

## **BearWorks**

**MSU Graduate Theses** 

Fall 2018

# Floral Consumer Experience Study

Wenonah Marie Marlin

Missouri State University, Wenonah07@missouristate.edu

As with any intellectual project, the content and views expressed in this thesis may be considered objectionable by some readers. However, this student-scholar's work has been judged to have academic value by the student's thesis committee members trained in the discipline. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

Follow this and additional works at: https://bearworks.missouristate.edu/theses

Part of the <u>Agricultural and Resource Economics Commons</u>

### **Recommended Citation**

Marlin, Wenonah Marie, "Floral Consumer Experience Study" (2018). *MSU Graduate Theses*. 3324. https://bearworks.missouristate.edu/theses/3324

This article or document was made available through BearWorks, the institutional repository of Missouri State University. The work contained in it may be protected by copyright and require permission of the copyright holder for reuse or redistribution.

For more information, please contact bearworks@missouristate.edu.

## FLORAL CONSUMER EXPERIENCE STUDY

A Master's Thesis

Presented to

The Graduate College of

Missouri State University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science, Agriculture

Ву

Wenonah Marie Toney-Marlin

December 2018

Copyright 2018 by Wenonah Marie Toney-Marlin

### FLORAL CONSUMER EXPERIENCE STUDY

Agriculture

Missouri State University, December 2018

Master of Science

Wenonah Marie Toney-Marlin

### **ABSTRACT**

The main objectives of this research is to identify the retailer controlled variable that are significant to increase floral purchases. Surveys were sent to MSU alumni and dispersed through social media. Respondents answered questions regarding floral purchasing patterns, floral product selection and quality, consumer attitude and socio-demographics. Responses were separated and compared by generation. Results show that Baby Boomers and older are more likely to purchase flowers more often, floral purchases are seasonal and flower type and a stylish shop are important to consumers.

**KEYWORDS**: floral industry, consumer experience, retail atmosphere, customer service, flowers

### FLORAL CONSUMER EXPERIENCE STUDY

### By

## Wenonah Marie Toney-Marlin

A Master's Thesis
Submitted to the Graduate College
Of Missouri State University
In Partial Fulfillment of the Requirements
For the Degree of Master of Science, Agriculture

### December 2018

## Approved:

Arbindra P. Rimal, Ph.D., Thesis Committee Chair

Kenneth H. Brown, Ph.D., Committee Member

Clydette M. Alsup-Egbers, Ph.D., Committee Member

Benjamin M. Onyango, Ph.D., Committee Member

Nichole L. Busdieker-Jesse, M.S., Committee Member

Julie Masterson, Ph.D., Dean of the Graduate College

In the interest of academic freedom and the principle of free speech, approval of this thesis indicates the format is acceptable and meets the academic criteria for the discipline as determined by the faculty that constitute the thesis committee. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

#### **ACKNOWLEDGEMENTS**

I would like to thank the following people for their support during the course of my graduate studies. Thank you to my entire committee: Dr. Arbindra Rimal for taking me on as one of his graduate students, Dr. Benjamin Onyango for his guidance and kindness, Mrs. Nichole L. Busdieker-Jesse for her understanding and clear instructions, Dr. Clydette M. Alsup-Egbers for her encouragement and language skills, and Dr. Kenneth H. Brown for his short clear explanations. My friends and family have been a source of constant support and encouragement. Thank you Raysha for helping me in classes when I was struggling, my parents for always believing in me even when I didn't believe in myself and my cheering section led by Leanne, Kaitlyn, Sabine and Lane.

## TABLE OF CONTENTS

Introduction	Page 1
Literature Review Other Industries Model Research Expectations Variables	Page 5 Page 5 Page 6 Page 8 Page 9
Materials and Methods Survey Instrument and Collection Data Analysis	Page 13 Page 16 Page 17
Results Descriptive Analysis Regression Analysis	Page 22 Page 22 Page 25
Discussion	Page 46
Conclusion	Page 50
References	Page 51
Appendices Appendix A. Responses to Survey Instrument Appendix B. Survey Instrument Appendix C. Human Subjects IRB Approval Appendix D. Human Research Training Certificate	Page 54 Page 54 Page 62 Page 67 Page 68

## LIST OF TABLES

Table 1. Variables used in OLS model	Page 20
Table 2. Household income reported for each generation	Page 26
Table 3. Education level reported for each generation	Page 26
Table 4. Gender reported for each generation	Page 27
Table 5. Ethnicity reported for each generation	Page 27
Table 6. Average ages reported for each generation	Page 28
Table 7. Quantity of purchases yearly made by each generation	Page 29
Table 8. Frequency of purchase in price range by annual household income	Page 30
Table 9. Primary purchasing outlet preferences for each generation	Page 31
Table 10. Percentage of quantity purchased by primary location	Page 31
Table 11. Percentage purchases made by each age group for holiday or life occasions	Page 32
Table 12. Importance of services offered by generation	Page 33
Table 13. Importance of retail atmosphere by generation	Page 34
Table 14. Customer service personnel qualities considered important to each generation	Page 36
Table 15. Important customer service personnel attributes chosen by each generation	Page 37

## LIST OF TABLES CONT.

Table 16. Acceptable length of freshness to each generation	Page 37
Table 17. Importance of floral product attributes to each generation	Page 38
Table 18. Consumer attitude for each generation	Page 40
Table 19. The importance of receiving flowers as a gift ranked by gender	Page 41
Table 20. Regression model including only retailer controlled variables	Page 42
Table 21. Retailer controlled variables	Page 43
Table 22. Situational moderator variables	Page 44
Table 23. Consumer moderator variables	Page 45
Table 24. Significant variables found in regression analysis	Page 49

## LIST OF FIGURES

Figure 1. Floral Consumption Supply Chain	Page	4
Figure 2. Conceptual Model	Page	12
Figure 3. Dozen Rose Arrangements	Page	18
Figure 4. Single Frame Time-lapse Video	Page	19

#### INTRODUCTION

Flowers are the visual representation of emotion. For centuries flowers have been given as gifts to celebrate life and its many cycles. Rene Van Rems' (2007) eloquent expression of the human interaction with flowers states:

You feel a fundamental human attraction to the meaningful beauty of flowers. The need goes further than wanting to enjoy flowers in nature, in fields and forests and gardens. We feel the impulse to bring flowers indoors, to present them as gifts, in a way that harmonizes nature and culture (p.7).

The business of selling flowers has evolved over time and with advances in technology has become about an \$11 billion industry in the United States (Sundale, 2018). However, there is concern in the industry that the most recent generations are not purchasing flowers as often as their ancestors.

Floral materials have been used to decorate for thousands of years. The first designated design period, The Egyptian Period, began in 2800 B.C. (AIFD, 2005). First documented in 621 A.D., flowers were used as a sacrifice to the gods (AIFD, 2005). Nosegays, small bouquets, were carried in the 14th century by women to mask unpleasant odors in the streets. During the Victorian Period, they were used to send messages using the language of flowers sometimes for joy, wood sorrel, and sometimes in jest, southernwood (Greenaway, 1884). Flowers are given to new mothers, carried by brides and serve as an integral part of memorial services. Though the role of fresh flowers has changed over the centuries they still serve as an important part of all the celebrations of life. Many times flowers aid in expressing emotions that cannot be captured with words.

Trends in the retail floral industry have changed drastically in just the past 100 years, with flowers having to be grown locally to being able to ship from overseas. This has changed

the supply chain from being concentrated in a central geographic location, the Netherlands being Lavelt's (2010) example, to having worldwide sectors. The many phases of the floral supply chain are presented in Figure 1. Thus, increasing retail sales will benefit the many phases of the floral industry. Flowers are grown commercially in over 40 countries and shipped all over the world. About two thirds, or \$7.44 billion of retail flowers sold in the United States, are imported, mostly from Columbia and Ecuador (Sundale, 2018). Once they leave the farm, in most cases, they are flown to a hub and distributed to wholesalers, who in turn sell them to retail florists. Even with this involved supply chain, fresh flowers are unique to other agricultural products because the product sold to the consumer varies very little from the raw product that was cultivated in the field. New technology and products change what designers can do with fresh cut product. However, even with all the new technology providing fantastic floral varieties, new design mechanics and incredible product selection, the demand for fresh-cut flowers and floral products is decreasing (Yue, Rihn, Behe, & Hall, 2010)

When faced with similar declining industry trends, other consumer retail companies such as Starbucks have turned toward a focus on a consumer experience that encourages clients not only to purchase their products but also to purchase more frequently. Belk's (1977) study reported that only about 2% of consumers selected flowers as a gift. Creating a customer experience that would encourage more purchases would aid the entire floral industry, not just the retail outlets.

Many discussions at trade shows and other events where floral professionals convene, center on issues concerning the current state of the floral industry. Comments such as, "The floral industry is suffering," or "The marketing that has worked in the past is not working with the younger generations," or "Consumers do not think of flowers as a gift and the importance of

having them in their homes has diminished" are just a few. The perception of flowers being too perishable or transient in nature is explained to students by New Mexico State University

Floriculture Program Coordinator Sabine Green, AIFD, as the "lack of floral culture in the U.S."

(Green, 2018). In addition, florists debate declining sales in one particular area of revenue. "Over the years, being in the floral industry there has been a common thread throughout the country that sympathy sales are on the decline...different ones citing the increase of cremations and the 'In Lieu of' trend as being the cause for the decline" (Wooten, 2015). So, the question that arises on how the floral industry can adjust the consumer experience to increase their sales. Companies that may have found the answer by cultivating an excellent consumer experience include Starbucks, Apple and Harley-Davidson.

Comparing some of the attributes of companies such as Starbucks and Apple will help to understand what they are doing to create on excellent consumer experience. Based on findings in current literature, a conceptual model was constructed, and a survey conducted to understand the consumer's ideal customer experience when it comes to floral purchases. Price, product quality and attributes, customer service and retail environment are considered as things that can be controlled by the retailer. Questions were asked about the consumer moderators such as attitude toward product and situation moderators such as type of retailer and location. In the survey, demographic questions are asked so that we may separate the survey subjects by generation to analyze the difference between the age groups.

