (Haynes 210). This could be adapted by retailers to remove some selection during the busier times (ie, Christmas) and allow harried shoppers to choose between fewer items.

## 2.2 What consumers look for in a wine shop

In studying wine shops in Australia, Goodman, Lockshin and Remaud (2010) identify three different wine shop models: "category killers," "proximity/convenience stores" and "specialty" stores. In surveying more than three hundred wine consumers, the authors found that most significant attribute in choosing among a selection of competing stores is location close to home or work. This is logical as wine is a commodity where quality in individual brands can't differ among stores and as long as price is relatively equal there isn't a benefit to driving further than necessary. The attribute ranked second was having good customer service. This is echoed in another Lockshin paper (Lockshin & Kahrmanis 1998) which also finds that customer service is rated above all other functional attributes (selection, price, store layout, etc.) Goodman *et al* also found that for category killer stores, prices lower to competition and selection of wines under \$15 were the most important attributes. For neighborhood stores, convenience and customer service were the two highest rankings. In all stores, advertised specials were considered not important. Interestingly at the specialist shop, having a staff with good wine knowledge was rated more important than a good selection of

higher priced wines, implying that even more knowledgeable consumers want a salesman that can be trusted with making wine recommendations.

Developing and retaining a strong sales staff is important to keeping a satisfied customer base that has high purchase loyalty (Macintosh & Lockshin, 2007). As wine is a complex good, it is unsurprising that consumers would look to form relationships with store staff that can help navigate through the myriad options. Retail stores that make an effort to train their staff and keep them happy so they stay will be better able to form and maintain customer relationships than stores with a high turnover of employees. Similar to this, a study of South African wine stores (Benke, Cumming, & Jolly, 2012) shows that familiarity in a category decreases the choice overload effect.

The next section will look at literature on how consumers behave inside a wine retail environment.

### 2.3 How do consumers choose from an assortment

As an experience good, the qualities of a bottle of wine aren't known until after it is consumed. Therefore when presented with an unfamiliar bottle on a retail shelf, a customer relies on a mix of intrinsic and extrinsic cues to help make a decision (Lockshin, Jarvis, d'Hautville, & Perrouy, 2006). Lockshin *et al* created a discrete choice experiment to see which cues resonate most with customers. They found that unknown brands have a halo affect from being from a well-regarded region as well as having received a medal. Conversely more expensive wines had a negative sales correlation with the presence of a medal. They do not attempt to link medals with points from wine critics as it seems counterintuitive that higher priced wines sell better without high ratings. They also differentiate between high and low-involvement consumers. High involvement are more experienced, have more knowledge and are more confident with wine and are more likely to select an unknown brand than a low involvement consumer, who is more likely to shop on price and the presence of medals.

Kallas, Escobar and Gil (2012) expanded on the study of cues by tracking recognition of Catalonia as a wine region. The regional wine council ran an advertising campaign on TV in Barcelona over the Christmas holiday period. The authors surveyed consumers prior to and after the campaign to measure consumer sentiment and likelihood of choosing a Catalan wine. They found that the attribute "Catalan" was rated higher than "Spanish" for wine for the post-campaign consumer survey as compared to the pre-campaign. This correlation was stronger as age increased. Coupled with their finding that

younger drinkers showed greater preference to wines already experienced over a recommended wine, this shows a need for retailers to have tastings in their stores in order for younger consumers to feel comfortable expanding their purchasing range.

Before they even begin to look at specific bottles, consumers form unconscious impressions on a store's selection (Amine & Cadenat, 2003). They identify three kinds of goods, with different consumer desires for choice: "delight products," "loyalty goods" and "utilitarian goods." They find that consumers' preference for greater selection is much larger in delight products than utilitarian goods, and moderately larger than loyalty products. As an example, between two supermarkets customers considered the one with a 7% greater selection in yogurt to be the stronger one, despite both stores having over 260 individual selections! On the contrary, one of the stores had 28% more brands of dish detergent and the subjects rated the store selections as equal. This has interesting implications for the wine business. In a wine shop, do the different categories of wine (Bordeaux, Tuscany, Australia, etc.) make up their own class of good or is the selection as a whole considered one category, in which consumers look for specific big brands as an anchoring mechanism to decide on the assortment quality?

Going deeper into the concept of how consumers unconsciously form opinions on store assortment, Morales, Kahn, McAlister and Broniarczyk (2004, page 1) state that consumers' perception of variety and satisfaction are dependent upon how the assortment is organized, both internally by the consumer and externally by the retailer." Both retailers and consumers group their merchandise into categories, and only when there is a match between the two do customers perceive a good assortment. If a consumer is looking for "wine for dinner tonight" but the retailer has the categories "United States", "France," etc. there is not a match between structures. It then becomes important do know exactly how most customers look for wine in a store; by region, occasion, price or something else and attempt to tailor the store offerings in that way. Lastly, Goodman Kahrmanis (2010, page 174) describe store image as the "consumer's perception of a store's positioning." To maximize consumer satisfaction, retailers must carry the right amount of products *and* display them in the way their customers will best respond to.

Many retailers will use signage such as "Best Seller" or "Manager's Pick" to spotlight individual items (Spasova, 2009). Store managers do this with the assumption that streamlining a customer's choice by guiding them to obvious items (presumably higher-profit centers for the retailer) helps both retailer and customer. Spasova points to studies that not only disprove this theory, but in fact results in the opposite: in stores with a large selection, the odds of a highlighted item matching one that the customer was already considering are

quite small, so customers are forced to expand their efforts in picking an item, leading to an increase in the overload effect (2009, page 158).

## 2.4 Choice overload in a wine store: hypotheses

From the review of relevant literature, it is to be assumed that a choice overload condition does exist in a wine retail environment:

H1a: The greater number of wines available in a store, the lower the satisfaction of customers with their choices. The large selection of wines with mostly intrinsic cues will lead to customers feeling less satisfied with their eventual choices given an increase of options. Stores with greater selections should have lower overall satisfaction than stores with smaller offerings. This relates to Iyengar et al's experiment with jams (2000) showing that large selections lead to fewer purchases.

H1b: Taking Gourville and Soman's work (2005) on alignable versus non-alignable goods as well as Polman's study of shoppers preferences (2010) leads to the hypotheses that the greater number of wines available in a store, the greater the difficulty for customers to make their choices of wine(s) to be bought. This difficulty would be measured in terms of reported satisfaction.

The large selection of wines with mostly intrinsic cues will lead to customers feeling less satisfied with their eventual choices given an increase of options, as well as increasing the difficulty in choosing which wines to buy.

An affirmation of H1 has yet to be studied in this environment and would have benefits for the wine industry given the rise of mega stores with multiple thousands of choices. However, given the rather unique place of wine in the system of consumer goods, it can also be surmised that:

H2, the more knowledgeable a consumer feels about wine, the higher the threshold to reach choice overload.

