

THE RELATIONSHIP BETWEEN LIVE MUSIC AND ENJOYMENT OF WINE

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ABSTRACT

This study was performed in order to determine the relationship between enjoyment of music in a live setting and enjoyment of wine consumed while at the concert. Surveys were collected from 113 respondents throughout the summer of 2011 at San Luis Obispo's "Concerts in the Plaza." J. Lohr Vineyards and Wines was the wine sponsor throughout the summer concert series, which represented a wide variety of musical genres. Overall, 80% of the sample was women, 69% drank white wine, and 93% had tried J. Lohr wines before the event. With regard to wine opinion, 57% of the sample maintained the same opinion of the wine before and during the live music event.

Regression analysis was used to explain the change in opinion of wine by various factors such as opinion of music at the event and previous opinion of wine. The analysis suggests that opinion of the live music was not a statistically significant factor influencing opinion of wine consumed at the live music event. The only variables that significantly influenced opinion of wine at the concert were the respondents' previous opinion of wine and frequency of listening to music while drinking wine. Both of these variables positively correlated with opinion of wine consumed at the event. The inability for the respondent to separate previous and current opinion of the wine could have contributed to the lack of significant results, as on average the sample had a somewhat positive opinion of the wine before and after the concert, regardless of the respondents' opinion of the live music.

Recommendations for further research include isolating the wine and music variables so no outside factors influence opinion. Serving the wine to respondents without

their knowledge of the brand would eliminate their ability to associate previous opinions with the current experience influenced by the presence of varying music.

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Chapter 1

INTRODUCTION

There is a well-known but rarely studied relationship between wine and music. The two are often combined, whether in Europe at the Opera, as inspiration for composers and musicians such as Mozart, or in wine and music festivals around the world. In modern times, researchers are exploring the relationship between wine and music and how one potentially affects the other.

With the emphasis on music and wine pairings, there is no question why research has increased in this field. Many wonder if the pairing of wine and music is simply a marketing scheme to increase purchases of the complementary goods or if they truly influence each other. In this report the possible influence of live music on the enjoyment of wine is explored in order to help understand the correlation between the atmosphere and a consumer's taste and preferences. More specifically, is there a positive correlation between enjoying live music and the enjoyment of wine consumed during that event?

Problem Statement

Is there a positive correlation between enjoying live music and the enjoyment of wine consumed during the live music event?

Hypothesis

There is a strong correlation between atmosphere and a consumer's taste and preferences. Atmosphere, more specifically music, can influence the consumer's mood and

overall experience which will ultimately influence their perception of other aspects of their visit. Listening to enjoyable music while drinking wine could actually influence the consumer's perception into thinking s/he enjoys the wine more than before.

Objectives

- To administer consumer surveys at the "Concerts in the Plaza" during Summer 2011 in San Luis Obispo
- To conduct regression analysis on the data collected in order to discover if there is a correlation between enjoying music and enjoying wine
- To develop and explain the relationship of influence between wine and music

Significance of the Study

By finding out if there is a relationship between enjoyment of wine and enjoyment of live music, wineries or wine brands that sponsor live music events can conclude if their investment in sponsorship is providing an "emotional" return on investment--through consumers further enjoyment of their wines due to the atmosphere. Although sponsoring live music events may not have the highest return on investment, if they are viewed as an opportunity to build future repeat customers, it can be seen as a much more profitable investment. If it is found that live music increases the enjoyment of the wine served, it can also be assumed that brand loyalty increases through this experience as if someone enjoys the wine once, they are more likely to buy the wine again based on this positive experience. With this possibility of increased brand loyalty, wineries or wine brands can expand their promotional budgets for event sponsorship. Although there is an opportunity for further

research on the correlation between the experience and future revenues generated, an initial relationship must be established to justify further exploration of the subject.

Chapter 2

LITERATURE REVIEW

Introduction

The following topics will be discussed due to their relevance to the topic of study. First, the interaction between the senses is important because the senses are the basis of the measurement of enjoyment in several aspects of this study. It is obvious that senses of sight, hearing, and taste are clearly combined in the context of an outdoor concert where wine is being consumed. Second, the effect of atmosphere on mood and behaviors is reviewed because of the role of music in defining an atmosphere, and its effect on consumers. Third, the trends in live music are also discussed to understand the background of attendee demographics and their relation to alcohol consumption so the findings can be applied to the consumer survey. Lastly, the consumer research tool is reviewed in order to develop an understanding of the formation of surveys and the analytical tests performed to form conclusions from the data.

With the current research on these topics, a strong background will be formed for the object of study. Through the review of all relevant literature, the basis for furthering the literature in these topics is established. Not only were gaps and limitations discovered, but opportunities for further exploration were also identified and, when applicable, added as an objective of the study.

Interaction between the Senses

The human senses are the basis of how people perceive the world--by touch, taste, sight, feel, and hearing. Although the science behind these individual senses is mostly common knowledge, there isn't as much research on the interaction between these senses and how they work together or influence each other. Some relations are obvious, such as the influence of smell on taste, but what about the interaction of the other senses? The research found on how the human senses relate is described in the following sources.

Ernst and Bulthoff (2004) reiterate what is assumed, that in order to perceive the surrounding world, the brain uses several sources of sensory information including vision, touch, and audition. According to this source, the senses must be merged efficiently to form "a coherent and robust percept" (Ernst and Bulthoff, 2004). This source explores the way the senses merge in the brain dependent on the type of information involved. Ernst and Bulthoff (2004) set the base of their research with a vast exploration of the aspects of sensory combination and sensory integration. In order for a human to have a complete perception of its surroundings, it must have the influence of multiple senses—with only one sensory signal, no reliable information can be formed based on the three dimensional structure of the environment. Yet, the brain will fill in gaps of information with prior experiences and knowledge (Ernst and Bulthoff, 2004). Ernst and Bulthoff (2004) conclude "the brain reduces the variance in the integrated estimate and increases the robustness of the percept by combining and integrating sources of sensory information from within and across modalities." Although they acknowledge that good progress has been made in

understanding sensory integration, there is still more to know in how the senses affect each other.