The purpose of this study is to have useful information that can be given to the floral industry so that it may adjust its marketing and shop environment to cater to its customers to increase the total sales for the industry.

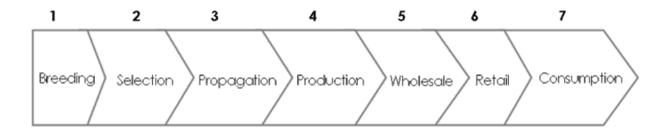


Figure 1. Floral Consumption Supply Chain (Levelt, 2010, p.150)

#### LITERATURE REVIEW

Academic studies on the floral industry are not common. Therefore literature pertaining to this specific area of research is limited. However, similar studies have been conducted for other industries and there is research pertaining to individual components of this study. Also looking at companies that seem to have the answer to our question- "how can the industry adjust to increase purchases by younger generations?"- may give guidance on creating the optimal consumer experience.

### **Other Industries**

More than marketing, more than sales, there are several companies that have succeeded in making their products a lifestyle. Three of these companies include Starbucks, Apple and Harley-Davidson.

Atmosphere, consistency and customer service are three areas in which Starbucks outrivals their competition. "Everything about the interior of a Starbucks, from the warm aroma to the casual couches, screams 'comfort'" (Hennessey, 2012). Starbucks has over 17,000 stores in 50 countries, and no matter which one you walk into the feeling of warmth is constant. In addition to the consistent atmosphere, the service by the baristas adds to the Starbucks experience. "While seemingly endless details go into producing the emotional blend that loyal Starbucks customers feel, often the most important aspect of this blend is the personal investment of the Starbucks partners" (Michelli, 2007, p.12). A person's name is the most beautiful sound in the world to them (Carnegie, 1936). Starbucks baristas begin and end their interaction with each customer with their name, from writing it on your cup to calling it when the order is complete, building a connection that entices the customer to return.

Simon Sinek compels his audience to rethink their approach to marketing in his TEDtalk, How great leaders inspire action, by stressing "People don't buy what you do, they buy why you do it" (Sinek, 2009). This may be the root of an excellent consumer experience and as he points out Apple has this covered. Along with an incredible sense of customer connection, Apple also stands for excellent quality and owning their products is a status symbol. "If you have all your metrics around doing something for the customer- you will end up making money," stated John Scully, Former Apple CEO (Bertoni, 2017). From Apple's inception in 1977, their marketing plan revolved around the words empathy, focus and impute. The company set out to understand their customers better than their competitors without straying from their mission and in doing so they determined they would have useful, highest quality products that looked creative and professional (Moorman, 2012).

Brand loyalty to Harley-Davidson is unrivaled due to their product selection, custom options and the sense of belonging the brand offers. "Harley-Davidson customers are addicted to the experience the brand provides" (Hasanaj, 2017). Harley has positioned themselves in the market, not as a leader in price or quality, but as an emotional brand. This was an intentional shift decided on in the 1980's by Director of Communications Ken Schmidt. Members of the exclusive Harley Owners Group (HOG) value the customization and accessories that have proven to be the competitive advantage for the brand (Bhasin, 2017).

#### Model

The model we created, displayed in Figure 2, is a modified version of Dr. Verhoef and his colleagues' model from the article "Customer Experience Creation: Determinants, Dynamics, and Management Strategies." This study refers to the customer experience as a big picture

involving the customer's "cognitive, affective, emotional, social and physical response to the retailer" (Verhoef, et al., 2009,p.2). The model used for this study has been adapted for the floral purchasing experience. Each of the boxes correspond with questions on our survey instrument. The question number is indicated in the top of each box.

The boxes break down the experience into three parts: what the retailer can control, elements outside the retailer's control and the total experience including the search for and aftersale phases of the experience. The model for our study focuses on what the retailer can control: retail atmosphere, product selection and quality, services offered, price and customer service personnel interaction. It does take into account the situational moderators and consumer moderators that are outside the retailer's control. Our model only touches on the after-sale phases of the freshness of product and how long it lasts.

The portion of the marketing mix that is controlled by the retailer is often referred to as the Four Ps. This term was first coined by Professor E. Jerome McCarthy (1960). The 4 Ps are defined in his book *Basic Marketing* as product, price, promotion and place.

These four Ps are accounted for in the conceptual model. Product, a good, service or idea to satisfy the consumer's needs, is captured in product selection and quality. Price, what is exchanged for the product, is simply price. Promotion, a means of communication between the seller and buyer, is found using services offered and customer service personnel interaction because both of those involve communication between the buyer and seller. Place, a means of getting the product to the consumer, is accounted for in retail atmosphere. Identifying which of these is most important to the consumer will allow the floral industry to change what is in its control to increase purchasing, especially for younger generations (Kerin, 2018).

## **Research Expectations**

Over time, with advances in technology and changes in consumer preferences, industries have to adapt their practices to fit the buyer's needs. In this study the sought-after consumer experience for purchasing floral products will be identified for each generation. The results should identify the practices that the floral industry retailers can implement to increase the quantity of purchases made by the younger generations.

Each generation of consumers has a different set of experiences that shape its thoughts, behaviors and beliefs (Oblinger, 2003). This market segmentation has been defined by many different sources. For this research, generations are defined as follows:

Greatest Generation - Born Before 1946

Baby Boomers - Born 1946-1964

Gen X - Born1965-1984

Millennials - Born 1984-2004

Traditional flower shops tend to be stuck in a rut marketing to the Baby Boomers. This research and the conclusions drawn from it will help the floral industry shape the consumer experience to encourage Millennials to increase their floral purchases. "Millennials are considered to be the largest consumer group in the history of the United States in terms of their buying power and represent the future market for most consumer brands" (Harris Poll, 2001). Comparisons will be made primarily between Baby Boomers and Millennials.

The total consumer experience is different than just customer service. It is the whole picture including the elements that the retailer can control: the product or service and its attributes, the retail atmosphere and the customer service, as well as the elements outside of the retailer's control such as the customer's purpose for shopping or seasonality. Creating a

8

distinctive customer experience can provide enormous economic value (Pine and Gilmore, 1999).

The consumer pertaining to the floral industry experience has not been researched extensively. Components of the total experience such as price and quality have been researched, but the entire consumer experience has been researched pertaining to other industries.

Combining literature reviews from both points of reference brought the following variables to light. With these variables and using the conceptual model as a guide, a regression analysis will be specified and evaluated.

## Variables

**Retail Atmosphere.** Convenient location, stylish shop, large selection, other gift items available, recognizable brand name, pleasant atmosphere, quality customer service

Retail atmosphere can strongly influence purchases. For example, Christmas music may remind you to keep an eye out for items that would make a good Christmas gift. A relaxed cozy atmosphere will encourage customers to look around and browse the selection longer. If the shop is stylish and chic, it may draw a younger crowd or possibly a middle-age crowd trying to seem young. When purchasing a gift, in-store browsing was used as inspiration for 62% of buyers age 18-29 and only 57% for buyers age 45-60 (M&RR, 2016). Thus, an inviting atmosphere with a good selection may entice Millennial buyers. This attraction is especially key, since 90% of all flower purchases are spontaneous (Eweida and Sverkel, 2009).

**Product Selection and Quality.** Type and quantity flowers, container, style, creativity, size, color, customization and freshness

Many people state the reason they don't by flowers is because they die so quickly. One of the questions posed is how long is a reasonable expectation for them to last. Across three age groups, over 57% of consumers expect fresh flowers to last six to ten days ((Yue, Rihn, Behe, & Hall, 2010). Even though the cited study only surveyed respondents between 18 and 50 years of age, the results may be similar for a majority of subjects

Also, the type of design and other elements such as the type of flower, color and container may influence purchases. This may be the greatest difference between the generations. For example, Boomers may not care about the container being a nice keepsake, whereas Millennials may want the custom feel of an interesting container. Types of flowers may be more important to Baby Boomers, where creativity may rank higher in importance to Millennials. Millennials enjoy uniqueness with 57% of them stating "I love to find things that you just can't find elsewhere (M&RR, 2016)."

**Services Offered.** *Delivery, online, phone order, 24-hour guarantee* 

Services offered vary from each type of floral retailer. Millennials expect a good website with online ordering options. They are significantly more likely to purchase flowers online (Russell, 2016). Baby Boomers will expect to be able to call an order for delivery over the phone. The freshness guarantee and online services will be most important to Millennials. Forty-two percent of Millennials stated that they would be more likely to purchase flowers if they had a vase life guarantee (M&RR, 2016).

**Price.** *Price*, quantity, seasonality

The total quantity of purchases made should depend on income. A lower price point will entice consumers to purchase flowers in any generation, with the top three indicated incentives to purchase being lower price, lower ship/delivery charges, and coupons/offers/discounts (M&RR,

2016). The purchasing frequency combined with the price will be an interesting correlation. Millennials may purchase more often, at a lower price, and Baby Boomers may purchase less often but spend more. Young professionals like to buy flowers for themselves as a reward or a pick me up (Scammon, Shaw and Bamossy, 1982). The "2016 Generations of Flowers Study" (Russell Research, Inc., 2016) has found that price as a key barrier to purchase decreased by 12% from 2009 to 2016.

Customer Service Personnel Interaction. Efficient, friendly, knowledgeable, professional appearance, design ability

Customer service has become an expectation, not an exception (Oblinger, 2003).

However, the definition of good customer service may vary between the generations.

Friendliness and efficiency will probably be important to all generations. On the other hand,

Baby Boomers will most likely be more concerned with professional appearance than

Millennials, and Millennials more concerned with design ability so that they can purchase something custom and unique.

**External Moderators.** The pervious variables are controlled mostly by the retailers. Situational and consumer moderators also must be considered. These are variables that are outside the control of the retailers.

Situational moderators include type of retailer and season. Services offered may vary by type of retailer; for example, a grocery store may not offer delivery but is a convenient location. Mother's Day is the most popular flower giving occasion for Millennials, with 37% of them stating that was the last time they had given flowers as a gift (M&RR, 2016).