Finally, based on the importance and ubiquity of wine critics, ratings and medals in a wine environment, consumers seek information to help them sort through the myriad selections and choices and information that abounds. That leads to:

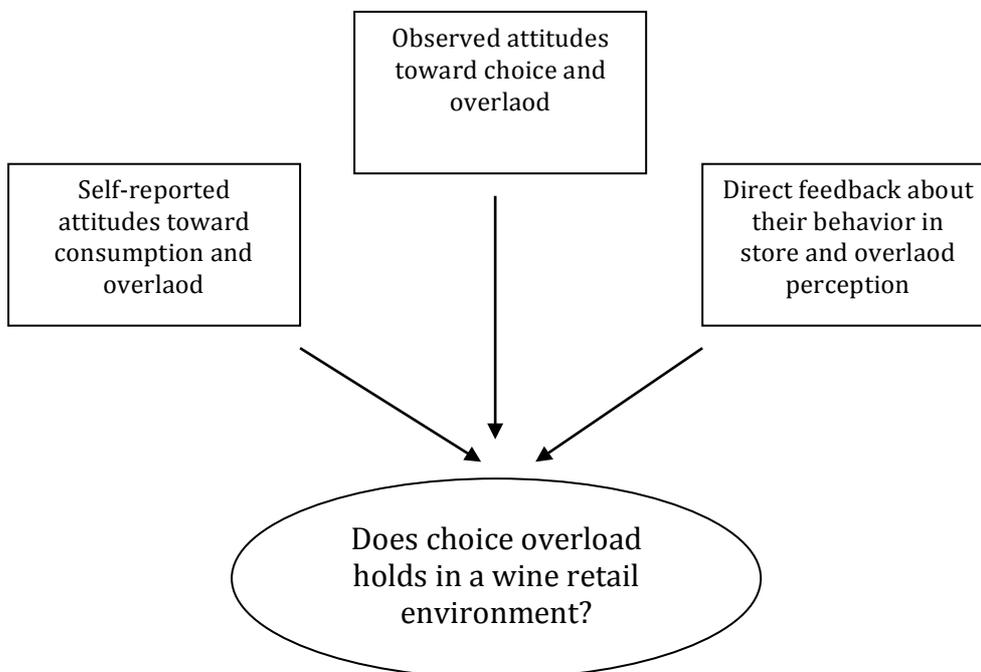
H3, A customer that feels stronger satisfaction with a wine store will have a higher threshold before experiencing choice overload than a customer with a lower reported store satisfaction.

In conclusion, this paper will address the question of whether a choice overload effect exists in a wine retail environment. Additional questions to attempt to answer are where the delineation exists between sufficient levels of choice and the overload condition, and are there steps that a retailer can do to raise the threshold level before overload happens.

## Chapter 3: Methodology

### 3.1 Overview

Consumer research in many fields has provided that choice overload does exist and leads to lower satisfaction with purchases, or can even lead to no purchase being made at all. (Dhar & Simonson, 2003) Based on this previous research this study will be adopting a deductive approach. Using currently available research in the fields of psychology and consumer behavior, the author has constructed three hypotheses. These hypotheses will be tested through quantitative measures in an attempt to confirm them. Three steps will be used in an attempt to prove the hypotheses:



To ascertain the validity of the hypotheses regarding choice overload in a wine retail environment a combination of methods will be used. This author has access to the operations and data for a regional chain of nine large wine and spirit stores in the New York City metropolitan area (New York, New Jersey and Connecticut). The nine stores have a similar “look and feel” to each other, and attract the same customer demographic. A main difference is in the stores’ physical size, ranging from 4000 sq.ft. to 12,000 sq.ft with most clustered around 10,000. Alcohol sales in the northeastern part of the United States is a fragmented market. Sales of alcoholic beverages in the United States are controlled by each state individually. In the northeast licensing laws restrict the number of licenses an individual/company can control, limiting the reach of any one retailer. Liquor cannot be sold in grocery stores, and in New York beer cannot be sold with wine and spirits. The retailer’s smaller-sized stores that sell beer therefore have less room to devote to wine, with a commensurately scaled-down selection. Overall skus of wine sold in each store range from 1100 to 1900. The differences between stores allows for ease of testing the choice overload hypotheses.

- Step 1 will be an exploratory study to gather information on consumer’s self-reported attitudes towards their wine purchasing habits and their perceived feelings about choice overload
- Step 2 will consist of an observational study to measure how customers actually behave in a wine shop environment. This includes time spent shopping and whether they seek help or not
- Step 3 will be live interviews with a random selection of the customers that were observed in step 2. These interviews will see how consumers actual behavior mimics their self-reported beliefs and attitudes.

The following sections describe the specific methods to be used in information gathering.

### **3.2 Step 1: Quantitative questionnaire**

Initially a survey will be sent via email to the customer database of the retailer. The survey will be used to measure customer’s attitudes on how they browse and select wine in a wine shop: if they shop by country or by varietal; do they seek help from store personnel or prefer to browse on their own; and how many bottles do they usually purchase in one visit. The survey will be randomly sent to 4000 names from the retailers email database. Achieving a representative sample of the population with a 95% confidence level and a confidence interval of 3 will require receiving 843 responses. A large

baseline sampling of attitudes that can be used to predict behavior to be seen in the observational stage will be measured.

Questions used:

**1. Roughly how often do you shop for wine?**

- once or twice a year
- every couple of months
- monthly
- a couple of times a month
- weekly or more

**2. How many bottles of wine do you usually buy in one shopping visit?**

- 1
- 2-3
- 4-6
- 7-12
- more than 12

**3. Thinking about your wine purchases, do you mainly select wine according to:**

- brand
- country/region
- grape variety
- staff recommendations/tasting
- label design
- other/depends

**4. When you do your wine shopping are you usually rushed for time or do you have time to browse and explore?**

- rushed for time
- able to browse

**5. Do you buy wines mostly from one region (ie, I usually buy Italian wines) or multiple areas (ie, I usually buy wines from more than one country or region)**

- one area
- multiple areas
- other

**6. Which best describes you when you enter a wine shop?**

- I know exactly what I want to purchase and only look for that wine(s)
- I have a rough idea of what I want and browse until I see something interesting
- I have a rough idea of what I want and ask for help finding something interesting
- I have no idea what I want to buy and browse until I see something interesting
- I have no idea of what I want to buy and ask for help finding something interesting

**7. If the store doesn't carry the specific wine you were looking for, do you:**

- leave without purchasing what you wanted
- replace with another wine

**8. How much time do you normally spend looking for wines in the store?**

- one minute
- one to five minutes
- five to ten minutes
- longer than ten minutes

**9. Which statement best represents your feelings about when you taste wine in a wine shop?**

- never
- when I have time
- when the tasting looks interesting
- as often as I can

**10. Does tasting wines in the store help you to choose which wines to purchase?**

- yes
- no
- not sure

**11. Thinking about the entire store, which statement best represents your feelings about Stew Leonard's Wines?**

- wish they had more selections in wine
- am happy with the number of wines they carry
- would prefer fewer options
- they have too many choices of wines

**12. Do you believe that having too many choices of wines in a store makes it more difficult for you to select the wine you want? Use a scale from 1 to 7 where 1=totally disagree and 7=totally agree**

totally disagree totally agree

<input type="radio"/>							
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**13. Thinking about the categories of wines listed in the table below, which one(s) do you associate with the following statements (if any):**

	Bordeaux wines	Red Zinfandel wines from California	Argentinian wines	Cabernet Sauvignon wines from California	Pinot Grigio
I know what to expect the wine to taste like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to find in the store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Would prefer more choices in the store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficult to choose from all that are available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I often purchase	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I never purchase	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to learn more about these wines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I know what to expect from this wine after reading the label	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**14. How strongly do you agree or disagree with the following statements:  
Please use the following scale where 1-strongly disagree, 2-disagree, 3-somewhat disagree, 4-neither agree nor disagree, 5-somewhat agree, 6-agree, 7-strongly agree**

	strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
I have a strong interest in wine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Wine is important to my lifestyle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talking about the wine I drink is something I enjoy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I travel I enjoy drinking the wine there	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I travel one of the things I like is visiting the wine regions in that area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always look out for new and interesting wines to buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rather stick with a wine I usually buy than try something I am not very sure about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Questions were chosen with the goal of ascertaining how customers

believed themselves to act in a wine shop: if they know in advance what they intend to purchase; how they choose from an assortment and settle on a specific bottle; how long they spend in the wine shop. Questions are also included to gauge customers' perceptions of the wine shopping experience: is it a chore to be completed in the quickest amount of time or instead a pleasurable act of browsing and exploring. Full results from the survey appear in Appendix A.