Krishna (2006) takes a more focused approach on the relation between vision and touch while acknowledging, in agreement with Ernst and Bulthoff (2004), that the combination of the senses is extremely influential in perceiving the environment. Krishna (2006) begins his analysis by insisting that psychologists in history have characteristically studied senses in isolation, but emphasizes the need and trend to focus on the interaction of the senses. Vision-touch interaction is the main focus of his research as it influences consumer perception of marketed goods. Past research concludes, “in some situations, vision completely dominates touch, whereas in others, vision is still dominant but not completely so” (Krishna, 2006). This indicates that the senses of sight and touch work together with what one sees being more influential than what one perceives with touch. In agreement with Ernst and Bulthoff (2004), Krishna (2006) emphasizes the need for further investigation of the effects of sensory inputs on each other and on consumer behavior, especially in studying how different senses individually, and through their interactions, can affect consumer perceptions, behavior, and choice.

In congruence with the past articles, a blog post by the Society for Neuroscience explores research in the interaction between the senses. Research has revealed that “what we see affects how we perceive odors” when investigating how the brain combines sight and smell to amplify perception (Society for Neuroscience, 2003). It is clearly demonstrated through several studies that the human senses are related and are combined when processed in the brain to develop a perception of the world. In agreement with past

research and the articles presented earlier, the Society for Neuroscience has found the need for further investigation into the integration of senses but also emphasizes the necessity in viewing the senses in combination, as their influence on each other is undeniable (Society for Neuroscience, 2003).

Nelson and Hitchon (1999) brought the interaction of senses into the context of marketing. Their article on “Loud Tastes, Colored Fragrances, and Scented Sounds,” explored the theory of synesthesia meaning “joined perception” (Nelson and Hitchon, 1999). Those who experience synesthesia very literally experience the interaction of senses. This theory has been tested in neurology and psychology, but is mostly misunderstood (Nelson and Hitchon, 1999). Although the context for the examination of the interaction between the senses is different than the other articles discussed, the background is useful in drawing conclusions about the relation of the human senses.

Phillip Schewe, journalist for *U.S. News and World Report*, reported that senses are very connected, more specifically the sense of touch and sense of hearing. Schewe (2011) emphasized that “scientist have long suspected...that some...sensory signals in the brain might have some circuits in common or might otherwise be related.” Although Schewe (2011) agrees that people hear with their ears and feel with their skin, he brings forth the idea that the human brain can combine information perceived through the senses in various ways. The scientific research behind his statement is scarce but developing in modern times.

Although it is clear that the senses are related, whether it is taste and smell, or touch and sight, there is an evident need for further scientific research on how vision can

influence smell, or how touch can influence taste, etc. These articles provide a strong background in what is already known in relation to this topic and therefore provide a base for further exploration of the topic of sensory integration and influence in the context of wine and live music.

Effects of Atmosphere on Mood and Behaviors

Music is an obvious atmospheric component, yet the importance of music to atmosphere as well as the influences music can have on the mood and behaviors of consumers has little research supporting or explaining it. The historical research done in this category is rather dated in the category of atmospherics, yet the relation between music and its influences on purchasing habits, more specifically wine, are more recent in most instances.

Although it is assumed that music has a heavy influence on mood and behavior, more recent empirical evidence is needed to clearly define this connection so that marketers and businesses alike can use atmospherics to influence consumer behavior. Milliman (1982) discusses the relationship between background music and the behavior of supermarket shoppers. In correlation with other articles reviewed, Milliman (1982) concludes that music has a definite connection to consumer mood and behavior and insists that “the music must fit the situation in which it is to be used,” or else adverse effects may result.

Similarly, Alpert and Alpert (1990) focus on the influence of music on mood and purchase intentions. This study establishes a broad base for further exploration of the

relation between music, mood, and their influence on wine enjoyment. Alpert and Alpert (1990) found that “the likelihood that a host of behaviors may be performed appear to be enhanced by positive moods,” and similarly to other reviewed sources, agreed that music has an important influence on mood. Alpert and Alpert (1990) discovered that the opinion of the product was dependent on whether they liked or disliked the music they were exposed to in the shopping atmosphere. They took the study further to determine the components of music that lead to “emotional or affective responses among customers” (Alpert and Alpert, 1990). Alpert and Alpert (1990) concluded that, “While the ability [for music] to influence mood seems likely, the degree of influence and the desirable direction may vary.”

Bruner (1990) explored in more depth the connection between music, mood, and marketing. Along with the past sources, Bruner (1990) agrees, “music is an especially powerful stimulus for affecting moods.” Bruner (1990) examines these conclusions through the review of marketing-related studies. His further exploration of managerial implications based on his results is useful in developing recommendations. He uses his review of various music and mood related studies to inform managers about the implications of music choice, which leads to some ideas regarding music choice in a retail setting.

All three articles clearly involve the basis for the topic of research—music and its’ effect on consumers. By using primary data found through various observational and survey studies, Bruner (1990), Alpert and Alpert (1990), and Milliman (1982) were able to draw conclusions on consumer mood and behavior as influenced by music, although it was also

made clear through their research that there are many unanswered questions and inconclusive results.

Although ample information is assumed between the relation of wine and music based simply on opinion, more research is needed using empirical evidence in the setting of live music and wine consumption. North, Hargreaves, and McKendrick (1999) continue the discussion on the relation between in-store music and wine selections in order to determine the correlation between background music and wine purchases. They concluded that music influences customer product selections based on their use of music.

Similarly, Areni and Kim (1993) focused on the influence of different genres of music on shopping behavior in a wine cellar. This study establishes a base for further investigation of the influence of music on wine enjoyment and selection. Areni and Kim (1993) complement previous research by confirming that music has a prevalent relation with wine consumption and selection. They conducted a study with varying music in a restaurant with a unique setting including a wine cellar, which allowed for the interaction of wine and music to be studied. Areni and Kim (1993) found that music had little or no influence on number of shelf items examined, number of items handled, number of items purchased, the frequency with which patrons sampled wine on site, or the amount of time spent in the wine cellar store. However, they concluded that background music influenced the amount of money shoppers spent, with classical music leading respondents to buy more expensive items (Areni and Kim, 1993).

Wine Advisors on the *Virgin Wines* blog explore the ability of music to actually influence the consumer perception of wine. This article states that wine and music are often

thought of in conjunction. Different from the previous two articles, the author insists that wine can have its “own special ‘melody’” and can be referred to as “liquid music.” Further, Virgin Wines suggests that there may be a connection to the cognitive priming theory, insisting that “music stimulates certain areas of the brain that are then influenced by pleasurable experiences found in wine drinking,” as well as the theory of synesthesia, or the crossing of the senses, which relates the experiences of multiple senses such as those stimulated by wine and music (Wine Advisors, 2011). Varying exposure to music and wine over time will lead to the data needed to make conclusions regarding the correlation between music and wine enjoyment.