Consumer moderators include socio-demographics and consumer attitudes. Non-floral buyers tend to be less affluent and less likely to be employed full time (M&RR, 2016). The consumers' attitudes toward floral products may also affect their purchasing frequency.

#### **Conceptual Model For Floral Consumer Experience Creation** Convenient location, stylish shop, large election, other gift items available, ecognizable brand name, pleasant tmosphere, quality customer service Situational Moderators Q7&9 Type of retailer, season, occasion Experience Type and quantity flowers, container, style, Management reativity, size, color, customization and Experience Services offered Q8b Delivery, online, phone order Consumer Moderators Q3, 13-17 Price Q4- Dependent Variable Socio-demographics, consumer Customer Service Personnel Interaction Q10 Efficient, friendly, knowledgeable, or of essional appearance, design abilit

Figure 2. Conceptual Model for Floral Consumer Experience Creation. Used as the framework for the regression analysis.

#### MATERIALS AND METHODS

The process of collecting data for this survey began with Collaborative Institutional Training Initiative training and approval through the Institutional Review Board (IRB) for use of human subjects. Due to the non-invasive nature of our questions IRB approved our research on March 19, 2018, as long as our survey remained anonymous. The approval letter and completion certificate are included in the Appendices.

This study assesses the consumer experience expectations or desires from the floral industry. This will assist floral retail outlets in adjusting their business models to include desirable products and practices to increase sales. The results are sorted by generation and compared to determine the consumer experience that is preferred by each generation.

Segmenting the discussion into specific sectors will aid in the understanding of the subject. Four main segments will be identified: purchasing patterns, the importance of specific elements regarding the consumer experience and service expectations, the important attributes of the floral product purchased, and the overall attitude toward flowers.

Purchasing patterns is the first main segment for the study. Purchasing patterns include where, how often and when floral products are purchased. Survey subjects will be asked to rank the retail outlet they purchase flowers from most often. Supermarket, Super Stores (Super Centers), Traditional Flower Shop, Online Retailer and Farmer's Market were the choices provided. Occasions and seasonality of purchases will be questioned. Occasions are separated from holidays because personal occasions are celebrated at different times throughout the year. Holidays include Valentine's Day, Mother's Day, Winter Holiday gifts and Winter Holiday party décor. Occasions include party décor, hostess gift, anniversary, just because, self-use, get well,

sympathy/funeral and wedding. The frequency of purchases will be the dependent variable.

Respondents will indicate how often they purchase flowers at differing price points.

Consumer experience and service is the second segment for the study. The consumer experience has many necessary elements. For the data analysis this is split into two parts: services offered and retail atmosphere. Services offered includes delivery available, phone order available and internet order available. The retail atmosphere includes convenient location, stylish shop, quality customer service, large selection, other gift items available, pleasant atmosphere and recognizable brand name. Quality customer service is a component of the consumer experience but for the purpose of this study it is also further detailed in its own category.

While quality customer service is listed as an element of the customer experience, it is also important to look at individual aspects of the specific customer service personnel that may be important to each consumer category. The definition of quality customer service may differ between generations. For example, while a retailer who relies solely on e-commerce may attract the millennial demographic, the retailer, might fall short retaining its baby-boomer contemporaries (Salomann, Kolbe, and Brenner, 2006). The qualities that will be examined are efficient, friendly, knowledgeable, professional appearance and design ability of the customer service representative.

Important attributes in floral product is the third segment for the study. Respondents will be asked to rank the importance of the following attributes in a floral design: type of flowers, type of container, design style, creativity, size of arrangement, quantity of flowers, color and customization. The top selling flowers in the United States based on stem count, determined by the Society of American Florists, are roses, carnations (standard), chrysanthemums (pompon), alstroemeria, tulips, lilies and mini-carnations (Society, 2016). Many online retailers or wire-

service providers try to set themselves apart by the type of container that is used. Both Teleflora and FTD offer signature lines of containers they promote.

Design style and creativity are elements controlled by the individual floral artist. Many leaders in the industry are known for a specific style. Husband and wife design team Bill Schaffer and Kris Kratt are known for their creativity, specifically at the world-renowned Philadelphia Flower Show. "Schaffer designs has been in the vanguard of floral designs because they strive to create the unusual, unexpected, and dramatic (Lemheney, 2013, p.7)."

Size of the arrangement and quantity of flowers may seem similar but they are not.

Pictured in Figure 3 are two arrangements, both with 12 stems of roses. The quantity of flowers is the same while the size of the arrangement is drastically different. Longevity, or vase life, can be extended with the proper use of commercial floral preservatives. Figure 4 was captured from a time-lapse video published by Floralife displaying the impact of preservative solution compared to water in a floral arrangement after seven days.

Identifying the consumer's attitude toward flowers is the fourth segment. This focus is not inquiring about purchase, just general attitude about flowers. Respondents will be asked if they think flowers are pretty, if they make them smile, if they enjoy having them in their environment and if they enjoy giving or receiving them as gifts. This sets a baseline of a positive attitude concerning the product before introducing the concept of purchasing.

A 2005 study, "Immediate Smiles and Long Term Mood Change," conducted by researchers Jeannette Haviland-Jones, Ph.D., and husband Terry McGuire, Ph.D., of Rutgers University, showed a 100% positive response toward flowers called the Duchenne smile or "true smile" involving the mouth, cheeks and eyes. The response was statistically significant at 1% level (Haviland-Jones et. al., 2005). This research team has done several studies concerning

flowers and their impact. Another study they conducted titled "The Power of Giving Flowers" concluded people who gift flowers are perceived as happy, achieving, strong, capable and courageous people. When interviewed about her feelings on this study, M.J. Ryan, author of "Random Acts of Kindness" states, "I can think of no other item besides flowers that evokes such positive feelings and perceptions for both the giver and the recipient" (Ryan, 2018).

### **Survey Instrument and Collection**

The objectives of the study were written in question form to provide a survey instrument. In addition to the specific flower related questions, standard demographic questions were included. The first draft to the instrument was given to students for a class project. They were to give it to five people and return to class with any comments or discussion. After this discussion, revisions were made on the wording of a few questions. This instrument was sent to IRB.

With the approval of IRB, the survey instrument was entered into Qualtrics software. A test e-mail was sent to 10 people to check the software and the formatting. After the replies were given, a few formatting changes such as the font were made. A copy of the survey instrument can be found in Appendix B.

The survey was distributed two ways, both using Qualtrics software. Surveys were sent to the Missouri State University Agriculture Alumni, after the Alumni office gave permission to use its email list for the survey. Five sets of e-mails were sent, resulting in 334 surveys completed, and 290 usable surveys. The software is programed to send a Thank You email to participants who completed the survey. Surveys were also distributed through Facebook and 283 usable surveys were collected using this method.

## **Data Analysis**

The Qualtrics software allowed the data to be downloaded directly into Statistical Package for Social Sciences (SPSS) statistic software. The first step was to isolate any outliers by running frequency tables. Most of the questions had a less than 2% missing rate. An exception was a question about price brackets. The answers were probably left blank instead of indicating "never." The missing values on this question ranged from 9.8- 21.5%.

Cross-tabulations and frequency tables were also used to generate an overall picture of the sample population and answered many of the original questions and hypotheses. Further analysis explained the extent of the importance of each independent variable in a purchasing decision.

Next, variables that coincide with the boxes in our conceptual model were generated in SPSS from the data collected using the survey instrument. Each of the ranking type questions were given a numeric code for the response. For the question referring to frequency of purchase in each price range, the answers were coded 0 for "never," 1 for "once a year," 2 for "twice a year," 12 for "once a month," and 52 for "once a week." These answers were then added together for each response to generate the variable "Quantity\_Purchased\_Yearly." Dummy variables were created to separate out the generations into three groups: Millennials, Generation X and Baby Boomers and older. Dummy variables also separated education into two groups, less than a four year degree and a four year degree or more. Ethnicity was not included in the analysis because nearly 95% of responses were either Caucasian or refused to state their ethnicity. Gender was also left out of the regressions because the variance inflation factor (VIF) was more than 5 and 70% of the responses were female. The VIF of multiple collinearity was also higher than 5 for the primary location variables and the consumer attitude variables. To solve this two primary

location variables were selected to remain in the regression. Respondents that selected superstore and supermarket as their primary purchasing location were added together to create Mass Market. The other primary location variable selected was traditional flower shop. The consumer attitude variables were quite similar so they were combined to create one variable. With these adjustments, there were no variables with a VIF more than three.

A framework equation (1), for our OLS model is based off the consumer experience model. In the framework equation each variable represents a set of variables in the final equation, *Reatmo* represents the variables in retail atmosphere group, *Proqual* in product selection, *Servic* in services offered, *Pers* in customer service and personnel, *Sm* in situational moderators and *Cm* in customer moderators. Table 1 lists each of the variables used in the regression with a short description of each item.

(1)  $y_i = \beta_0 + \beta_1 reatmo + \beta_2 proqual + \beta_3 servic + \beta_4 pers + \beta_5 sm + \beta_6 cm + u_i$ 



Figure 3. Dozen rose arrangements. Design on the left is short and compact (Roses, 2018). The design on the right is more traditional (Marlin, 2016).