Compiling the responses will give a baseline on how customers perceive their behavior when in a wine retail environment. The second piece to the study will be actual observations of customers inside a wine shop to see if observed behavior correlates with predicted behavior from customers' own statements of beliefs.

### 3.2 Step 2: Observed behavior

In order to ascertain how customers actually behave while in a wine store, a direct observational approach will be used. Three of the nine stores will be used for the observations, choosing one store each in New York, New Jersey and Connecticut in order to gather as wide a range of customers as possible.

Using a tracking and timings sheet inspired by Dr Anne Sharp customers' pathways through the store will be measured (Sharp, 2012). Time spent in each section of the store will be noted, as well as any interactions with store staff and bottles selected from that section.

Specific focus will be on five categories: wines made from the Zinfandel grape in California; Cabernet-based wines from California; red Bordeaux; Pinot Grigio and Argentinian wines. These were chosen for the following reasons:

- Zinfandel is a relatively small section of overall US sales, but other than a few market leaders the category is diffuse. Regionality does not appear to be important; rather it is a typical Californian "fighting varietal." Does the lack of a reference label make the category more difficult to shop as there are few well-known brands with which to compare?
- Cabernet is a major category in the US market, with a wide range of offerings and many major brands that have large market shares. This large category has many dominant brands. Does the larger choice

assortment in the wine shops get balanced by the recognizability of many of the labels?

- Bordeaux is still a bit mysterious and confusing to the majority of customers; with a multitude of regions and *cepage* combinations. For many consumers, Bordeaux would be considered a non-alignable good, leading to less satisfaction when choosing from that category.
- Argentina is a rapidly growing category, though dominated by the Malbec grape. There should be higher satisfaction, as the new category does not have dominant labels and customers are still experimenting with the category and do not have set notions.
- Pinot Grigio from Italy is a basic category in the United States. People are very label-conscious, and the category is dominated by large companies. Customers do not expect complexity from this wine and satisfaction should be high.

Customers will be randomly selected upon entering the store. Along with tracking their path through the store, their behavior will be noted as well. How long is spent in each section; how many bottles are touched/looked at; what gets placed into the customer's cart/basket and whether and where the customer seeks out store staff. If direct observation of eventual purchases are not possible (ie, label is obscured), data from the retailer's POS system will enable tracking of selected wines.

Observations will be made for at least 100 customers; spread across three different locations in the same retail chain. These three locations are in three different states, and have sales volumes that differ by a factor of 4 from the highest to lowest locations. Completing observations across markets allows for greater diversity in consumers and gives a more complete picture of the "average" wine customer. And having a wide range of store volumes again allows for a more complete picture of the range of wine consumers.

As described in the results section later, the original facet of the study to vary selection choices within specific stores was not approved by store management, so a proxy was created to measure customers' perceptions of choice levels. This will be explained in the following section.

### 3.3 Step 3: Follow-up interview

After the observed customer has completed their transaction, they will be interviewed outside the store regarding their satisfaction with the purchase. The interview will be as follows:

- 1) Did you know in advance which wines you were going to buy?

- 1a) If yes, did you only purchase those wines
- 2) On a scale of 1-10, how satisfied are you with the wine you purchased (not the store itself)
- 3) On a scale of 1-10, how satisfied are you with the store overall (not the wine you just purchased)
- 4) I see that you just purchased a (insert type of wine observed being purchased). If you had to guess, how many wines of this type did you have to choose from?
- 5) On a scale of 1-10, please rate your wine knowledge.

Question 4 was developed as the proxy to varying choices within the store itself. Are customers more satisfied when they perceive fewer choices than there in fact are; or inversely are they less satisfied if they feel like they have more choices than in actuality.

After compiling data from the three parts of the study, I will attempt to correlate behavior to evidence of choice overload in the data set.

## Chapter 4 Results

### 4.1 Step 1: Qualitative Questionnaire

4000 surveys were sent to a random selection of names from the retailers' database. 806 responses were collected. These customers self-reported as being high-consumption wine drinkers: 57% shop for wine bi-weekly or more. 50% of respondents purchase four or more bottles of wine in each shopping trip. When asked whether they normally have the time to browse and explore in the wine store or if they were rushed for time, fully 86% expressed the ability to browse. This suggests a more knowledgeable customer base than what would be considered normal and that for these customers wine shopping is not a "chore" like food shopping.

An analysis of consumers' self-reported behavior does not show evidence of a choice overload effect. When asked to rate the level of agreement with the statement "Do you believe that having too many choices of wine in a store makes it more difficult for you to select the wine you want," 70% chose "totally disagree" where only 5% selected "totally agree." Also, 83% of respondents reported being happy with the number of selections in the wine store, as compared with 14% who wanted greater selection and only 3% preferring a more limited selection range.

Even when looking solely at those respondents who agreed with the statement about having too many choices leading to more difficulty in choosing, the majority of those people still were satisfied with the selection levels in the store:

Answer Options	Agree with statement	Overall
wish they had more selections in wine	8%	14%
am happy with the number of wines they carry	71%	83%
would prefer fewer options	8%	1%
they have too many choices of wines	12%	2%

This satisfaction with the overall choice level in the store even extended to those who were usually rushed for time while shopping:

Thinking about the entire store, which statement best represents your feelings about Stew Leonard's Wines?			
Answer Options	When you do your wine shopping are you usually rushed for time or do you have time to browse and explore?		Overall
	rushed for time	able to browse	
wish they had more selections in wine	20%	13%	14%
am happy with the number of wines they carry	74%	85%	83%
would prefer fewer options	3%	1%	1%
they have too many choices of wines	4%	2%	2%

A major divergence in the selection patterns did occur among those people who were under a time constraint versus those with time to browse:

Thinking about your wine purchases, do you mainly select wine according to:			
Answer Options	When you do your wine shopping are you usually rushed for time or do you have time to browse and explore?		Overall
	rushed for time	able to browse	
brand	28%	10%	13%
country/region	9%	15%	14%
grape variety	23%	38%	36%
staff recommendations/tasting	11%	15%	15%
label design	2%	1%	1%
other/depends	27%	20%	21%

The plurality of those rushed for time chose their wine by brand primarily (28%) whereas only 10% of non-rushed respondents chose by that method.