Trends in Live Music: Attendee Demographics and Relation to Alcohol Consumption

Live music events present attendees with an opportunity to relax in a setting of enjoyable music and good company. With the opportunity to indulge in this leisure, outdoor concert attendance is growing and spreading across demographics. One aspect that is often present at outdoor concerts, no matter what demographic is present, is alcohol. In some settings beer is served, while in others wine is found to be more appropriate. In either case, alcohol and music add greatly to the atmosphere and overall perception of the event. Music, which appeals to nearly everyone globally, has the ability to attract people of all ages and backgrounds, depending on the genre and setting.

As a recreational activity, concert attendees vary demographically by gender, age, race, financial status, and education. Wellner (1997) concluded that young adults are the largest participants in recreation, which can translate to concerts in general. Wellner (1997)

also concluded that Caucasians, primarily in the higher income levels and those that have attained higher education, are more likely to participate in such recreational events.

Stipp (1990) found that people who attend concerts are fulfilling psychological and/or sociological needs in some cases. The patterns observed revealed that people attended concerts in order to have “a deeper experience with musical preference through a live concert setting” or in order to participate in a social event in general (Stipp, 1990). Although there are some deeper needs being met by attending live music events, there are also basic trends in demographics that determine attendance.

Age is a huge influence in concert attendance in general as well as in genre choices for attendance. Throughout the life-cycle, people vary in their genre preferences dependent on their needs and desires. Zill and Robinson (1994) conducted a study in which country music was found to be the most popular genre of music in the United States, followed by easy listening, and rock music in third place. Differences in age related preferences are more widely displayed in the rock genre, with both young and old audiences attracted to this style of music (Zill and Robinson, 1994). Zill and Robinson (1994) have concluded that musical preferences, which influence concert attendance, are more highly affected by internal factors of attraction such as what the needs and desires of people are in various phases of the life-cycle.

Not only do internal factors influence concert attendance, but also external factors, such as location, can affect the demographic in attendance at any musical event. Backman, Backman, Uysal, and Mohr (1995) found that primary attendees are tourists and local community members in any recreational event. For destination locations such as the

Central Coast, tourism is a significant source of attendance at local musical events such as the concert summer series hosted at Mission Plaza in downtown San Luis Obispo. According to Backman, Backman, Uysal, and Mohr (1995) festival style events, such as those that attract tourists in the Central Coast, represent the “fastest growing segment of the tourism industry” in the United States.

More specifically, demographics can be identified through MRI Mediamark Reporter data on adults who have attended musical performances at least once a month over the past six months. Based on the varying factors of demographics identified before, it was found in the MRI data that adults aged 55-64 are 39% more likely than all adults to attend a musical performance once a month. More specifically, women aged 18-34 are 44% more likely to attend a musical performance at least once a month in comparison to all adults. As far as race is concerned, Black and African American adults are 42% more likely than all adults to attend a musical performance once a month. Additionally, adults in the \$50,000-\$59,999 household income bracket are 47% more likely to attend a musical performance. Lastly, respondents with a college or post graduate education are most likely to attend musical performances, with respondents who have attained post graduate education being 62% more likely than all adults. This leads to the belief that the demographic most represented at live music events are adults 55-64, women 18-34, Black or African American adults, adults who have attended college or post graduate school, and lastly adults in the household income range of \$50,000-\$59,999 (Fall 2010 Leisure Activities: Attend Music Performances Once A Month, 2011).

The relation between alcohol and enjoyment of concerts is commonly assumed but rarely researched. Hamilton (2001) states “consumption of alcohol seems to be a social behavior” while acknowledging, “music has an effect on an individual’s mood, physiological state, and sensation seeking tendencies.” These factors can most readily be combined in a live music event. At these large social occasions, attendees with similar taste in music gather and consume alcohol in most cases. Hamilton (2001) researched the effect of various genres on alcohol consumption at live music venues and concluded that genres can affect alcohol consumption in many ways—by evoking emotion and encouraging sensation seeking tendencies.

Use of Surveys in Consumer Research

Consumer research is pivotal in making conclusions about consumer behavior and preferences. Research, in the form of surveys or questionnaires, is widely used to determine consumer habits, preferences, feelings, or motives, while also being used to identify target demographics. Surveys or questionnaires include several questions surrounding a certain topic in order to determine something about the consumer in relation to that topic. Surveys can be administered in a variety of contexts such as in restaurants, grocery stores, at home over the telephone, by Internet, or in person, and in any other circumstance where consumer behavior can be studied and questioned.

North, Hargreaves, and McKendrick (1999) used a post purchase questionnaire to determine the influence of in-store music on wine selections. The questionnaire was used to determine why consumers selected the wine purchased, what their preference for wine

normally was, and how the music affected them (North, Hargreaves, and McKendrick, 1999). This is a basic illustration of how surveys can be used to collect information regarding consumer behavior, motivation, and other identifiers.

Wilson (2003) conducted a survey of consumers to determine the effect of music on perceived atmosphere and purchase intentions in a restaurant. Similar to North, Hargreaves, and McKendrick (1999), Wilson (2003) used a questionnaire to evaluate consumer opinion. The questionnaire, distributed to restaurant patrons, discussed topics such as the restaurant visiting habits, reasons for dining, number of people dining with them, and likelihood to return to the restaurant among demographic identifiers (Wilson, 2003).

Milliman (1982) studied the possible link between the use of programmed background music and in-store shopping behavior. In congruence with Wilson (2003) and North, Hargreaves, and McKendrick (1999), consumers were randomly chosen to answer questions regarding their purchase habits, motivations, and influences.

Additionally, Alpert and Alpert (1990) designed a study in which subjects were exposed to a range of musical “mood” selections and a range of mood-evoking products within a given category and then were asked to rank their mood or feelings. The ratings were then analyzed to determine the correlation between influence and mood response. Average ratings were determined and used to conclude the overall influence and response. On top of simple rankings, respondents were also asked a series of identifying questions including information on purchasing habits. Like the other studies reviewed, respondents completed a questionnaire (Alpert and Alpert, 1990). The use of ratings based on feelings

and influence is different than the other studies and applicable to the procedure for data collection.