Figure 4. Single frame of time-lapse video captured at seven days. (Floralife, 2014)

Table 1. Variables used in OLS model

Category of Variable	Variable	Description
Retail Atmosphere	LOCATION	Convenient location
Retail Atmosphere	SHOP	Stylish shop
Retail Atmosphere	CUSTOMER	Quality customer service
Retail Atmosphere	SELECTION	Large selection
Retail Atmosphere	GIFT	Other gift items available
Retail Atmosphere	ATMOSPHERE	Pleasant atmosphere
Retail Atmosphere	BRAND	Recognizable brand name
Product Selection	FLOWERS	Type of flowers
Product Selection	VESSEL	Type of container
Product Selection	DESIGN	Design style
Product Selection	CREATE	Creativity
Product Selection	SIZE	Size of arrangement
Product Selection	OF	Quantity of flowers
Product Selection	COLOR	Color
Product Selection	CUSTOS	Customizable
Services Offered	AVAILABLE	Delivery available
Services Offered	ORDER	Phone order available
Services Offered	INTERNET	Internet order available
Customer Service Personnel	EFFICF	Efficient
Customer Service Personnel	FRIENDLY	Friendly
Customer Service Personnel	KNOWLO	Knowledgeable
Customer Service Personnel	APPEAR	Professional appearance

Table 1 continued. Variables used in OLS model

Category of Variable	Variable	Description
Customer Service Personnel	ABILITY	Design ability
Consumer Moderators	INC	Household Income
Consumer Moderators	MIL	Age Mill
Consumer Moderators	BOOM	Age Boomer
Consumer Moderators	EDUC	High-Ed
Consumer Moderators	ATT	Consumer Attitude
Situational Moderators	VDAY	Valentine's Day
Situational Moderators	MDAY	Mother's Day
Situational Moderators	WGIFT	Winter Gift
Situational Moderators	WDECOR	Winter Decor
Situational Moderators	PARTY	Party Decor
Situational Moderators	HOST	Hostess Gift
Situational Moderators	ANNIV	Anniversary
Situational Moderators	BECAUSE	Just Because
Situational Moderators	SELF	Self Use
Situational Moderators	WELL	Get Well
Situational Moderators	SYMP	Sympathy/Funeral
Situational Moderators	WED	Wedding
Situational Moderators	MM	Mass Market
Situational Moderators	PTF	Primary Traditional Shop

### **RESULTS**

The results of this study are displayed with simple descriptive statics and cross tabulations, then further analyzed using linear regression models. To follow with the conceptual model, retailer-controlled variables include retail atmosphere, service, product selection and quality. Situational moderators are included in purchasing patterns, and customer moderators include socio-demographic and consumer attitude sections.

### **Descriptive Analysis**

The data collected to use in the consumer experience analysis answers many of the base study questions. Tables that express the raw data for each question are found in Appendix A. Spark lines have been added into the tables for ease of reading.

Socio-Demographics. Socio-demographic questions were asked to determine trends in the data as result of household income, education, gender, ethnicity and age. Income is displayed in Table 2. Forty percent of the subjects who shared income information fell between \$50,000 and \$100,000 yearly for their household. Our survey population consisted of MSU alumni and the researchers' friends on social media, so more of these respondents would be expected to have at least a four-year degree (Table 3). Due to the methods of collection, education may be skewed from the general population. Gender, broken down by generation in Table 4, was classified into two groups: male (29%) and non-male (71%). Non- male is composed of the responses female and other. The samples collected were primarily caucasian (Table 5). The responses to age are how the variables for the generation were derived. At the time our survey was sent out the

generations were segmented by age as explained in Table 6. Due to the small quantity, the responses from the Greatest Generation were combined with Baby Boomers for the analysis.

**Purchasing Patterns.** Baby Boomers and older people purchase flowers an average of 17 times a year. Both Millennials and Gen X generations purchase about 10.5 times a year. Table 7 shows the number of times per year a floral purchase is made by individuals in each generation. The majority of survey participants (54%) purchase flowers three times a year or less. In addition, 17% of the total population buy flowers 11-13 times per year and 13% of Boomer and older people purchase 53-56 times per year.

Sixty-six percent of people who purchase flowers once a week or more have an annual household income of greater than \$75,000. Table 8 is a cross tabulation of household income and frequency of purchase within specified price ranges.

The data in Table 9 show that the number one outlet for floral purchases is a supermarket followed by traditional flower shops. Online retailer is the least selected retailer by all generations followed closely by farmer's markets. Supermarkets and super stores combined would be considered a sector of the floral industry referred to as mass market. Fifty percent of respondents chose a mass market retailer as their primary retailer. Table 10 compares the primary retail purchasing location with the quantity of yearly purchases. Of the respondents who purchase flowers 0-7, times yearly 39% selected traditional flower shops as their primary purchase location, and of respondents purchasing flowers more than 52 times per year, 60% selected a mass market location as their primary retail location.

Many floral purchases revolve around holidays or life occasions. For our respondents, Sympathy and Mother's Day were the most common reasons to purchase flowers. However, 46.6% of male respondents purchased flowers for Valentine's Day, compared to only 17.44% of

non-male respondents (chi- square = 51.293; p-value<0.001). Table 11 shows responses of those extremely likely or somewhat likely to purchase flowers for each holiday or occasion as a percentage of the total responses in that generation.

Retail Atmosphere and Service. The services offered by a flower shop to make ordering more convenient for the customers may include phone ordering, online ordering and floral delivery. Table 12 shows the importance of these services by generation. Online ordering is important to 65% of Millennials and 53% of Boomers. Delivery is most important to 78% of Millennials. Retail atmosphere is how the retail location positions its physical shop, both its geographical location and the components inside. Table 13 displays the elements considered in this study, broken down into generations. Quality customer service is ranked by 95% of respondents as most important overall, and recognizable brand name is the least valued attribute at 15.6%. Interesting points to highlight are 45% of Millennials indicated that a stylish shop was important to them and only 35% of Baby Boomers said the same. Forty percent of Millennials indicated the availability of other gift items was important, while 25% of Baby Boomers found this important.

Recognizing that quality customer service is essential, a more in-depth study was taken of customer service personnel interaction. Table 14 shows all aspects of customer service were important with slightly less weight placed on professional appearance. Table 15 summarizes the percent within each generation that found the aspect of customer service either somewhat important or very important. Professional appearance was least important to Millennials. Friendly and efficient attributes were most important across generations.

**Product Selection and Quality.** The attributes of floral products include physical features such as size, and quality aspects such as freshness, referred to as vase life, in the floral

industry. As shown in Table 16, the most people expected a vase life of five to seven days. Table 17 summarizes findings about the floral product attributes by generation. Overall, color is the most important attribute and type of container is the least important. The type of container was least important to Boomers. Millennials considered color the most important characteristic.

Identify the Consumer's Attitude Toward Flowers. The data show that most respondents agree that fresh flowers are pretty. Table 18 displays the data results reported by each generation. With the exception of the statement "I enjoy being given flowers," all of the responses in this question were over 90% positive. "I enjoy being given flowers" only had a 78% positive response. Few males said they enjoy receiving flowers (Table 19). The male and other respondents were statically different (chi- square = 307.12; p-value<0.001). These responses are a good foundation for the rest of the survey. If they were not positive, fewer purchases would be made.

### **Regression Analysis**

The raw data answer the question of what survey subjects say is important in purchasing flowers. A regression analysis evaluates to what degree of importance the independent variables influence the dependent variable, actual quantity of purchases yearly. The coefficients for a linear regression including only the retailer controlled variables are listed in Table 20. This equation has and adjusted R<sup>2</sup> of 0.051 and a standard error of the estimate of approximately 23.357. The F statistic of 1.968 is significant to 0.005. A second equation was used to find a better fit. There are many independent variables in this regression model. Tables 21-23 have the variables divided into the sections of the conceptual model: retailer controlled variables, situational moderators and consumer moderators. The equation used has and adjusted R<sup>2</sup> of 0.254

and a standard error of the estimate of approximately 17.434. The F statistic of 3.963 is significant to 0.000. Individual variables with statistically significant coefficients include FLOWERS, LOCATION, SHOP, INTERNET, VDAY, WGIFT, SELF, INC, BOOM and EDU.

Table 2. Household Income reported for each generation.

	Mill	Gen X	Boomer	Total
Under \$25,000	24	8	7	39
\$25,000-35,000	17	7	11	35
\$35,000-50,000	22	23	20	65
\$50,000- 75,000	33	46	19	98
\$75,000- 100,000	29	47	23	99
\$100,000-125,000	15	37	24	76
\$125,000 or more	13	44	30	87
Total	153	212	134	499

Table 3. Education level reported for each generation.

	Mill	Gen X	Boomer	Total
High school graduate/GED	2	13	15	30
Some college/2 year associate degree	22	44	28	94
Four year college degree	80	98	68	246
Post graduate	58	92	51	201
Total	162	247	162	571

Table 4. Gender reported for each generation

Not Male	Mill 128	Gen X 178	Boomer 101	Total 407
Male	34	69	61	164
Total	162	247	162	571

Table 5. Ethnicity reported for each generation.

	Mill	Gen X	Boomer	Total
Caucasian/white	149	229	146	524
Black/ African American	1	1	0	2
Asian/ Pacific Islander	0	1	1	2
Native American	3	1	1	5
Hispanic	6	8	3	17
Other	0	0	3	3
Refused	3	7	6	16
Total	162	247	160	569

Table 6. Average ages reported for each generation.

	Mill	Gen X	Boomer	Total
18-24	40	0	0	40
10-24	40	O	O	40
25-34	122	0	0	122
35-44	0	123	0	123
45-54	0	124	0	124
<del>4</del> 3-3 <del>4</del>	U	127	O	127
55-64	0	0	98	98
65-74	0	0	56	56
75 or older	0	0	8	8
75 01 01401	Ü	Ü	O	O
Total	162	247	162	571

Table 7. Quantity of purchases yearly made by each generation.

_	Mill	Gen X	Boomer	Total
0	4	8	8	20
1	18	17	10	45
2	31	39	15	85
3	29	44	13	86
4	8	16	10	34
5	3	10	1	14
6	0	0	2	2
7	0	1	1	2
12	2	6	2	10
13	11	15	3	29
14	10	13	9	32
15	4	6	6	16
16	2	1	4	7
17	0	0	3	3
18	0	1	1	2
24	0	1	0	1
26	2	1	0	3
27	1	1	2	4
28	0	1	0	1
38	1	0	0	1
48	0	0	1	1
52	0	1	0	1
53	1	0	3	4
54	1	1	5	7
55	2	1	4	7
56	1	0	2	3
57	0	1	0	1
64	1	0	2	3
65	0	2	0	2
66	1	1	1	3
67	1	1	2	4
78	0	0	2	2
128	0	1	0	1
208	1	2	0	3
Total	135	192	112	439

Table 8. Frequency of purchase in price range by annual household income.