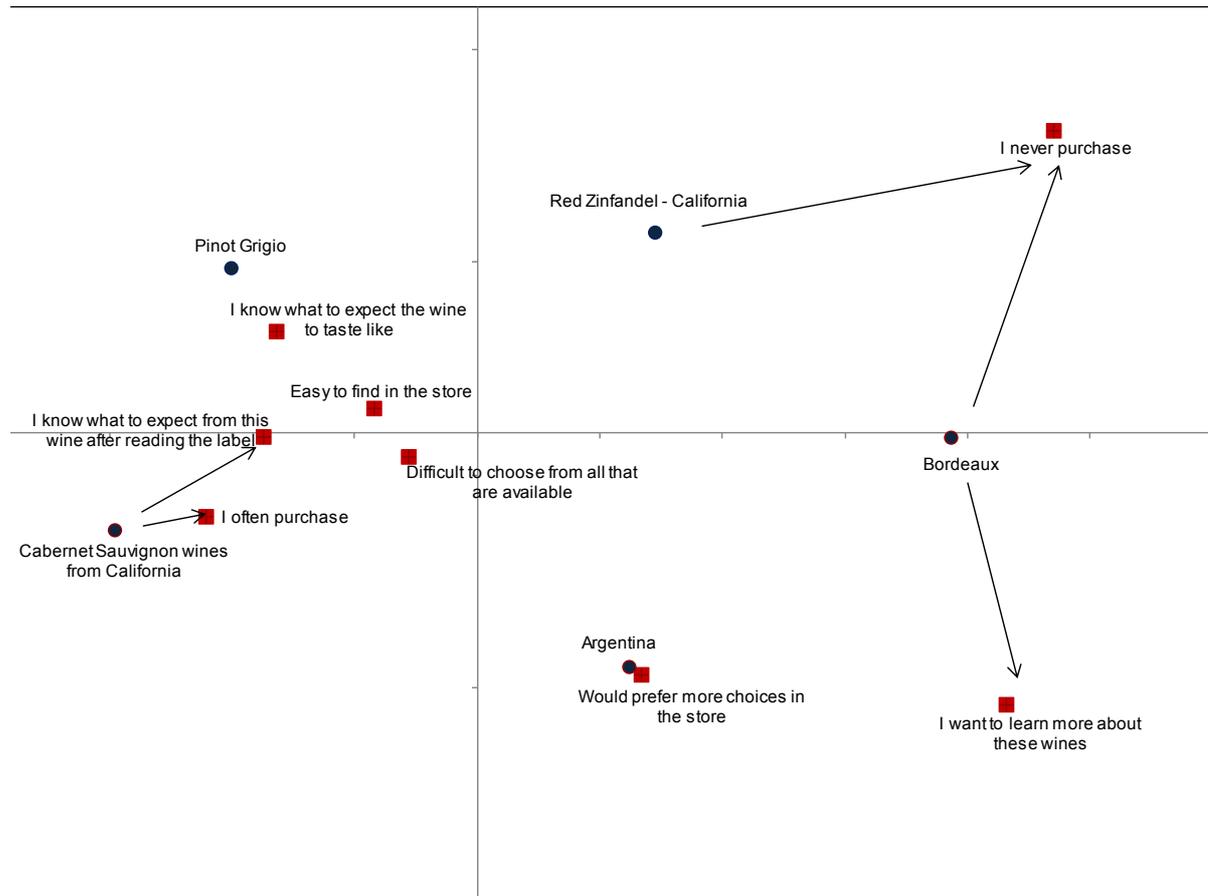
Responses given to the questions about feelings towards varying types of wines revealed intriguing customer perceptions:

**13. Thinking about the categories of wines listed in the table below, which one(s) do you associate with the following statements (if any):**

Answer Options	Bordeaux wines	Red Zinfandel wines from California	Argentinian wines	Cabernet Sauvignon wines from California	Pinot Grigio	Response Count
I know what to expect the wine to taste like	31%	38%	34%	65%	61%	646
Easy to find in the store	40%	45%	46%	73%	61%	592
Would prefer more choices in the store	30%	21%	36%	35%	18%	300
Difficult to choose from all that are available	28%	19%	18%	42%	26%	194
I often purchase	22%	28%	34%	65%	42%	609
I never purchase	49%	46%	24%	12%	28%	503
I want to learn more about these wines	57%	30%	54%	30%	17%	430
I know what to expect from this wine after reading the label	26%	34%	36%	65%	48%	366

As expected, Bordeaux wines with their more complex labeling was rated lower on purchase frequency and understanding of what the wine will taste like. However customers also expressed an interest in learning more about Bordeaux. They are also interested in becoming more educated in the wines of Argentina. As stated earlier, Argentina is a rapidly rising country of interest for the US wine consumers. It is not surprising that there would be the dichotomy between people wanting to learn more about them while at the same time expressing an interest in seeing more options for them in the stores. The actual number of Argentinian wines in the individual stores for the wine chain range from 34 to 51.

A perceptual map created from the table shows the relative responses:



With the five wines in all four quadrants, this Pmap shows that customers view these wine categories as different and distinctive from each other. Using a deviation table in conjunction with the Pmap shows how the specific categorizations customers make of each wine style deviates from an expected norm.

DEVIATION level is 3.5% n= 753					
	Bordeau x	Red Zinfandel	Argentina	Cabernet	Pinot Grigio
I know what to expect the wine to taste like	-8.4		-7.0	5.4	11.5
Easy to find in the store -	-5.7			3.7	4.5
Would prefer more choices in the store -			4.0		-4.2
Difficult to choose from all that are available -					
I often purchase -	-9.8	-4.8		13.1	
I never purchase	13.4	11.9		-19.0	
I want to learn more about these wines	13.2		11.3	-10.7	-12.1
I know what to expect from this wine after reading the label	-5.5			5.7	

This data tells us that customers have the following feelings towards each wine style:

- Bordeaux is not purchased much, though they want to learn more about them (the positive numbers in the deviation table). Customers do not know what to expect from a Bordeaux, and they are seen as not easy to find in the store (though this could be a function of low purchase rates)
- Red Zinfandel is also not purchased much. Customers did not have strong feelings regarding the other attributes.
- Customers reported as wanting to learn more about wines from Argentina, and also prefer more choices in that section. They also state unfamiliarity with what the wines would taste like. Taken together this shows a young category of wine, growing in popularity.
- California Cabernet scored very high in terms of purchase rates. Customers know what to expect from them, however they do not wish to learn more. Finally they are seen as easy to find, though as with Bordeaux this may be related to purchase rates.
- Finally, Pinot Grigio scored quite high relative to understanding what the wine will taste like. Conversely it rated the lowest of the five wines regarding wishing to learn more. Interestingly customers wished for fewer options, despite Pinot Grigio being the largest single category of wine sales.

## 4.2 Step 2: Observations

Initially I compared the answers given in the initial survey to those actually observed in-store to look for similarities.

First is the number of bottles purchased in one visit:

method	1	2-3	4-6	7-12	<12
survey	6%	45%	27%	16%	7%
observed	21%	38%	25%	12%	3%

The survey respondents reported much higher purchases per visit than those actually observed in the stores.

Next, regarding time spend in shopping for wine:

<b>method</b>	<b>1</b>	<b>2-3</b>	<b>4-6</b>	<b>7-12</b>	<b>&lt;12</b>
survey	0%	7%	32%	61%	0%
observed	12%	44%	30%	13%	0%

Again, there is a large discrepancy between reported and actual behavior. People in-store shopped much more quickly than what the survey respondents self-reported. There could be many factors contributing to this discrepancy. People may not have been accurate in gauging the actual passage of time while they shop. The observations may not have been equally distributed across days of the week and time of day, so possibly customers who tend to spend more time in store (ie, weekend shoppers) were under-represented in the observational sample. Finally, one possible factor in the seemingly large discrepancy between survey and observational results is in the two population samples. The survey group has opted-in to receive communications from the retailer. They are most likely more engaged and more committed wine drinkers than the average consumer; and overrepresented in the survey sample as compared to the general observational sample.