Thousands, if not millions, of studies have been conducted through the use of consumer surveying. The way that the data is analyzed, however, varies drastically. The tests used are specific to the data collected, which will yield the most meaningful results. Frequencies, averages, and regressions can be used to identify patterns and correlations. In determining relationships between two questions, a regression can be used. When determining the amount of responses that match a certain outcome, frequencies can be calculated. Lastly, when searching for the average ranking, opinion, or response, means can be estimated to find the average rank, opinion, or response amongst a certain respondent group or in total (Malhotra, 2010).

Summary

The integration of these topics including the interaction between the senses, the effects of atmosphere on mood and behavior, the trends in live music, and the use of consumer surveys, will allow the development and exploration of the relationship between wine and music. In turn, this analysis will lead to the acceptance or rejection of the hypothesis that enjoying music in a live concert setting will lead to further enjoyment of the wine consumed during the event.

Chapter 3

METHODOLOGY

Procedure for Data Collection

A survey was developed in order to determine if there was a relationship between the enjoyment of wine and the enjoyment of live music, as well as demographic and other characteristic data of concert attendees. The final draft of the survey administered is available in Appendix A. The concerts took place during the summer of 2011 in the San Luis Obispo Mission Plaza. One of the alcohol sponsors for the night was local winery, J. Lohr Vineyards & Wines. With a location in Paso Robles, the winery is well known in the community and is the largest wine producer in the Central Coast. J. Lohr provided their best selling *Seven Oaks* Cabernet Sauvignon and *Riverstone* Chardonnay for the purchase and enjoyment of concert-goers.

The variables that are explored in the consumer survey consist of simple demographic identifiers including gender, age, and whether the respondent is a local or visitor to San Luis Obispo County. In addition, the frequency of wine consumption and frequency of winery or tasting room visits were included in order to determine the respondents' level of interest in wine, as well as wine preferences and opinions including the recognition of J. Lohr wines, the opinion of J. Lohr wines before the concert, and the opinion of J. Lohr wines at the event. Knowing this will allow the development of the respondents' opinions of the wines served at the event before and after the introduction of live music as an atmospheric component.

The variables then expand to the respondents' musical habits and preferences including frequency of attendance at live music events, frequency of music listening in general, music genre preferences, opinion of the musical performer at the concert, and opinion of the music genre presented at the concert. These were used to determine the respondents' level of interest in music and general enjoyment of the live music at the event. By asking these questions, a profile of attendees will be formed including characteristics such as their interest in wine and music and their current enjoyment of the wine and music.

These variables will be analyzed in a sample made up of wine consumers, age 21 and over, either from or visiting the San Luis Obispo county area and in attendance at the San Luis Obispo Concerts in the Plaza. In order to be a candidate for response to the survey, the respondent must be in attendance at the concert and consuming wine at the time of response. The survey will be administered audibly to the respondent as alcohol is involved and could distort the results. The surveys will be collected from June 2011 to August 2011 on Friday evenings at the Concerts in the Plaza in San Luis Obispo. Surveyors will be trained to orally administer the survey in order to control responses and minimize surveying error. Surveyors will also be notified not to begin surveying until approximately 30 minutes after the concert has begun to allow respondents to take in the concert atmosphere and develop an opinion of the wine served.

Procedure for Data Analysis

The data collected will be analyzed in order to assess how the enjoyment of wine depends on other variables--particularly the enjoyment of the live music. The data will be

organized in chronological order by concert attended/date and therefore concert genre/performer. The data will be included in a Microsoft Excel file with each survey numbered based on collection date and time. It will be entered twice and cross-compared to eliminate entry error. Data analysis conducted will include frequencies, averages, and regression analysis to determine if there is a statistically significant relationship between enjoyment of wine and music.

Statistical Regression Analysis Methods

A regression will be performed using three, increasingly specific, models to determine if certain variables influence the opinion of wine at the concert. When a statistically significant correlation is found, the variable will be identified as an influential factor in determining current opinion of the J. Lohr wine. After the regression is estimated for each model, the output will be evaluated to determine overall model fit and significance of each independent variable using the R square, F-statistic, and p-value statistics.

The adjusted R^2 is used for model evaluation to determine the explanatory power of the model. This number indicates the percent of variation in current opinion of wine that is explained by variation in the independent variables included in the model. The adjusted R^2 value ranges from 0 to 1. The higher the value, the greater the explanatory power of the model. In other words, the higher the adjusted R square, the more the independent variable(s) help explain the dependent variable.

The significance of the F-statistic is used to determine overall model fit. This value is used to determine if the independent variables have a statistically significant relationship to

the dependent variable in question. The null hypothesis is that the independent variables do not relate to the dependent variable (i.e. all β 's are zero) while the alternative hypothesis is that the independent variables do have a relationship to the dependent variable. A low p-value indicates a statistically significant relationship between the dependent and independent variables in the model. When the p-value for the F-test is less than the determined level of significance (0.10), the null hypothesis will be rejected and it will be concluded that the independent variables have a relationship to the dependent variable.

Each estimated coefficient will be the factor by which current opinion of wine is increased or decreased when the independent variable is increased by one. The null hypothesis is that the independent variable has no statistically significant relationship to the current opinion of wine (i.e. all β 's are zero), while the alternative relationship is that there is a statistically significant relationship. Statistical significance of the various characteristics is determined in relation to the p-value. If the p-value is less than 0.10, the null hypothesis will be rejected and it will be deemed a statistically significant variable in relation to the dependent variable.

Regression Variables

The dependent variable in the regression analysis is the opinion of the J. Lohr wine consumed at the event. That is, the opinion of the wine when accompanied with the live music performed at the concert. The regression analysis will explain the current opinion of the wine by responses to other survey questions. Current opinion of the wine will be

explained by several independent variables. These variables include opinion of the live music being played at the concert, previous opinion of J. Lohr wine, frequency of wine consumption, frequency of winery visits, and frequency of listening to music while consuming wine.

The first independent variable that will be used in the regression analysis is the opinion of live music at the event. This was evaluated on a seven-point scale ranging from (-3) very negative to (0) neutral and (+3) very positive.

The second independent variable that will be used to explain the current opinion of wine is the respondents' previous opinion of J. Lohr wine. This opinion was ranked on the same seven-point scale ranging from very negative to very positive. This opinion was intended to indicate the respondents' opinion before their experience with wine at the live music event.

The third independent variable to be used in the analysis is the respondents' frequency of wine consumption. A dummy variable will be created to run the regression for this variable with frequencies using values zero (0) or one (1). Respondents who drink wine 3 or more times a week will be assigned one (1) while respondents who drink 2 or less times a week will be assigned zero (0).