Under \$25	Under \$25,000	\$25,000- 35,000	\$35,000- 50,000	\$50,000- 75,000	\$75,000- 100,000	\$100,000- 125,000	\$125,000 or more	Total
Never	1	4	9	10	9	11	5	49
Once a year	9	9	13	15	19	5	10	80
Twice a year	19	9	22	35	34	22	27	168
Once a month	5	9	16	24	21	22	15	112
Once a week	4	1	3	7	6	5	12	38
Total	38	32	63	91	89	65	69	447
\$26-\$75								
Never	16	12	14	18	22	9	5	96
Once a year	11	9	24	39	34	21	29	167
Twice a year	4	7	14	30	24	33	30	142
Once a month	1	2	5	5	12	8	13	46
Once a week	0	0	0	1	1	2	1	5
Total	32	30	57	93	93	73	78	456
\$76-125								
Never	29	23	47	64	61	32	38	294
Once a year	2	2	4	13	12	21	20	74
Twice a year	1	1	3	3	7	10	8	33
Once a month	0	0	1	1	2	1	4	9
Once a week	0	0	0	1	1	0	0	2
Total	32	26	55	82	83	64	70	412
\$126 or more								
Never	29	23	49	79	73	49	51	353
Once a year	3	3	6	1	6	7	8	34
Twice a year	0	0	1	1	2	3	3	10
Once a month	0	0	0	1	0	0	2	3
Once a week	0	0	0	1	1	0	0	2
Total	32	26	56	83	82	59	64	402

Table 9. Primary purchasing outlet preferences for each generation.

	Mil	Gen X	Boomer	Total
Super Market	37%	35%	37%	36%
Super Store	14%	15%	13%	14%
Traditional Flower Shop	38%	38%	37%	38%
Online Retailer	4%	5%	6%	5%
Farmers Market	6%	7%	7%	7%

Table 10. Percentage of quantity purchased by primary location. Responses are divided by quantity purchased annually and shown as a percentage of subgroup.

	0 to 7	12 to 24	25 to 52	52 or more	Total
-	31%	48%	27%	55%	37%
Primary Super Market	14%	16%	0%	5%	13%
Primary Superstore	39%	27%	73%	28%	36%
Primary Traditional Flower Shop	6%	2%	0%	0%	4%
Primary Online Retailer Primary Farmers Market	7%	5%	0%	13%	7%

Table 11. Percentage purchases made by each age group for holiday or life occasions.

	Mill	Gen X	Boomer	Total
Valentine's Day	56%	55%	60%	57%
Mother's Day	88%	81%	65%	78%
Winter Gift	25%	37%	46%	36%
Winter Decor	33%	39%	42%	38%
Party Decor	51%	52%	47%	50%
Hostess Gift	51%	52%	61%	54%
Anniversary	70%	66%	61%	65%
Just Because	76%	67%	66%	69%
Self Use	62%	53%	51%	55%
Get Well	77%	74%	74%	75%
Sympathy/Funeral	88%	90%	86%	88%
Wedding	52%	36%	35%	40%

Table 12. Importance of services offered by generation.

Delivery available	Mill	Gen X	Boomer	Total
Not important at all	3	9	11	23
Somewhat unimportant	6	15	4	25
Neutral	26	37	24	87
Somewhat Important	61	77	51	189
Very Important	66	109	72	247
Total	162	247	162	571
Phone order available				
Not important at all	10	16	8	34
Somewhat unimportant	6	19	4	29
Neutral	31	34	22	87
Somewhat Important	51	64	51	166
Very Important	63	110	76	249
Total	161	243	161	565
Internet order available				
Not important at all	8	19	17	44
Somewhat unimportant	12	23	16	51
Neutral	36	57	41	134
Somewhat Important	60	76	54	190
Very Important	46	71	31	148
Total	162	246	159	567

Table 13. Importance of retail atmosphere by generation.

Convenient location	Mill	Gen X	Boomer	Total
Not important at all	2	4	2	8
Somewhat unimportant	2	4	1	7
Neutral	19	23	27	69
Somewhat Important	65	103	75	243
Very Important	73	111	55	239
Stylish shop				
Not important at all	10	24	13	47
Somewhat unimportant	18	38	15	71
Neutral	61	89	76	226
Somewhat Important	55	74	41	170
Very Important	17	22	16	55
Quality customer service				
Not important at all	0	3	0	3
Somewhat unimportant	2	0	0	2
Neutral	4	10	9	23
Somewhat Important	26	63	35	124
Very Important	130	167	115	412
Large selection				
Not important at all	0	1	0	1
Somewhat unimportant	4	5	0	9
Neutral	18	14	21	53
Somewhat Important	86	144	72	302
Very Important	54	82	68	204
Other gift items available				
Not important at all	20	29	32	81
Somewhat unimportant	29	43	27	99
Neutral	49	70	61	180
Somewhat Important	53	89	34	176
Very Important	11	15	6	32

Table 13 continued. Importance of retail atmosphere by generation.

Pleasant atmosphere	Mill	Gen X	Boomer	Total
Not important at all	3	7	2	12
Somewhat unimportant	5	8	4	17
Neutral	17	35	33	85
Somewhat Important	62	100	60	222
Very Important	75	95	61	231
Recognizable brand name				
Not important at all	59	61	40	160
Somewhat unimportant	36	60	18	114
Neutral	43	84	76	203
Somewhat Important	17	33	18	68
Very Important	6	6	8	20

Table 14. Customer service personnel qualities considered important to each generation.

Efficient	Mill	Gen X	Boomer	Total
Somewhat unimportant	1	1	1	3
Neutral	7	16	7	30
Somewhat Important	55	90	56	201
Very Important	99	140	98	337
Friendly				
Not important at all	0	1	0	1
Somewhat unimportant	2	3	0	5
Neutral	2	7	6	15
Somewhat Important	37	60	36	133
Very Important	121	176	119	416
Knowledgeable				
Not important at all	1	1	0	2
Somewhat unimportant	1	2	0	3
Neutral	3	11	6	20
Somewhat Important	44	65	36	145
Very Important	112	168	117	397
Professional appearance				
Not important at all	4	6	2	12
Somewhat unimportant	6	10	2	18
Neutral	35	48	28	111
Somewhat Important	62	108	62	232
Very Important	55	75	68	198
Design ability				
Not important at all	1	5	0	6
Somewhat unimportant	4	7	1	12
Neutral	15	22	18	55
Somewhat Important	52	90	44	186
Very Important	90	123	99	312
	162	247	162	571

Table 15. Important customer service personnel attributes chosen by each generation.

	Mill	Gen X	Boomer	Total
Efficient	95%	93%	95%	94%
Friendly	98%	96%	96%	96%
Knowledgeable	97%	94%	96%	96%
Professional Appearance	72%	74%	80%	75%
Design Ability	88%	86%	88%	87%

Table 16. Acceptable length of freshness to each generation.

	Mill	Gen X	Boomer	Total
24 Hours	1	1	2	4
2-3 Days	18	25	13	56
5-7 Days	107	169	112	388
8-11 Days	26	35	25	86
12-14 Days	6	9	5	20
14 Days or more	4	7	4	15
Total	162	246	161	569

Table 17. Importance of floral product attributes to each generation.

Type of flowers	Mill	Gen X	Boomer	Total
Not Important at all	3	4	1	8
Somewhat Unimportant	3	5	4	12
Neutral	25	24	16	65
Somewhat Important	76	114	72	262
Very Important	55	100	69	224
Type of container				
Not Important at all	8	14	13	35
Somewhat Unimportant	22	24	9	55
Neutral	47	71	57	175
Somewhat Important	68	112	63	243
Very Important	17	25	17	59
Design style				
Not Important at all	3	1	5	9
Somewhat Unimportant	3	3	6	12
Neutral	28	49	29	106
Somewhat Important	71	120	68	259
Very Important	57	73	52	182
Creativity				
Not Important at all	1	1	2	4
Somewhat Unimportant	6	5	5	16
Neutral	24	39	23	86
Somewhat Important	76	125	69	270
Very Important	54	76	59	189

Table 17 continued. Importance of floral product attributes to each generation.

Size of arrangement	Mill	Gen X	Boomer	Total
Not Important at all	3	3	5	11
Somewhat Unimportant	12	13	7	32
Neutral	36	59	44	139
Somewhat Important	81	122	78	281
Very Important	28	49	27	104
Quantity of flowers				
Not Important at all	2	3	1	6
Somewhat Unimportant	13	7	4	24
Neutral	22	31	23	76
Somewhat Important	59	102	56	217
Very Important	66	103	76	245
Color				
Not Important at all	2	3	0	5
Somewhat Unimportant	4	4	2	10
Neutral	12	25	26	63
Somewhat Important	52	95	49	196
Very Important	92	119	85	296
Customizable				
Not Important at all	4	4	5	13
Somewhat Unimportant	11	19	7	37
Neutral	55	73	48	176
Somewhat Important	54	97	59	210
Very Important	38	54	41	133

Table 18. Consumer attitude for each generation.

I think fresh flowers are pretty.	Mill	Gen X	Boomer	Total
Somewhat disagree	0	0	1	1
Neither agree nor disagree	1	1	1	3
Somewhat agree	14	28	12	54
Strongly agree	147	217	148	512
Seeing a bouquet of flowers makes me smile.				
Somewhat disagree	2	2	0	4
Neither agree nor disagree	11	23	10	44
Somewhat agree	51	62	32	145
Strongly agree	97	158	118	373
I enjoy having flowers around me, in my home or at work.				
Strongly disagree	1	0	0	1
Somewhat disagree	0	6	3	9
Neither agree nor disagree	13	17	11	41
Somewhat agree	52	81	23	156
Strongly agree	96	142	123	361
I enjoy being given flowers.				
Strongly disagree	3	9	6	18
Somewhat disagree	7	14	4	25
Neither agree nor disagree	17	32	30	79
Somewhat agree	25	52	17	94
Strongly agree	109	136	101	346
I enjoy giving flowers to others.				
Strongly disagree	0	1	1	2
Somewhat disagree	3	6	2	11
Neither agree nor disagree	13	21	12	46
Somewhat agree	48	79	31	158
Strongly agree	98	136	115	349
I enjoy giving flowers to others.				
Strongly disagree	0	1	1	2
Somewhat disagree	3	6	2	11
Neither agree nor disagree	13	21	12	46
Somewhat agree	48	79	31	158
Strongly agree	98	136	115	349

Table 19. The importance of receiving flowers as a gift ranked by gender.