There were areas of overlap between the observational cohort and the survey responders. 30% of the observed customers asked for help while shopping. This is more in agreement with the survey cohort, in which 25% of people reported as asking for help.

### 4.3 Step 3: Interviews

Results from the live interviews revealed an unexpected result: no discernable evidence of choice overload emerged.

<b>Location</b>	<b>n</b>	<b>Avg Satisfaction wine purchase</b>	<b># of Wines</b>
Farmingdale	44	9.2	1849
Paramus	50	9.0	1196
Newington	25	9.2	1626
<b>Total</b>	<b>119</b>	<b>9.2</b>	

Out of the 119 interviews, only three respondents rated the satisfaction with their wine choice less than seven on a scale of 1 to 10. This also extended to satisfaction with the wine store in general:

Location	n	Avg Satisfaction overall store	# of Wines
Farmingdale	44	9.5	1849
Paramus	50	8.9	1196
Newington	25	9.2	1626
Total	119	9.2	

In fact, the location with the greatest number of wines had the highest overall store satisfaction and tied for the most wine satisfaction. H1a and H3 are not proved.

When looking at total time selecting wine, it was discovered that there was an inverse correlation between overall choices and time spent shopping for wines:

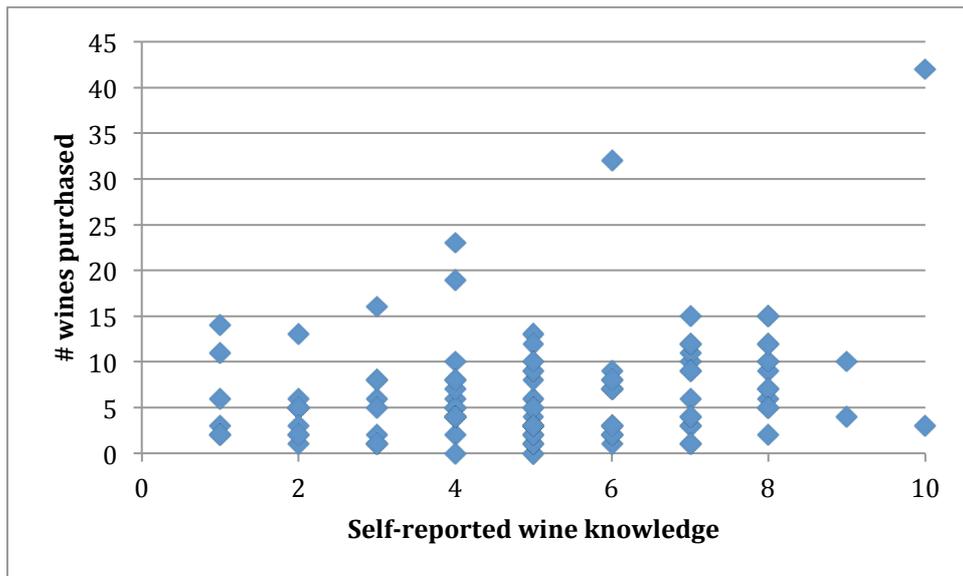
Location	Time shopping (ex-tasting)
Farmingdale	4 minutes
Paramus	6 minutes
Newington	7 minutes

H1b is not proved. It should be noted that the timings only included time spend shopping for wine. Beer, liquor the check-out process was excluded, as was time spend at wine tasting (if any).

H2 involved a link between wine knowledge and satisfaction. H2 was not proved either, as the correlation between the two categories was 0.006, nearly perfect non-correlation:



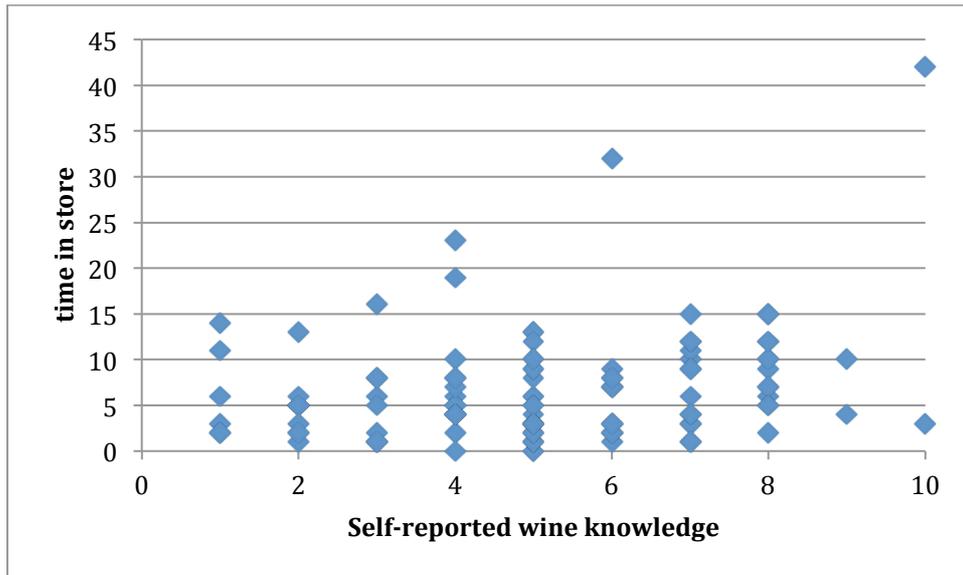
In an attempt to reevaluate the role of self-reported wine knowledge, I correlated the number of bottles purchased against wine knowledge. There was slight increase in correlation, but only to 0.11:



In fact the three of the four largest single purchases were to people who rated their knowledge as 5-7 rather than the higher ratings.

Initially the study design was such that selections within categories would be varied in the stores on different observational days. Store management was uncomfortable with doing this however. A proxy was developed instead, in the form of asking the interviewees to estimate how many choices that had to pick from in a specific category of wine they were observed to purchase. It was thought that their perception of choice could stand in for an actual differing of choices. For example if a section had 100 wines in it, would customers who thought they had 200 choices be less satisfied than customers who estimated only 50? Again the results showed no correlation; 0.07.

Finally correlating education with time spend in store showed slightly higher correlation, 0.24:



With the three hypotheses not proved it is apparent that choice overload does not exist for the customer base of this wine retailer. The following section will discuss questions raised by these findings and possible explanations.

## Chapter 5: Discussion

In this study, observational behavior matched consumer's self-reported behavior in regards to choice overload; it doesn't exist in this study cohort. So we are left with an absence of choice overload despite a body of research showing that the dilemma exists in many different environments. Can this be reconciled, and if so what implications does it have for retail managers? One possibility is that the customer base of this retailer is substantially different from the average wine consumer. The data from the survey shows them to be high consumption, highly-engaged wine consumers. The interviews show a high level of satisfaction with the store in general separated from the purchased wines. And customer demographic data shared by store management shows that the majority of customers pass at least three other wines stores to shop at this specific retailer, reinforcing the idea of loyalty and comfort with the store. That innate trust and confidence could be a mitigating factor in preventing choice overload, as shown by Macintosh and Lockshin (2007).