The fourth independent variable that will be used as a factor to explain current opinion of wine is the frequency of tasting room and/or winery visits on average. A dummy variable will also be created to run the regression for this variable using values zero (0) or one (1). Respondents who visit wineries or tasting rooms at least twice a month will be

assigned one (1) while respondents who visit wineries or tasting rooms less than twice a month will be assigned zero (0).

The last independent variable to be considered is the frequency of listening to music while drinking wine. This variable will also be given a dummy variable with values zero (0) or one (1). Respondents who listened to music at least some of the time while drinking wine will be assigned one (1) while respondents who never listened to music while drinking wine will be assigned zero (0).

Regression Models

Three increasingly specific models will be used to estimate the relationship between the variables and current opinion of wine. The first model includes current opinion of wine as a function of current opinion of the live music. The second model takes into consideration an additional variable. This model estimates current opinion of wine as a function of current opinion of the live music and previous opinion of the J. Lohr wine. Lastly, the most specific model considers five variables when evaluating current opinion of the wine. It estimates current opinion of wine as a function of current opinion of music, previous opinion of wine, frequency of wine consumption, frequency of winery visits, and frequency of pairing wine with music. Using the regression analysis it will be determined if the variables influence current opinion of wine or lack a statistically significant influence.

Running the Regression

All regressions will be performed in Microsoft Excel. Both single and multivariate regressions will be run dependent on the model. A single variable regression will be run in order to determine the relationship between the current opinion of wine and the current opinion of music. A multiple variable regression will be run in order to determine the relationship between the current opinion of wine and multiple independent variables. The equations are as follows:

Model One

$$Q = \beta_0 + \beta_1 \text{Current Opinion of Music}$$

Model Two

$$Q = \beta_0 + \beta_1 \text{Current Opinion of Music} + \beta_2 \text{Previous Opinion of Wine}$$

Model Three

$$Q = \beta_0 + \beta_1 \text{Current Opinion of Music} + \beta_2 \text{Previous Opinion of Wine} + \beta_3 \text{Dummy_Frequent Wine Consumption} + \beta_4 \text{Dummy_Frequent Winery Visitor} + \beta_5 \text{Dummy_Frequent Listening to Music While Drinking Wine}$$

Where Q is the respondent's current opinion of wine, β_0 is the intercept coefficient, and the other β 's are the coefficients associated with each specified variable. The coefficients calculated through the regression analysis indicate whether an increase in the

corresponding independent variable tends to increase current opinion of wine and whether that effect is statistically significant.

Assumptions and Limitations

When conducting the analysis, it is assumed that all other outside factors, such as weather, crowd, or any other personal influences, do not affect wine opinion. It is also assumed that at the time of response, the person had observed, to some degree, the live performance, and had consumed, to some extent, the beverage in question.

With these assumptions there are also limitations to this study and the conclusions based on it. The sample of attendees of San Luis Obispo Concerts in the plaza may not represent the greater population of wine consumers or consumers of other less known wine brands since J. Lohr is so well known in the local area. Therefore the results may not be completely applicable to the total population or entire wine industry. It is expected that the sample will not explain trends or opinions of the larger population of California and the United States because of the demographic distribution of San Luis Obispo County, which limits the applicability of the results of analysis.

The involvement of alcohol may also hamper the accuracy of results. Not only could these factors limit data quality, but there is also the possibility for repeat respondents as many attend the concerts on a weekly basis. This could distort the demographics of people in attendance. Also, the limitation of wines served could affect consumer opinion as they may prefer a different varietal or brand and have a negative opinion of the beverage as a result. Lastly, the limitation of musical genres presented could affect respondents' opinions.

Since many attend as a routine outing, they may not necessarily attend based on the performer but instead as an activity, which may lead to their opinions being more harshly swayed or entirely unrelated to the performer. Also, the current opinion of wine may be misconstrued due to the fact that it is not a blind tasting so they will know the wine is the same as wine they have consumed previously.

Chapter 4

DEVELOPMENT OF THE STUDY

Summary of Data

The data was collected on 7 occasions with a wide variety of musical genres throughout the summer. The dates, bands, and musical genres represented are presented in Table 4-1. A total of 113 surveys were collected and analyzed in this study.

Table 4-1: Musical Representation and Data Collection Summary

Date	Band Name	Genre	Surveys Collected
June 10	Nada Rasta	Reggae Rock	33
June 17	Truth About Seafood	Rock	17
June 24	Tropo	Live Electronica	16
July 1	Cuesta Ridge	Americana, Folk and Bluegrass	18
July 8	Zongo All-Stars	CaliCubano	13
July 29	Criticnue	Rock, Soul, and Country	9
August 5	Guy Budd Band	Rock, Blues, and Funk	7

Entire Sample

The sample was analyzed based on demographics, wine habits, and music habits. The demographics represented in the sample are described in Appendix B. Eighty percent of respondents were female, while 62% were aged 41-60, and 97% were residents of San Luis Obispo County.

Sixty nine percent of respondents drank white wine while attending the event and 66% consumed wine 3-6 times per week or more on average. Visitation to tasting rooms and wineries was much less frequent, with 62% visiting only a few times a year. The typical price point for respondents' wine purchases was between \$10-20. J. Lohr Vineyards &

Wines was the wine sponsor for these weekly concerts and it was found that 93% of the sample had tried J. Lohr wines before with the average previous opinion being positive. The sample on average had a slightly higher opinion of J. Lohr wine while consuming it at the event in comparison to previous experiences with the wine. Overall the rating was 1.78 before the event and 1.89 during the event on a seven point scale where -3 is very negative, 0 is neutral, and +3 is very positive.

Sixty six percent of the sample listened to live music more than six times in the past year yet 95% listened to music in general every day. The most popular musical genres were Rock/Alternative, Jazz/Blues, and Country. On average, concert attendees had a positive opinion of the genre presented and the band performing, ranking their opinion of the band as 1.73 and the genre as 1.64 on a seven point scale where -3 is very negative, 0 is neutral, and +3 is very positive. When asked about the frequency of listening to music while drinking wine, 98% responded they did so at least some of the time.