	Non- Male	Male	Total
Strongly disagree	3	15	18
Somewhat disagree	2	23	25
Neither agree nor disagree	6	73	79
Somewhat agree	69	25	94
Strongly agree	320	26	346
Total	400	162	562

Table 20. Regression model including only retailer controlled variables: retail atmosphere, product selection, services offered and customer service personnel.

Category	Variable	Description	Estimated Coefficient	Std. Error	T-stat	Significance
Product S		Description	Coefficient	Liioi	1-stat	Significance
1104400	FLOWERS	Flower type	3.014	1.625	1.855	.064
	VESSEL	Container type	-1.849	1.379	-1.341	.181
	DESIGN	Design style	.761	1.897	.401	.689
	CREATE	Creativity	1.472	1.977	.745	.457
	SIZE	Arrangement	-2.898	1.639	-1.768	.078
	QF	Flower Quantity	1.517	1.547	.980	.327
	COLOR	Color	413	1.642	252	.801
	CUSTOS	Customizable	1.172	1.484	.790	.430
Services (	Offered					
	AVAILABLE	Delivery	.218	1.575	.138	.890
	ORDER	Phone order	653	1.403	465	.642
	INTERNET	Internet order	-2.942	1.148	-2.563	.011
Retail Atr	nosphere					
	LOCATION	Convenient	-2.869	1.576	-1.820	.069
	SHOP	Stylish shop	4.112	1.428	2.879	.004
	CUSTOMER	Quality service	.688	2.523	.273	.785
	SELECTION	Large selection	.331	1.943	.170	.865
	GIFT	Other gift items	-1.507	1.210	-1.245	.214
	ATMOSP	Pleasant	537	1.754	306	.760
	BRAND	Recognizable	1.189	1.240	.959	.338
Customer	Service Personn	el				
	EFFICF	Efficient	-1.595	2.096	761	.447
	FRIENDLY	Friendly	3.598	2.664	1.351	.178
	KNOW	Knowledgeable	-2.790	2.569	-1.086	.278
	APPEAR	Professional	.380	1.399	.271	.786
	ABILITY	Design ability	2.566	1.947	1.318	.188

Table 21. Retailer Controlled Variables for the regression model include retail atmosphere, product selection, services offered and customer service personnel.

			Estimated	Std.		~: :
Category		Description	Coefficient	Error	T-stat	Significance
Product So						
	FLOWERS	Flower type	2.923	1.344	2.174	.030
	VESSEL	Container type	643	1.170	550	.583
	DESIGN	Design style	.322	1.549	.208	.835
	CREATE	Creativity	1.557	1.599	.974	.331
	SIZE	Arrangement	-1.600	1.374	-1.164	.245
	QF	Flower Quantity	872	1.287	677	.499
	COLOR	Color	.990	1.352	.732	.465
	CUSTOS	Customizable	614	1.218	504	.614
Services (	Offered					
	AVAILABLE	Delivery	.604	1.345	.449	.654
	ORDER	Phone order	866	1.201	721	.471
	INTERNET	Internet order	-1.646	.995	-1.655	.099
Retail Atn	nosphere					
	LOCATION	Convenient	-2.381	1.302	-1.829	.068
	SHOP	Stylish shop	2.605	1.218	2.139	.033
	CUSTOMER	Quality service	.481	2.116	.227	.820
	SELECTION	Large selection	.685	1.566	.437	.662
	GIFT	Other gift items	751	1.070	702	.483
	ATMOSP	Pleasant	.405	1.484	.273	.785
	BRAND	Recognizable	.276	1.059	.261	.794
Customer	Service Personn	el				
	EFFICF	Efficient	-1.163	1.694	687	.493
	FRIENDLY	Friendly	1.974	2.183	.904	.366
	KNOW	Knowledgeable	-2.420	2.151	-1.125	.261
	APPEAR	Professional	-1.611	1.224	-1.317	.189
-	ABILITY	Design ability	.797	1.557	.512	.609

Table 22. Situational Moderator Variables for the regression model include type of retailer, season and occasions.

			Estimated	Std.		
Category	Variable	Description	Coefficient	Error	T-stat	Significance
Holidays						
	VDAY	Valentine's Day	4.692	2.364	1.985	.048
	MDAY	Mother's Day	1.828	2.795	.654	.514
	WGIFT	Winter Gift	6.288	2.511	2.505	.013
	WDECO	Winter Decor	3.773	2.675	1.411	.159
Occasions						
	PARTY	Party Decor	2.589	2.536	1.021	.308
	HOST	Hostess Gift	2.935	2.306	1.273	.204
	ANNIV	Anniversary	-1.498	2.422	618	.537
	BECAUS	Just Because	2.696	2.357	1.144	.253
	SELF	Self Use	5.921	2.483	2.385	.018
	WELL	Get Well	907	2.477	366	.715
	SYMP	Sympathy/Funeral	-4.621	3.331	-1.387	.166
	WED	Wedding	1.974	2.200	.897	.370
Retail Out	let					
	PSM	Mass Market	1.335	2.913	.458	.647
	PTF	Traditional Shop	1.936	3.146	.615	.539

Table 23. Consumer Moderator Variables for the regression model include sociodemographic variables and consumer attitude.

Category Scio-Demographic	Variable	Description	Estimated Coefficient	Std. Error	T-stat	Significance
Scio-Demograpine	<b>,</b> S					
	INC	Household Income	1.619	.595	2.722	.007
	MIL	Mill	.203	2.377	.086	.932
	BOOM	Boomer	5.495	2.578	2.132	.034
	EDUC	High-Ed	-6.037	2.497	-2.418	.016
Consumer Attitude						
	ATT	Consumer Attitude	036	.446	081	.936

#### DISCUSSION

Several inferences can be drawn from the results of the Floral Consumer Experience

Study. The comparison between Millennials and Baby Boomers is not as significant as

hypothesized. We will compare the results to our original research expectations and point out
interesting themes or ideas that arose.

Looking first at the variables within the retailer's control, from the original discussion objective consumer experience and service, more Millennials indicated that a stylish shop and other gifts available were important attributes to the retail atmosphere. We expected this result based on the "Purchasing Barriers Tracking" study (MR&R, 2016). Our regression shows that a stylish shop is significant to increase the quantity of yearly floral purchases with a coefficient of 2.605 and a p-value of 0.033. The importance a consumer places on a convenient location has a negative effect on purchase volume with a coefficient of -2.381 and a p-value of 0.068. This, paired with the surprising finding that online ordering is the least important service offered, may allow us to infer that individuals that base their gift purchasing solely on convenience are not likely to purchase flowers. It also has a negative coefficient of -1.646 and a p-value of 0.099. Still, 12% more Millennials stated that online ordering was important to them. There were no statistically significant variables that fell into the category of customer service personnel; however, as we expected Millennials were least concerned with professional appearance. Millennials and Boomers were equally concerned with design ability. There was little variance between generation in the importance of these variables with over 90% indicating that efficient, friendly and knowledgeable staff were important and 96% indicating that quality customer

service is important. This validates Oblinger's (2003) point that customer service has become an expectation.

Product selection and quality are also within the control of the retail floral outlet. The notion that flowers don't last, combined with the survey population expecting them to last 5-7 days, is encouraging to floral retail outlets. With the proper post-harvest care and handling procedures, a vase life at consumer level of 5-7 days is easily accomplished. Of the variables in the category of product selection, the only one found significant in the regression is type of flowers with a  $\beta$  coefficient of 2.923 and a p-value of 0.030. This was indicated on average as important to 85% of our sample, with 80% importance to Millennials and 87% importance to Boomers. We were incorrect to think that Millennials would be more concerned with creativity since they ranked creativity on a similar level to Boomers, 80% and 81% respectfully. Other important facts to note are that color was listed as important more often than any other attribute, and type of container the least important with 47% of responses indicating it neutral to not important at all.

External moderators including purchasing patterns, and consumer moderators including consumer attitude, fall outside the retailer's control. Seasonality of the floral industry is not a surprise. The highest months for floral sales are February 9.9% of total sales, May 12.0% of total sales and December 13.2% of total sales for flower shops in the United States (Goodman, 2011). Mother's Day was indicated by the largest percent of our survey respondents as a holiday when they were likely to purchase flowers (78% overall and 88% of Millennials). Statistically significant holidays include Valentine's Day (coefficient of 4.692 and a p-value of 0.048) and Winter Gift (coefficient of 6.288 and a p-value of 0.013). Occasions are not easily predicted by season because they vary by individual. Included in occasions was self-use. Interestingly, as

surmised from the Scammon (1982) study, the statement that young professionals buy flowers for themselves holds true with 62% of Millennials stating they purchase flowers for themselves, which is 11% more than Boomers. This variable is also significant with a p value of 0.018 and a coefficient of 5.921. It makes sense that you may purchase more often if you are buying for yourself and not waiting for a holiday or other occasion. The type of retailer seems to play a role in the quantity of purchases with 60% of people purchasing once a week or more and selecting a mass market location as their primary retailer. There does not appear to be much variance between the generations in regard to primary purchasing location.

The purchasing patterns of our sample are very dependent on the sociodemographic questions that we asked. Generation does matter with Boomers purchasing on average about seven times more per year. The dummy variable for boomer is significant at 5% with a coefficient of 5.495. Household income and higher education are also both statistically significant as highlighted in Table 24. Household income makes sense, 66% of people purchasing more than once a week have an annual income of over \$75,000.

There is no question about consumers' positive attitude toward flowers, with over 99% of respondents indicating they think flowers are pretty and over 90% signifying flowers make them smile. They enjoy being around flowers and giving them as gifts. It is also good for the industry.

Table 24. Significant Variables found in Regression Analysis.