A second potential factor is the nature of the face to face interviews. Studies suggest that people give different answers when given the ability to be anonymous than when answering a questioner directly (Wilfley, Schwartz, Spurrell, & Fairburn, 1997). Perhaps the subjects being interviewed did not want to admit to questioner dissatisfaction with a purchase that they

transacted only minutes previous? However since the anonymous survey data matches the interviews in regards to the lack of choice overload we must continue looking for answers.

An intriguing possibility remains: is it possible that wine is a unique category of consumer good for which choice overload does not exist? Despite a large body of work showing choice overload exists, there is not unanimity in the literature. A meta-analysis of the current research on choice overload (Scheibehenne, 2010) does not find evidence of it; in fact they conclude “the overall effect size in the meta-analysis was virtually zero.” They further postulate that “‘more choice is better’ with regard to consumption quantity and if decision makers had well-defined preferences prior to choice.” This sounds rather like the high-consumption, engaged customer base of the retailer in this study. High consumption equates to more familiarity to the product category which leads to greater confidence in selecting from a larger set. Unlike the research on non-alignable goods (Gourville & Dilip, 2005), wine is bought regularly. Computers, televisions, ceiling fans etc. are low-frequency purchases, and consumers never get comfortable with the choices in a category. Wine comes with a comfort level, particularly when there is perceived to be “no bad option.” An anecdotal similarity is observed at a farmers’ market where a table might contain two dozen varieties of heirloom tomatoes. Instead of becoming paralyzed with the options and walking away, people grab a little of many kinds in order to taste many different kinds and discovering preferences on their own. This is possible with wine and tomatoes but not in high-value items like cars and computers where the financial implications of a bad choice are more stark.

Further, data in some of the major studies purporting to show choice overload is not consistent within their own datasets. Iyengar et al’s study with jams in a supermarket (Iyengar & Lepper, 2000) is one of the main study’s held up to prove the choice overload phenomena, and is the basis for Schwartz’s “The Paradox of Choice.” However when German researchers attempted to replicate this study, it did not hold for German consumers; whether for jams, chocolate or candies (Economist, 2010).

Other research directly contradicts the choice overload notion. One study showed that in many cases retailers that have reduced the number of options for sale actually reported *lower* revenues after the change, rather than an increase as the choice overload theory would expect (Boatwright & Nunes, 2001).

Finally there is work that shows that the key factor is how the assortment is arranged for the customer to see (Mogilner, Rudnik, & Iyengar, 2008).

Categorizing into discrete sections help frame the choices into manageable sections, increasing reported satisfaction.

Back to the wine shop framework, it is possible that there are several mitigating factors that remove the choice overload impact. Being a high-frequency, comparatively low-value good means that the risk of making a bad selection is minimal; a person can always make a new choice in a few days when they return to the wine shop. Loyalty to a specific store breeds comfort with the choice selection; if this store offers it then it must be a good selection. Finally with the use of categories, the selections are bracketed into smaller more manageable chunks making the selection process easier. This retailer not only sorts wine into regions and sub-regions (ie, Italy->Tuscany->Chianti) but those sub-sections are organized roughly by price point. Using these brackets allows for a section of 300 wines to quickly be navigated into just those wines that the consumer wishes to select from without having to browse all 300 offerings. A look at two questions from the qualitative survey illustrates this point. The cross-table below shows the results from two questions: “I always seek out new and interesting wines to try” with “Do you believe that having too many choices of wine makes it more difficult for you to select the wine you want:”

<b>Do you believe that having too many choices of wines in a store makes it more difficult for you to select the wine you want? Use a scale from 1 to 7 where 1=totally disagree and 7=totally agree</b>					
<b>I always look out for new and interesting wines to buy</b>					
<b>Answer Options</b>	<b>strongly disagree</b>	<b>disagree</b>	<b>somewhat disagree</b>	<b>agree</b>	<b>strongly agree</b>
totally disagree	33%	42%	33%	47%	65%
	33%	25%	29%	24%	16%
	17%	0%	13%	10%	7%
	0%	25%	8%	8%	4%
	0%	0%	13%	6%	5%
	0%	8%	0%	3%	1%
totally agree	17%	0%	4%	1%	2%
n=	12	12	24	233	215

The results show that even among the people who disagree and strongly disagree with the comment that they look for new wines, more than two-thirds still do not report having a problem selecting wines.

The second cross-table show the results from “I would rather stick with a wine I usually buy than try something I am unsure about” with “Do you believe that having too many choices of wine makes it more difficult for you to select the wine you want:”

Do you believe that having too many choices of wines in a store makes it more difficult for you to select the wine you want? Use a scale from 1 to 7 where 1=totally disagree and 7=totally agree

Answer Options	I would rather stick with a wine I usually buy than try something I am unsure about				
	strongly disagree	disagree	somewhat disagree	agree	strongly agree
totally disagree	69%	54%	43%	51%	44%
	12%	23%	27%	19%	9%
	8%	8%	14%	4%	13%
	5%	7%	7%	3%	13%
	1%	8%	5%	12%	3%
	3%	1%	3%	4%	6%
totally agree	1%	0%	1%	6%	13%
n=	95	142	133	68	32

Again here there is very little evidence of choice becoming an issue for customers. In the subset of people who strongly agree with the statement about sticking with the familiar wine, half of that group totally or strongly disagreed with the idea of too many choices making selecting difficult. This is good support for the idea that customer's overall comfort with a store mitigates choice overload.

## Chapter 6: Managerial Implications and Further Research

This study points to concrete steps that managers in the retail wine industry can take in order to have greater satisfaction with their store despite offering a large selection of wines.

A retailer should first work to create consumer loyalty with their store. A warm, comfortable, clean shopping environment (Morales, Kahn, McAlister, & Broniarczyk), along with a well-trained, customer-service oriented staff (Macintosh & Lockshin, 2007) are the best way to engender customer loyalty. Concurrently with building loyalty, retailers should also work to ensure comfort with wine and their wine selections in the store specifically. Higher levels of comfort with a store seem to indicate a lowering or even elimination of the choice overload effect (Benke, Cumming, & Jolly, 2012). Retailers can induce comfort by having a long-tenured staff with little turnover so customers see the same people time after time and can develop relationships. A second way to induce greater comfort is holding regular wine tastings. The ability to try different wines from different regions every time in the store goes a long way to inducing comfort and familiarity. Even if a tasted wine is not purchased, the "knowledge" gained is filed away in the brain and serves as reference points

for other wines tasted at later dates. The observational data in this study showed correlation between self-reported wine knowledge and number of bottles purchased per visit.

Finally managers can use merchandising techniques to frame the wine selection into more easily viewed sections. Taking a large category and sub-sectioning into smaller geographic regions and then sorting again by price makes it easier to find exactly what is being looked for, while still enabling browsing when the customer just wants to look around.

Further research needs to be done to confirm or disprove conclusively whether choice overload does in fact exist, and if it does exist is wine as a consumer good immune to it. Replicating this study at a different retail chain can see if this present study is invalid due to an aberrational customer base compared to the “average” wine retail chain. However within the design of that study, finding a different method of measuring satisfaction other than direct interviews would be helpful. Acknowledging that people may be less willing to admit to making an unsatisfactory choice, measuring satisfaction in an indirect way might prove more accurate.