Respondents Who Maintained Opinion of Wine after Concert Experience

The majority of the respondents surveyed maintained their opinion of J. Lohr wines before and during the concert experience. These respondents are identified in Table 4-2 and Appendix B. Sixty four respondents, or 56.6% of the sample, found the wine just as enjoyable from previous experiences as they did at the live music event. As a percent of the segment, more females maintained their opinion of the wine than changed their opinion. Also, the highest percent of the segment consumed white wine at the event in comparison to the other change of opinion segments. In this case, the lowest maintained opinion was

one case of a somewhat negative impression of the wines. While over three fourths of these respondents had, and maintained, at least a positive opinion of the wines, 1% had a somewhat negative opinion of the wine before and during the event.

Table 4-2: Summary of Respondents' Change of Opinion of Wine Before and During Event

Previous Opinion	Current Opinion					Total
	Somewhat Negative	Neutral	Somewhat Positive	Positive	Very Positive	
Somewhat Negative	1%					1%
Neutral	1%	4%	6%	3%		13%
Somewhat Positive		3%	8%	10%	3%	24%
Positive		1%	4%	29%	9%	43%
Very Positive				1%	18%	19%
Total	2%	7%	18%	43%	30%	100%

NOTE: The shaded cells indicate the "diagonal" or those respondents who maintained the same opinion before and at the live music event. The italicized numbers represent those respondents who increased their opinion of the wine after the live music event. The bold numbers represent those respondents who decreased their opinion of the wine at the live music event.

Respondents Who Increased Opinion of Wine at Concert Experience

There were a total of 33 respondents who increased their opinion of J. Lohr wines during the concert experience. That is, 29.2% of the total sample had a more positive opinion of the wine after being exposed to the atmosphere of the concert. This portion of the sample is identified and described in Table 4-2 and Appendix B.

Respondents who increased their opinion were the most frequent wine drinkers with 73% of the segment drinking wine at least 3-6 times a week whereas 69% of those who maintained their opinion and 60% of those who decreased their opinion drank as frequently. Ninety seven percent of the respondents who increased their opinion of the wine listened to music while drinking wine at least some of the time. This indicates that

music is an important atmospheric component to the respondent, which could lead to a greater opinion change based on the music and atmosphere.

All 33 respondents had at least a neutral opinion of J. Lohr, which increased to at least a somewhat positive opinion after the live music event. Even though the respondents' opinion of wine was at least somewhat positive following the concert experience, their opinion of music was in some cases somewhat negative. However, respondents indicated they liked the music performed at the event more than they liked that type of music in general. This suggests a possible relationship between enjoying the music more than before and enjoying the wine more than before.

Respondents Who Decreased Opinion of Wine after Concert Experience

On the other hand, there were 10 respondents who decreased their opinion of J. Lohr wines after their concert experience. That is, 8.83% of the total sample had negatively changed their opinion of the wine after being exposed to the atmosphere of the concert. This portion of the sample is identified in Table 4-2 and Appendix B. Forty percent of respondents in this segment drank red wine at the event, while only 30% of those who maintained their opinion and 33% of those who increased their opinion of the wine drank red wine at the event. Those who decreased their opinion also tended to purchase wines at a higher price point than those who maintained or improved their opinion. All had tried J. Lohr wines before, yet some respondents indicated a somewhat negative opinion of the wines at the event. These respondents also had a negative or somewhat negative opinion of

the music in some cases, indicating it may have negatively influenced their opinion of the wine.

Results of Analysis

The data included in the regression analysis was a total of 113 survey responses regarding current opinion of wine, previous opinion of wine, current opinion of music, frequency of wine consumption, frequency of winery visits, and frequency of listening to music while drinking wine. Three regressions were estimated for this analysis (Table 4-3).

For the first regression, current opinion of wine was estimated as a function of current opinion of the music. Without controlling for the influences of other variables, no statistically significant relationship was found between current opinion of wine and current opinion of the music.

The second regression added the variable of previous opinion of J. Lohr wine. Once again current opinion of live music was found to be statistically insignificant. However, previous opinion of J. Lohr wine was found to be statistically significant at the 1 percent level. It was found that previous opinion of J. Lohr wine had a coefficient of 0.51 indicating that the current opinion of J. Lohr wine could be calculated by adding 0.51 multiplied by the previous opinion of J. Lohr wine to the intercept (0.94). In this model, 29% of the variation in current opinion of J. Lohr wine can be explained by the variation in the current opinion of live music and previous opinion of J. Lohr wine as is indicated by the adjusted R square value. For model two, the p-value of the F-statistic was 0.00, indicating that the overall model fit was significant.

The third and last regression added in several dummy variables as described in chapter three. Dummy variables representing frequent wine consumers, frequent winery visitors, and frequent combination of wine and music were applied in this model in estimating current opinion of wine along with the variables used in the previous two models. Current opinion of live music, frequent wine consumer and frequent winery visitor were all found to be statistically insignificant, however, previous opinion of J. Lohr wine and frequent combination of wine and music were both found to be statistically significant at the 1 percent level. It was found that previous opinion of J. Lohr wine had a coefficient of 0.52 and frequent combination of wine and music had a coefficient of 2.11 indicating that the current opinion of wine could be calculated by adding the result of multiplying 0.52 by the previous opinion of J. Lohr wine to the result of multiplying 2.11 by 1 if the respondent frequently combined wine and music and then adding these to the intercept (-1.29). In this model, 35% of the variation in current opinion of J. Lohr wine can be explained by variation in the independent variables. For model three, the p-value of the F-statistic was 0.00, indicating that the overall model fit was significant.

Through the use of these three models and regression analysis, no statistically significant model was found between current opinion of J. Lohr wine and current opinion of live music. The only variables deemed statistically significant were previous opinion of J. Lohr wine and the frequency of listening to music while drinking wine. The significance behind frequency of listening to music while drinking wine shows that the importance of music as a regular atmospheric component affects the current opinion of wine. This could indicate that respondents who frequently listen to music while drinking wine could be more

highly influenced in a situation where music was the key atmospheric component. It is believed that the lack of relationship identified in these models is a result of the problems with data collection described in the following section, including the fact that most respondents did not change their opinion of the wine.