Category	Variable	Description	Estimated Coefficient	Std. Error	T-stat	Significance
Product	FLOWERS	Flower type	2.923	1.344	2.174	.030
Atmosphere	LOCATION	Convenient	-2.381	1.302	-1.829	.068
Atmosphere	SHOP	Stylish shop	2.605	1.218	2.139	.033
Services Offered	INTERNET	Internet order	-1.646	.995	-1.655	.099
Demographic	INC	Income	1.619	.595	2.722	.007
Demographic	BOOM	Boomer	5.495	2.578	2.132	.034
Demographic	EDUC	High-Ed	-6.037	2.497	-2.418	.016
Holidays	VDAY	Valentine's Day	4.692	2.364	1.985	.048
Holidays	WGIFT	Winter Gift	6.288	2.511	2.505	.013
Occasions	SELF	Self Use	5.921	2.483	2.385	.018

#### **CONCLUSION**

While there is not a clear indication why Millennials buy fewer flowers than Baby Boomers, we can identify what Millennials desire from the floral industry. They expect excellent customer service with friendly, efficient and knowledgeable staff. They enjoy shopping in a stylish location with other gift items available that offers delivery of their purchase. The reasonable expectation of five to seven days of vase life and the right colors are most important in their product selection.

With 91% of Millennials saying they enjoy having flowers around them, in their home or at work, and self-use having such a high impact on our regression, perhaps it is time for industry marketing to encourage buyers to surround themselves with flowers. In turn when the occasion for a gift arises, with flowers in the forefront of their mind, they will remember it is always best to send your love with flowers.

As with any study revolving around a survey there are many limitations. We are relying on the memory and accuracy of human subjects. While we accounted for any obvious outliers there can always be mistakes in the estimation of the participants. Some people lack the ability to recall, estimate or judge generalizations. Without tracking participants' actual purchases over a year, we must rely on their memory.

The focus of this study was the physical place of business and the people and products within. Further studies could focus on marketing. A few non-traditional trends are making an appearance in the industry, including unconventional shops such as flower trucks and a movement called Slow Flowers that is similar to the Farm to Table movement in the food industry.

#### REFERENCES

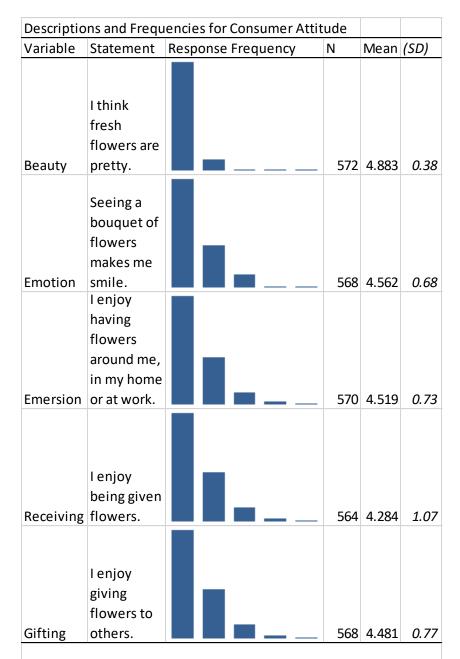
- American Institute of Floral Design. (2005). *The AIFD guide to floral design : terms, techniques, and traditions.* Flourtown: Intelvid Group.
- Belk, R. W. (1977). Gift Giving Behavior: Part A. Faculty Working Papers, College of Commerce and Business Administration.
- Bertoni, S. (2017, May 23). Former Apple CEO, John Sculley, On How to Think Like Steve Jobs and Market Like Pepsi. Retrieved from Forbes: www.forbes.com
- Bhasin, H. (2017, December 24). *Marketing Strategy of Harley Davidson*. Retrieved from Marketing91: www.marketing91.com
- Carnegie, D. (1936). How to Win Friends and Influence People. New York: Gallery Books.
- Eweida, A., & Sverkel, S. (2009). *Understanding Consumer Preference in the Flower Industry*. Vasteras: Uppsala University.
- Floralife. (2014, July 2). Floralife Crystal Clear® (also known as Flower Food Clear 300). Retrieved from YouTube: https://www.youtube.com/watch?v=B0vGl-04N-A
- Goodman, P. (2011). The Profit Minded Florist. Los Angeles: Teleflora LLC.
- Green, S. (2018, September 18). Marketing for the Floral Industry. *Adavnced Floral Design*. Las Cruces, NM.
- Greenaway, K. (1884). Language of Flowers. London: Routledge.
- Harris Poll. (2001). Presenting the Class of 2001: Millennium's First College Grads are Connected, Career-Minded and Confident--Way! Rochester, NY: Harris Interactive.
- Hasanaj, E. (2017, Jan 9). Five lessons from Harley-Davidson brand Tactics to Revolutionize Your Customer Experience. Retrieved from Customer Think: www. customerthink.com
- Haviland-Jones, J., Rosario, H. H., Wilson, P., & McGuire, T. R. (2005). An Environmental Approach to Positive Emotion: Flowers. *Evolutionary Psycology*, 104-132.
- Hennessey, R. (2012, August). *Three Reasons Why Starbucks Still Shines, Despite Market Shortcomings*. Retrieved from Forbes: www.forbes.com
- Kerin, R. A., & Hartley, S. A. (2019). *Marketing* (14th ed.). New York, New York: McGraw-Hill Education.
- Lemheney, S. (2013). In B. Schaffer, & K. Kratt, *Taking the Flower Show Home*. Atglen, PA: Schiffer Publising, Ltd.

- Levelt, M. (2010). Global trade and the Dutch hub: understanding variegated forms of embeddedness of international trade in the Netherlands. *Digital Academic Repository*, 4-6.
- M&RR. (2016). Purchasing Barriers Tracking Study. Alexandria: Floral Marketing Fund.
- Marlin, W. (2016). Traditional Dozen. Personal collection. AIFD, Springfield.
- McCarthy, J. (1960). Basic Marketing. Homewood, IL: McGraw-Hill Education.
- Michelli, J. A. (2012). The Starbucks Experience. New York; New York: McGraw-Hill.
- Moorman, C. (2012, July 10). Why Apple is a Great Marketer. Retrieved from Forbes: www.forbes.com
- Oblinger, D. (2003, July/August). Boomers, Gen-Xers & Millennials: Understanding the New Students. *Educause Review*, pp. 37-47.
- Pine, B. J., & Gilmore, J. H. (1999). *The Experience Economy*. Boston: Harvard Business Review Press.
- Rems, R. V. (2007). Rene's Bouquets. South Korea: Rene Van Rems International.
- *Roses Cubed.* (2018, November 3). Retrieved from Blossom Flower Shops: https://www.blossomflower.com/flowers/roses/roses-cubed/
- Russell Reserch, Inc. (2016). 2016 Generations of Flowers Study. East Rutherford: Russell Reserch, Inc.
- Ryan, M. (2018). Power of Giving Flowers Study. (S. o. Florists, Interviewer)
- Salomann, H., Kolbe, L. M., & Brenner, W. (2006). Self-Services in Customer Relationships: Balancing High-Tech and High-Touch Today and Tomorrow. *E-service Journal*, 4(2), 65-84.
- Scammon, D. E., Shaw, R. T., & Bamossy, G. (1982). Is a Gift Always a Gift? An Investigation of Flower Purchasing Behavior ACRoss Situations. *NA-Advances in Consumer Research*, 531-536.
- Sinek, S. (2009, September). *How Great Leaders Inspire Action*. Retrieved from TED Ideas Worth Spreading: https://www.ted.com/talks/simon\_sinek\_how\_great\_leaders\_inspire\_action?language=en
- Society of American Florists. (2016, September 23). *Floral Industry Statistics*. Retrieved July 7, 2018, from SAFNOW: https://safnow.org/
- Sundale Research. (2018). *State of the Industry: Florists in the U.S.* Bay Shore: Sundale Research.

- Verhoef, P. C., Lemon, K. N., Parasuraman, a., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer Experience Creation: Determinants, Dynamics and Management Straregies. *Journal of Retailing* 85, 31-41.
- Yue, C., Rihn, A., Behe, B., & Hall, C. (2010). *Consumer Preferences for Flowers as Gifts*. Alexandria: Floral Marketing Fund.

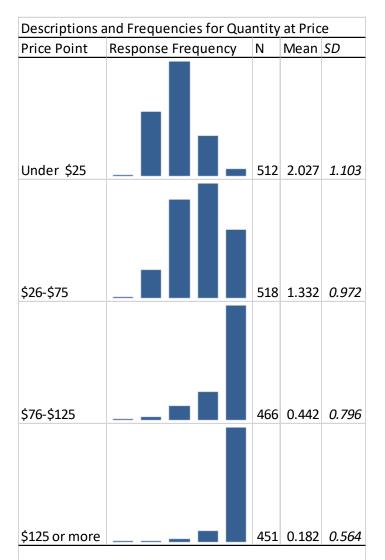
#### **APPENDICES**

Appendix A: Responses to Survey Instrument with Descriptive Statistics

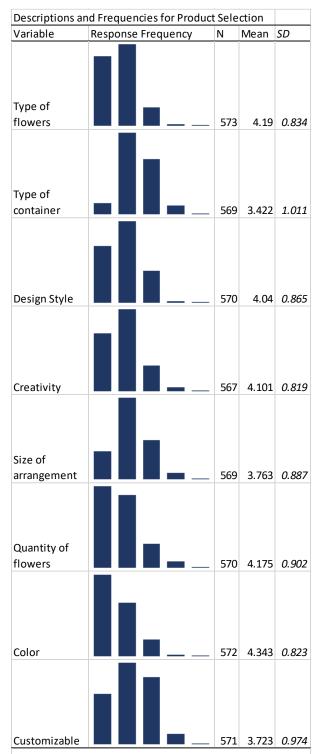


Notes: Quantifies respondents' attitude about flowers. Scale Values (from left to right): 5= Strongly Agree 4= Somewhat agree 3= Neither agree or disagree 2= Somewhat disagree 1= Strongly disagree