Another avenue for exploration is in the shopping habits of wine consumers in general. Like the voracious tomato eaters at the farmers’ market, how adventurous are average wine consumers in seeking out new wines and experimenting with them? If it can be shown that a wine shopper desires more choices than a jam shopper or someone looking for a television this would explain the lack of choice overload observed in this study. A last question that can be studied in a wine retail environment concerns price levels. If it can be postulated that wine constitutes an intrinsic good where the cost of a poor decision is minimal (wine is cheaper than a flat screen TV for instance); mitigating choice overload due to the low barrier of selection. But what about for fine wines (say \$50 per bottle and above) where now there is some pain involved in choosing poorly. Is there a measurable choice overload affect in this category of wine compared to the more everyday selections of wines generally observed?

Lastly, does wine with its unique place in history, culture and the everyday table exist on its own spectrum of consumer goods that renders it immune to choice overload? A study measuring how consumer perceptions of and habits regarding wine compared to other goods (especially intrinsic goods like computers) would be a new avenue to fixing wine’s place in consumers’ minds.

## Chapter 7: Conclusion

Choice Overload has been described in academic works for over 40 years. Evolutions in technology, globalization and supply chains have exponentially added to the amount of items a store can carry. Consumers are faced with an ever-growing number of choices in all product categories; larger hypermarkets and the “long-tail” effect of the internet means that there are far more available choices than ever before.

This paper deigned to look at the choice overload effect; where consumers feel less satisfied when forced to choose from among too many options; or even postpone deciding entirely. A large body of research has confirmed this effect exists across a wide range of goods and categories. However it had never been studied in the environment of wine sales. Hypothesizing that wine occupies a unique category of intrinsic cue goods, this paper set out to measure the choice overload effect in a wine retail environment. It was hypothesized that the threshold would be higher than that of other goods, as wine buyers desire to find and experiment with new wines regularly, especially as knowledge about wine increases.

A three-part study was designed: first a survey was sent to 4000 wine drinkers asking about their habits while wine shopping, and secondly 120 customers were observed as they shopped in three separate wine stores and thirdly they were interviewed after their transaction was complete. The goal from the three segments of the study was to measure the existence of the choice overload effect using satisfaction ratings for the customers’ ultimate selections of wine as well as they overall satisfaction level of the wine store in general.

Neither the survey nor the observations/interviews showed any evidence of choice overload. In the survey, 70% of respondents reported “completely disagree” with the statement that having too many choices makes it more difficult to choose a wine. Similarly only 3% wished for fewer actual selections than what the stores already carry (which ranged from 1100 to 1900 depending on location). These findings were replicated in the interviews, where people reported being extremely satisfied with their wine purchase, irrespective of number of bottles purchased, time spent in store, wine knowledge level or any other factor. Therefore in this study the choice overload effect did not exist.

Careful review of existing literature regarding choice overload points the way to some steps that retailers can take to mitigate the effect. Sorting the selections into easily recognizable categories allows for easier purchasing

and greater satisfaction (Mogilner, Rudnik, & Iyengar, 2008). Creating overall customer comfort with the specific store creates loyalty and satisfaction: this can be accomplished by having a well-trained, long-tenured staff (Macintosh & Lockshin, 2007) and a clean, easy shopping environment (Morales, Kahn, McAlister, & Broniarczyk). The retail chain in which this study was taken is known for actually doing all these mitigating factors. They have been named “Retailer of the Year” by multiple wine trade publications and have been included on Fortune Magazine’s Top 100 Companies to Work for 10 years in a row. The long-tenured staff, well organized floor layout and national reputation all serve to put customers at ease (both consciously and unconsciously) allowing for a lessening of the choice overload (or in this case, the elimination of it).

Finally this paper is but another stepping stone to definitively proving the existence or lack of the choice overload effect. Replicating this study at different retailers will show if this particular study cohort was unusual in some way. Also further research is needed to see how wine as a category differs from other intrinsic cue goods like televisions, cars and electronics. Is the relatively low price involved in a bottle of wine insufficient pain in choosing wrong to elucidate choice overload? Designing a study comparing fine wine to regular everyday wine would illuminate whether wine in general is immune to choice overload or just wine below a certain financial threshold. Lastly there is interesting evidence in this study that satisfaction with a specific wine shop can mitigate or even eliminate choice overload.

For many people all over the world, a bottle of wine with dinner is both pleasurable and normal. Thankfully it appears that the act of selecting that bottle can also be pleasurable in many circumstances.

## References

- Airely, D. (2008). *Predictably Irrational: the Hidden Forces that Shape our Decisions*. New York: Harper Perrenail.
- Amine, A., & Cadenat, S. (2003). Efficient retailer assortment: a consumer choice evaluation perspective. *International Journal of Retail & Distribution Management*, 31(10), 486-497.
- Areni, C., & Kim, D. (1993). The Influence of Background Music on Shopping Behavior: Classical Music versus Top 40 Music in a Wine Store. *Advances in Consumer Research*, 336-340.
- Benke, J., Cumming, A., & Jolly, L. (2012). The effect of item reduction on assortment satisfaction-a consideration of the category of red wine in a controlled retail setting. *Journal of Retailing and Consumer Sciences*, 282-291.
- Boatwright, P., & Nunes, J. (2001). Reducing Assortment: An Attribute-based Approach. *Journal of Marketing*, 50-63.
- Dhar, R., & Simonson, I. (2003). The Effect of Forced Choice on Choice. *Journal of Marketing Research*, 40(2), 146-160.
- Drummond, G., & Rule, G. (2005). Consumer Confusion in the UK Wine Industry. *Journal of Wine Research*, 16(1), 55-64.
- Dubois, P., & Nauges, C. (2010). Identifying the effect of unobserved quality and expert reviews in the pricing of experience goods: Empirical application on Bordeaux Wine. *International Journal of Industrial Organization*, 205-212.
- Economist. (2010, December 16). *You Choose*. Retrieved 1 22, 2012, from The Economist: <http://www.economist.com/node/17723028>
- Gilbert, D. (2007). *Stumbling on Happiness*. New York: Vintage Books.
- Goodman, S., Lockshin, L., & Remaud, H. (2010). *Where to shop? The influence of store choice characteristics on retail market segmentation*. Auckland: 5th International Academy of Wine Business Research Conference.
- Gourville, J., & Dilip, S. (2005). Overchoice and Assortment Type: When and Why Variety Backfires. *Marketing Science*, 24(3), 382-395.
- Haynes, G. (2009, March). Testing the Boundaries of the Choice Overload Phenomenon: The Effect of Number of Options and Time Pressure on Decision Difficulty and Satisfaction. *Psychology and Marketing*, 204-212.
- Iyengar, S., & Lepper, M. (2000). When Choice is Demotivating: Can One Desire Too Much of a Good Thing? . *Journal of Personality and Social Psychology*, 79(6), 995-1006.
- K Gehrt, R. Y. (2004). Situational, consumer, and retailer factors affecting Internet, catalog, and store shopping. *International Journal of Retail & Distribution Management*, 32(1), 5-18.
- Kallas, Z., Escobar, C., & Gil, J. (2012). Assessing the impact of a Christmas advertisement campaign on Catalan wine preference using Choice Experiments . *Appetite*(58), 285-298.
- Lockshin, L., & Hall, J. (2003). *Consumer Purchasing Behavior for Wine: What We Know and Where We are Going*. Adelaide: Wine Marketing Research Group.