Table 4-3: Coefficient Estimates for Three Models Estimating Relationship to the Current Opinion of Wine

	1 st Model		2 nd Model		3 rd Model	
Intercept	1.88	***	0.94	***	-1.29	*
Opinion						
Current Opinion of Live Music	0.01		0.03		0.02	
Previous Opinion of J. Lohr Wine			0.51	***	0.52	***
Frequency						
Frequent Wine Consumer					0.23	
Frequent Winery Visitor					-0.24	
Frequent Combination of Wine and Music					2.11	***
Model Evaluation						
Adjusted R2	-0.01		0.29		0.35	
Significance F	0.9427		0.0000		0.0000	

***, **, and * denotes significance at the 1%, 5%, and 10% level respectively

Problems with Data Collection

There were several problems with data collection that could potentially have influenced the results of the data analysis. There is the underlying fact that there could be no relationship between the two variables, but there are also other factors that may have influenced the data. First, there is the potential for sampling error. Not only is the sample relatively small, but it is also biased as the sample is made up of 97% San Luis Obispo county residents and 93% of this sample was previously familiar with J. Lohr wines.

An administering error is possible as well. In the case of determining previous opinion of J. Lohr wines, respondents were first asked if they had tried J. Lohr wines before. If their response was “no,” the surveyor should have skipped the question regarding previous opinion as it was no longer applicable. In 2 cases, the respondents replied they had not tried J. Lohr wines before but still gave a previous opinion, which was factored into the segment of the sample that increased their opinion. The surveyor could have also led on to the purpose of the study, which may have varied the responses regarding opinion. Not only could they have caught on to the intent of the study but respondents could have also let emotions or other factors influence their current opinion, which was assumed not to be a factor.

Another issue is the lack of ability to separate previous and current opinion of wine. The consumer assumes the wine is consistent from their previous and current experience with it and therefore may have assumed their opinion should also remain consistent. This could have lead to the respondent basing their previous opinion off of their current perception of the wine since they were consuming it while participating in the survey. Since the respondents know what they taste is the same as what they experienced previously they expect their opinion to remain consistent and therefore may alter their responses accordingly.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Data Collection

A survey was created relating to wine and music habits and opinions in order to test for a relationship between enjoyment of music and enjoyment of wine. The survey was administered at the San Luis Obispo Concerts in the Plaza on seven occasions throughout the summer of 2011. The concerts occurred on Friday evenings in the San Luis Obispo Mission Plaza with various genres of music represented throughout the summer. A total of 113 surveys were collected and analyzed in this study.

Sample Summary

In general, the sample is based on wine consumers, age 21 and over with varying wine and music preferences and habits. The sample was analyzed based on demographics, and opinions and habits related to wine and music. The majority of respondents were female, aged 41-60, and residents of San Luis Obispo County. The majority of attendees drank white wine while attending the event and consumed wine 3-6 times per week or more on average. Visitation to tasting rooms and wineries, however, was much less frequent, with the majority visiting only a few times a year. The typical price point for respondents' wine purchases was between \$10-20. J. Lohr Vineyards & Wines was the wine sponsor for these weekly concerts and it was found that 93% of the sample had tried J. Lohr

wines before with the average previous opinion being positive. The sample on average had a slightly higher opinion of J. Lohr wine while consuming it at the event.

The majority of the sample listened to live music more than six times in the past year yet listened to music in general every day. The most popular musical genres were Rock/Alternative, Jazz/Blues, and Country. On average, concert attendees had a positive opinion of the genre presented and the band performing. When asked about the frequency of listening to music while drinking wine, over 98% responded they did so at least some of the time.

Regression Analysis

A single variable regression was run in order to determine the relationship between the opinion of wine and the opinion of music at the concert. A multiple variable regression was run in order to determine the relationship between the opinion of wine and multiple independent variables. The coefficients calculated through the regression analysis indicate whether an increase or decrease in the corresponding variable tends to increase current opinion of wine and whether that effect is statistically significant.

After the regression was performed on each model, the output was evaluated to determine overall model fit and significance of each independent variable using the R square, F-statistic, and p-value statistics. The relationship between the variables and current opinion of wine were deemed either statistically significant or not at the 10% significance level.

Conclusions

Regression Analysis Results

The data included in the regression analysis was a total of 113 survey responses regarding current opinion of wine, previous opinion of wine, current opinion of music, frequency of wine consumption, frequency of winery visits, and frequency of listening to music while drinking wine.

Three regressions were estimated for this analysis (Table 4-3). The best model included five independent variables, which explained 35% of the variation in opinion of wine during the event. Throughout the three models, only two statistically significant relationships were found. The only significant variables included previous opinion of J. Lohr wine and the frequency of listening to music while drinking wine, which had a positive correlation to the opinion of wine during the event. Independent variables were deemed significant based the p-value statistics pertaining to each variable and the overall model fit.

All other variables, including opinions and habits related to music, were deemed statistically insignificant. It is believed that the lack of relationship demonstrated in these models is a result of the problems with data collection. Most respondents did not change their opinion of the wine, quite possibly due to an inability to separate their previous opinion with their current experience. Other issues or outside factors could have also influenced the results, as will be addressed in the recommendations following.

Sample Segmentation Results

Although the regression results indicate there is no statistically significant relationship between opinion of music and opinion of wine, when segmenting the sample into respondents who increased their opinion, decreased their opinion, and maintained their opinion of the wine during the event, a relationship is somewhat suggested as is described below.

There were a total of 33 respondents who increased their opinion of J. Lohr wines after their concert experience. That is, 29.2% of the total sample had a more positive opinion of the wine after being exposed to the atmosphere of the concert. In addition, respondents indicated they liked the music performed at the event more than they liked that type of music in general. This suggests a possible relationship between enjoying the music more than before and enjoying the wine more than before.

The majority of the respondents surveyed, however, maintained their opinion of J. Lohr wines before and after the concert experience. Sixty four respondents, or 56.6% of the sample, found the wine just as enjoyable from previous experiences as they did at the live music event, and their change of music opinion did not seem to suggest a relationship since their wine opinion did not change along with it.

Recommendations

In order to increase the efficiency and accuracy of the study of wine and music, several data collection issues must be addressed. Initially, more attention should be paid to

survey administration to eliminate the potential for a surveyor error. The most prevalent issue in the design of this study is the lack of ability to separate previous and current opinion of wine. This is attributed to the fact that the respondent knows the product has stayed the same and therefore assumes their opinion should also remain the same. In order to eliminate this knowledge bias, a blind tasting technique should be implemented to isolate the music and wine variables from knowledge about the product.