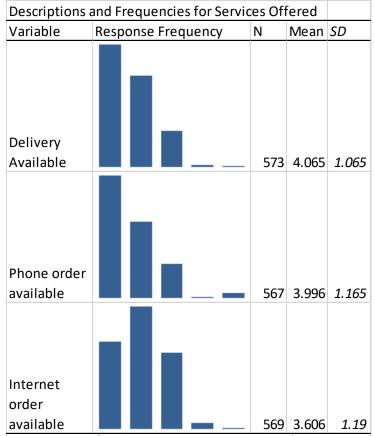
Appendix A continued: Responses to Survey Instrument with Descriptive Statistics



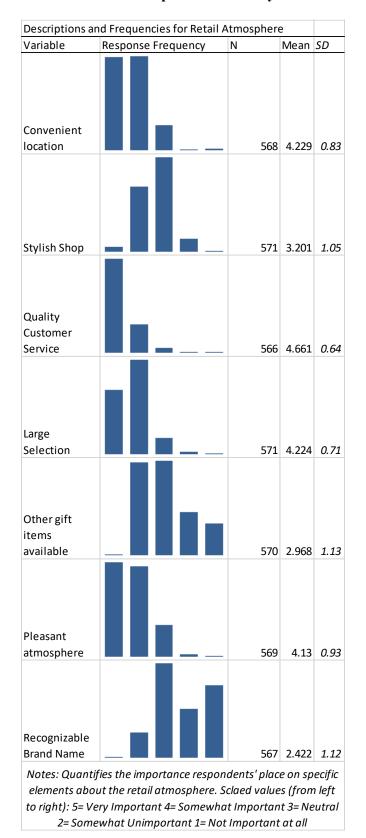
Notes: Quantifies respondents' liklyhood to purchase flowers in a given price range. Scale Values (from left to right): 4=Once a week or more 3=Once a month 2= Twice a year 1=once a year 0= Never



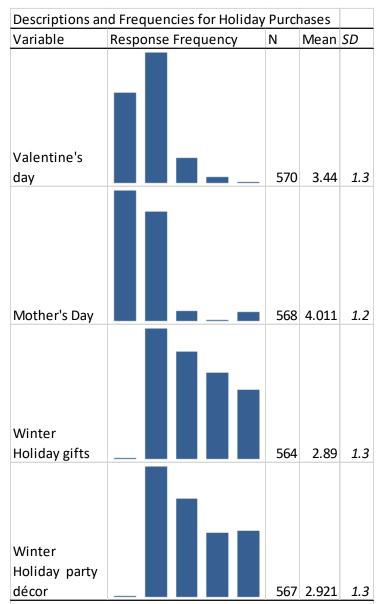
Notes: Quantifies the importance respondents' place on specific elements in prodcut selection. Sclaed values (from left to right): 5= Very Important 4= Somewhat Important 3= Neutral 2= Somewhat Unimportant 1= Not Important at all



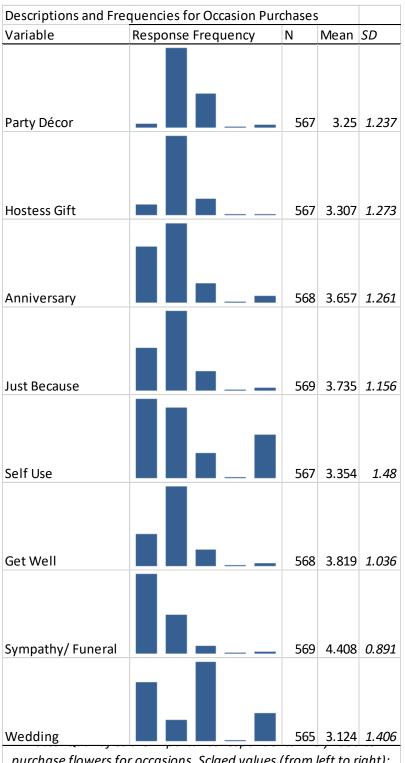
Notes: Quantifies the importance respondents' place on specific elements in prodcut selection. Sclaed values (from left to right): 5= Very Important 4= Somewhat Important 3= Neutral 2= Somewhat Unimportant 1= Not Important at all



Appendix A continued: Responses to Survey Instrument with Descriptive Statistics

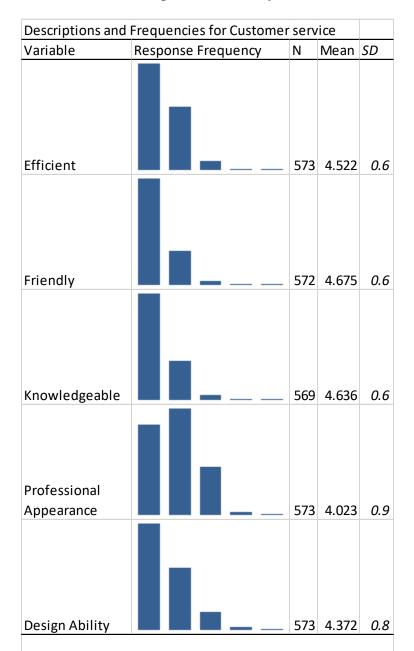


Notes: Quantifies the importance respondents' likelyhood to purchase flowers for holidays. Sclaed values (from left to right): 5= Extremely likely 4= Somewhat likely 3= Neither likely nor unlikely 2= Somewhat unlikely 1= Extremely Unlikely



purchase flowers for occasions. Sclaed values (from left to right): 5= Extremely likely 4= Somewhat likely 3= Neither likely nor unlikely 2= Somewhat unlikely 1= Extremely Unlikely

Appendix A continued: Responses to Survey Instrument with Descriptive Statistics



Notes: Quantifies the importance respondents' place on specific elements in product selection. Sclaed values (from left to right): 5= Very Important 4= Somewhat Important 3= Neutral 2= Somewhat Unimportant 1= Not Important at all

#### **Appendix B: Survey Instrument**

#### Floral Consumer Experience Study (Survey)

Thank you for taking the time to participate in this survey from Missouri State University. We are gathering data to gain a better understanding of the floral industry. Your participation is voluntary. All responses are anonymous and confidential. It should take about 5 minutes to complete. If you have any concerns please contact arbindrarimal@missouristate.edu.

Question 3: Please indicate which answer best applies to how you feel about each statement.

	Strongly	Somewhat		Somewhat	Strongly
	Agree	agree	Neutral	disagree	Disagree
I think fresh flowers are pretty.					
Seeing a bouquet of flowers makes me smile.					
I enjoy having flowers around me, in my home or at work.					
I enjoy being given flowers.					
I enjoy giving flowers to others.					

Question 4: How often do you purchase flowers within each of the following price brackets?

				<u> </u>	
	Once a				
	week or	Once a			
Price	more	Month	Twice a year	Once a Year	Never
Under \$25					
\$26-\$75					
\$76-\$125					
\$125 or more		_			

Question 5: What length of time for the flowers to retain freshness do you find acceptable?

24 Hours	2-3 days	5-7 days	8-11 days	12-14 days	14 days or more

Question 6: Indicate the importance of each element of the floral purchase to you:

Element	Very Important	Somewhat Important	Neutral	Somewhat unimportant	Not Important at all
Type of flowers					
Type of container					
Design Style					
Creativity					
Size of arrangement					
Quantity of flowers					
Color					
Customizable					

# Question 7: Rank the retail outlet that you most often purchase floral products. Supermarket Super Stores(Super Centers) Traditional Flower Shop Online Retailer Farmer's Market

#### Question 8: Please rate the importance of the following consumer experience aspects to you:

	Very Important	Somewhat Important	Neutral	Somewhat unimportant	Not Important at all
Delivery Available					
Phone Order Available					
Convenient location					
Stylish Shop					

Internet Order Available			
Quality Customer Service			
Large Selection			
Other gift items available			
Pleasant atmosphere			
Recognizable Brand Name			

Question 9: How likely are you to purchase flowers for the following occasions:

	Very likely	Somewhat likely	Neutral	Somewhat unlikely	Very unlikely
Valentine's Day	very intery	e.y	Treation .	grinner,	unintery
Mother's Day					
Winter Holiday Gifts					
Winter Holiday Party Décor					
Party Décor					
Hostess Gift					
Anniversary					
Just Because					
Self Use					
Get Well					
Sympathy/ Funeral					
Wedding					

Question 10: Please rate the customer service qualities most important to you:

	Very Important	Somewhat Important	Neutral	Somewhat unimportant	Not Important at all
Efficient					
Friendly					
Knowledgeable					
Professional Appearance					
Design Ability					

IF you have any other comments about flowers please let us know below:

# YOUR ANSWERS TO THE FOLOWWING DEMOGRAPHIC QUESTIONS WILL HELP US INTERPRET THE RESULTS OF THIS SURVEY

13	Gender				
	Male		Female		Other
1.1	Λσο				
14	Age				
	18-24		25-34		35-44
	45-54		55-64		65-74
	75 and				
	older		Don't Know		Refused
15	What is the last year or g	rade of school comple	eted?		
-5	,	•			
	Some high school or less	High school g	raduate/GED	Some college/	2 year associate degree
	Four year collage degree	Post Graduate	e	Don't Know	
	Refused				

16 What was your total household annual income for 2015?
Under \$25,000 \$25,000-35,000 \$35,000-50,000

\$50,000-

75,000 \$75,000-100,000 \$100,000-125,000

\$125,000 or more Don't Know Refused

17 Your ethnicity

Caucasian/white Black/African American Asian/Pacific Islander

Native American Hispanic Other (specify)

Don't Know Refused

18 How did you receive this survey?

Email Social Media

# Appendix C: Human Subject IRB Approval

Inbox



To:

Arbindra Rimal Agriculture - SPFD Campus Benjamin Onyango

RE: Notice of IRB Approval
Submission Type: Initial
Study #: IRB-FY2018-544
Study Title: Floral Consumer Experience
Decision: Approved

Approval Date: March 19, 2018

Expiration Date: March 17, 2019

This submission has been approved by the Missouri State University Institutional Review Board (IRB) for the period indicated.

# **Appendix D: Human Research Training Certificate**