- Lockshin, L., & Kahrimanis, P. (1998, December). Consumer Evaluation of Retail Wine Stores. *Journal of Wine Research*, 9(3), 173-184.
- Lockshin, L., Jarvis, W., d'Hautville, F., & Perrouy, J.-P. (2006). Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. *Food Quality and Preference*(17), 166-178.
- Macintosh, G., & Lockshin, L. (2007). Retail relationships and store loyalty: A multi-level perspective. *International Journal of Research in Marketing*, 14, 487-497.
- Mogilner, C., Rudnik, T., & Iyengar, S. (2008). The Mere Categorization Effect: How the Presence of Categories Increases Choosers' Perceptions of Assortment Variety and Outcome Satisfaction . *Journal of Consumer Research*, 202-215.
- Morales, A., Kahn, B., McAlister, L., & Broniarczyk, S. (n.d.). *Perceptions of Assortment Variety: The Effects of Congruency Between Consumers' Internal and Retailer's External Organization*. : .
- Polman, E. (2011). *Differences between making decisions for the self vers for others: A reversal of the choice overload affecg*. Cornell University. Ithaca: Cornell university.
- Scheibehenne, B. G. (2010). Can There Ever Be Too Many Options? A Meta-Analytic Review of Choice Overload. *Journal of Consumer Research*, 32, 419-427.
- Schwartz, B. (2004). *The Paradox of Choice: Why More is Less*. New York: Harper Perennial.
- Sharp, A. (2012). *Observational Behavior*. Adelaide: Ehrenberg Bass Institute.
- Spassova, G. (2009). Taking the Load out of Choice Overoad: Strategies for Reducing Cognitive Difficulty in Choice from Extensive Assortments. *Advances in Consumer Research*, 157-160.
- SupremeCorq*. (n.d.). Retrieved March 31, 2012, from [foodsci.perdue.edu](http://foodsci.perdue.edu)
- Toffler, A. (1970). *Future Shock*. New York: Random House.
- Wilfley, D., Schwartz, M., Spurrell, E., & Fairburn, C. (1997). Assessing the specific psychopathology of binge eating disorder patients: Interview or self-report? . *Behaviour Research and Therapy*, 1151-1159.

## Appendix A

### Stew Leonard's Wine Survey August 2013

1. Roughly how often do you shop for wine?		
Answer Options	Response Percent	Response Count
once or twice a year	2.5%	20
every couple of months	17.8%	143
monthly	23.8%	191
a couple of times a month	35.8%	288
weekly or more	20.1%	162
<i>answered question</i>		<b>804</b>
<i>skipped question</i>		<b>5</b>

2. How many bottles of wine do you usually buy in one shopping visit?		
Answer Options	Response Percent	Response Count
1	5.6%	45
2-3	44.6%	359
4-6	26.7%	215
7-12	15.9%	128
more than 12	7.2%	58
<i>answered question</i>		<b>805</b>
<i>skipped question</i>		<b>4</b>

3. Thinking about your wine purchases, do you mainly select wine according to:		
Answer Options	Response Percent	Response Count
brand	13.0%	105
country/region	14.4%	116
grape variety	36.0%	290
staff recommendations/tasting	14.9%	120
label design	0.9%	7
other/depends	20.8%	168
<i>answered question</i>		<b>806</b>
<i>skipped question</i>		<b>3</b>

4. When you do your wine shopping are you usually rushed for time or do you have time to browse and explore?		
Answer Options	Response Percent	Response Count
rushed for time	14.2%	114
able to browse	85.8%	688

<i>answered question</i>	802
<i>skipped question</i>	7

**5. Do you buy wines mostly from one region (ie, I usually buy Italian wines) or multiple areas (ie, I usually buy wines from more than one country or region)**

Answer Options	Response Percent	Response Count
one area	9.8%	79
multiple areas	87.8%	707
other	2.4%	19
<i>answered question</i>		805
<i>skipped question</i>		4

**6. Which best describes you when you enter a wine shop?**

Answer Options	Response Percent	Response Count
I know exactly what I want to purchase and only look for that wine(s)	9.7%	78
I have a rough idea of what I want and browse until I see something interesting	65.7%	530
I have a rough idea of what I want and ask for help finding something interesting	17.7%	143
I have no idea what I want to buy and browse until I see something interesting	5.3%	43
I have no idea of what I want to buy and ask for help finding something interesting	1.6%	13
<i>answered question</i>		807
<i>skipped question</i>		2

**7. If the store doesn't carry the specific wine you were looking for, do you:**

Answer Options	Response Percent	Response Count
leave without purchasing what you wanted	40.8%	31
replace with another wine	59.2%	45
<i>answered question</i>		76
<i>skipped question</i>		733

**8. How much time do you normally spend looking for wines in the store?**

Answer Options	Response Percent	Response Count
under one minute	0.1%	1
one to five minutes	6.7%	54
five to ten minutes	32.0%	257
longer than ten minutes	61.1%	491
<i>answered question</i>		<b>803</b>
<i>skipped question</i>		<b>6</b>

**9. Which statement best represents your feelings about when you taste wine in a wine shop?**

Answer Options	Response Percent	Response Count
never	10.0%	80
when I have time	17.7%	142
when the tasting looks interesting	48.8%	392
as often as I can	23.6%	190
<i>answered question</i>		<b>804</b>
<i>skipped question</i>		<b>5</b>

**10. Does tasting wines in the store help you to choose which wines to purchase?**

Answer Options	Response Percent	Response Count
yes	73.8%	504
no	10.5%	72
not sure	15.7%	107
<i>answered question</i>		<b>683</b>
<i>skipped question</i>		<b>126</b>

**11. Thinking about the entire store, which statement best represents your feelings about Stew Leonard's Wines?**

Answer Options	Response Percent	Response Count
wish they had more selections in wine	13.7%	103
am happy with the number of wines they carry	83.2%	625
would prefer fewer options	1.1%	8
they have too many choices of wines	2.0%	15
<i>answered question</i>		<b>751</b>
<i>skipped question</i>		<b>58</b>

**12. Do you believe that having too many choices of wines in a store makes it more difficult for you to select the wine you want? Use a scale from 1 to 7 where 1=totally disagree and 7=totally agree**

Answer Options	totally disagree	
	351	170
	<i>answered question</i>	
	<i>skipped question</i>	

**13. Thinking about the categories of wines listed in the table below, which one(s) do you associate with the following statements (if any):**

Answer Options	Bordeaux wines	Red Zinfandel wines from California
I know what to expect the wine to taste like	202	247
Easy to find in the store	239	269
Would prefer more choices in the store	89	64
Difficult to choose from all that are available	54	37
I often purchase	135	168
I never purchase	246	229
I want to learn more about these wines	244	128
I know what to expect from this wine after reading the label	96	126
	<i>answered question</i>	
	<i>skipped question</i>	

**14. How strongly do you agree or disagree with the following statements: Please use the following scale where 1-strongly disagree, 2-disagree, 3-somewhat disagree, 4-neither agree nor disagree, 5-somewhat agree, 6-agree, 7-strongly agree**

Answer Options	strongly disagree	disagree
I have a strong interest in wine	6	5
Wine is important to my lifestyle	12	14
Talking about the wine I drink is something I enjoy	15	26
When I travel I enjoy drinking the wine there	11	11
When I travel one of the things I like is visiting the wine regions in that area	13	37
I always look out for new and interesting wines to buy	12	12
I would rather stick with a wine I usually buy than try something I am not very sure about	98	143

*answered question*  
*skipped question*