In order to fully isolate the variables to be analyzed, the influence of outside factors must be minimized. A recommendation for further research would include a blind tasting with some duplicates of wine samples and varying music. This would allow the surveyor to determine the influence of musical genre on the overall opinion of wine. Ideally, the study would be conducted indoors, in order to eliminate the factor of weather and its' possible influence on mood. In order to control for variances in mood, the study would ideally be conducted over time or a question regarding mood would be included so it could be used as a factor in the regression analysis. In order to get more accurate and applicable results, the study should ideally survey an increased sample from the local and surrounding communities as well as other counties depending on the desired extent of the research. By keeping the wine consistent, and varying only the music, the true relationship between the two variables will be revealed.

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APPENDIX A: CONSUMER SURVEY

Male Female Date: Time: Surveyor Initials: Wine Served:

First, I'm first going to ask you a few questions regarding your wine consumption.

1. How often do you consume wine?

Every day 3-6 times per week 1-2 times per week 1-2 times per month a few times a year

2. How often do you visit wineries or tasting rooms?

Every day 3-6 times per week 1-2 times per week 1-2 times per month a few times a year

3. Thinking about your wine purchases, what price range best represents your typical purchase?

<\$5 per bottle \$5-10 per bottle \$10-15 per bottle \$15-20 per bottle \$20-25 per bottle >\$25

4. J. Lohr is the wine sponsor for tonight's event. Before today, had you tried J. Lohr wines?

Yes No I'm not sure (IF NO, SKIP NEXT QUESTION)

5. I'm curious to see what your opinion of J. Lohr wine was before today. Based on your previous experience, use this scale from very negative to very positive to select the option which best reflects your opinion.

Very Negative Negative Somewhat Negative Neutral Somewhat Positive Positive Very Positive N/A

6. Now that you have been served a J. Lohr wine at tonight's event, I am interested to see what your current opinion of J. Lohr wine is. Use the scale from very negative to very positive to select that which best reflects your opinion.

Very Negative Negative Somewhat Negative Neutral Somewhat Positive Positive Very Positive

Now, I'm going to ask you a few questions about your music preferences.

7. How often have you listened to live music in the last year?

Once (today) 2-3 times 4-6 times More than 6 times

8. How often do you listen to music in general? This includes at home, at work, at the gym, in the car, etc.

Every day 3-6 times per week 1-2 times per week 1-2 times per month a few times a year

9. If you had to categorize your music preferences, what two genres of music do you listen to most frequently?

Rock/Alternative Reggae Classical Pop Country Jazz/Blues Hip Hop & Rap Other (List)

10. Thinking about your wine and music habits, how often do you listen to music when you consume wine?

Always Sometimes Never

11. Before today, had you listened to this band?

Yes No I'm not sure

12. Now I'm curious to see what your overall opinion of tonight's musical performance is. Use this scale from very negative to very positive to select the option which best reflects your opinion.

Very Negative Negative Somewhat Negative Neutral Somewhat Positive Positive Very Positive

13. I am also interested to see what your opinion of this genre of music is. In other words, how would you rank your opinion of this type of music on a scale from very negative to very positive.

Very Negative Negative Somewhat Negative Neutral Somewhat Positive Positive Very Positive

Lastly, I have a few general information questions.

14. How old are you?

21-30 31-40 41-50 51-60 61-70 71+ Prefer Not to Answer

15. Do you live locally or are you visiting San Luis Obispo County?

Local Visitor

APPENDIX B: DATA SUMMARY BY SAMPLE SEGMENTS

Variable	Opinion Increased n=33	Maintained Opinion n=64	Opinion Decreased n=10	Entire Sample n=113
<i>Percent of Sample Indicated</i>				
Gender				
Female	73	84	70	80
Age				
21-30	15	14	10	14
31-40	12	19	20	17
41-50	21	23	20	24
51-60	42	38	40	38
61-70	9	5	10	6
71+	0	2	0	1
San Luis Obispo County Resident	97	98	90	97
Wine Served				
Red	33	30	40	31
White	67	70	60	69
Price Point of Typical Purchase				
<\$5	12	5	0	6
\$5-10	18	25	0	21
\$10-15	21	31	20	28
\$15-20	30	31	30	29
\$20-25	15	6	40	12
>\$25	3	2	10	3
Previously Tried J. Lohr Wine?				
Yes	94	100	100	93
No	6			5
Not Sure				2
*Previous Opinion of J. Lohr Wine	1.03	1.98	1.60	1.78
*Current Opinion of J. Lohr Wine	2.21	1.98	0.50	1.89
Frequency of Wine Consumption				
Everyday	12	22	20	18
3-6 times per week	61	47	40	48
1-2 times per week	21	25	30	27
1-2 times per month	6	5	10	7

Variable	Opinion Increased n=33	Maintained Opinion n=64	Opinion Decreased n=16	Entire Sample n=113
<i>Percent of Sample Indicated</i>				
Frequency of Wine Consumption Continued				
A few times a year	0	2	0	1
Never	0	0	0	0
Frequency of Winery Visits				
Everyday	0	0	10	1
3-6 times per week	0	0	0	0
1-2 times per week	0	0	10	1
1-2 times per month	15	20	20	18
A few times a year	70	59	50	62
Never	15	20	10	19
Frequency of Listening to Live Music in Last Six Months				
Once	0	5	0	4
2-3 Times	9	9	30	13
4-6 Times	24	13	10	17
>6 Times	67	73	60	66
Frequency of Listening to Music in General				
Everyday	91	95	100	95
3-6 times per week	9	5	0	5
**Musical Preferences				
Rock/Alternative	64	59	70	62
Reggae	15	5	10	10
Classical	24	13	0	14
Pop	15	14	10	15
Country	30	34	20	30
Jazz/Blues	42	45	50	43
Hip Hop & Rap	9	9	10	9
Other	6	9	20	11
Frequency of Listening to Music While Drinking Wine				
Always	82	59	40	34
Sometimes	15	41	60	65
Never	3	0	0	2
Previously Heard of Band?				
Yes	12	27	50	71
No	82	69	40	23

Variable	Opinion Increased n=33	Maintained Opinion n=64	Opinion Decreased n=16	Entire Sample n=113
<i>Percent of Sample Indicated</i>				
Previously Heard of Band? Continued				
Not Sure	6	5	10	6
*Current Opinion of Band	1.67	1.85	0.70	1.73
*Current Opinion of Genre Presented	1.61	1.67	0.60	1.64

NOTE: Shaded cells indicate possible effect of problems with data collection. * indicates variables where averages were calculated for the sample. Average opinion is based on a seven point scale where (-3) is very negative, (0) is neutral, and (+3) is very positive.

**Percent of sample for musical preferences sums to greater than 100 as respondents were allowed to select up to two genres.