



# **Gracie Management Music Consumption Model™ Report**

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## **Abstract**

Study conducted among 490 people in the United States within the core music buying demographic, defined demographically as being 18-34 years-old. The study consisted of batteries dealing with respondents' various uses of music, music consumption patterns, binding and individual concerns, perception of music today compared to the past, sharing friends' musical tastes, influences on music discovery, vinyl records purchase intent and seven demographic questions. We then created a statistical model to understand the strength of these variables on predicting US core music buyers' willingness to consume music in a way that has a direct economic benefit to artists and labels. Understanding these drivers can help artists and labels better plan marketing initiatives, which should be driven by science rather than hearsay. This is especially important in these times when artists and labels see less revenue as access to musicians for "free" grows.

## **Keywords**

Music Consumption, Music Discovery, United States, Core Music Consumers, 18-34, Marketing, Marketing Science, Behavioral Marketing, Return on Investment.



Chasson Gracie is a ten-time marketing award winner and Founder and CEO of Gracie Management; in addition, he is also the Head of Strategic Planning for the New York office of Dieste, an award-winning advertising agency. He combines strategic planning with statistical modeling for musicians, record labels and artist managers to leverage data for smarter campaigns, promotions and platforms. The unique method brings a science to a field that has long survived on gut decisions, which in many cases has damaged careers. Chasson has used statistical modeling to help many hugely successful campaigns, including the 2010 US Census and Above the Influence.



Ritika Sinha is a marketing analyst with a specialization in advanced techniques and econometric modeling. Having received her Masters in Economics from New York University, her current role is in the Customer Intelligence group at Drafftcb Chicago where she brings analytical rigor to every marketing decision that her clients make, whether it's Volkswagen and Kmart or S.C.Johnson and Brown Forman. Her keener pursuits include predictive response modeling, the multi-channel attribution problem, and advanced experimental design. As an avid foodie and keen enthusiast of global languages and culture, Ritika tries to live each day as the right blend of art and science.

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## **Executive Summary: Gracie Management Consumption Model™ Major Findings**

Our model was created to understand the independent variables that help predict music consumption, along with predicting how much % change in those independent variables can impact one's consumption of music in a way that leads to revenue for an artist, an artists' label et al.

In our music consumption battery (see *Statistical Procedures* 1. Dependent Variable: Music Consumption), there were five statements and a respondent rated each from strongly agree to strongly disagree. We summed up scoring for all 490 respondents and obtained a mean score, being above the mean is classified as having high music consumption; being below the mean is classified as having low music consumption.

Here are the six key findings from the model:

**1. Cognitive use of music is the biggest predictor of music consumption.**

36% of core music consumers are cognitive users of music, and they explain the biggest portion of music consumption within the model. Cognitive users are more likely than emotional users of music to consume music, while background users as a whole were not statistically significant, hence not included in the model as a holistic battery.

**2. Create a musical ecosystem - the more you share the musical taste of your friends, the more likely you are to consume music – up to 5X more likely than the general population.**

While radio DJs, blog writers et al have some sway in the fate of an artist, when it comes to actual music consumption, the more one's friends have the same taste, the more likely they are to have high consumption of music. It seems that having friends with the same taste of music forms an ecosystem that encourages all involved to consume even more than if they all lived on separate musical islands.

**3. Males are 1.5X more likely to have high music consumption than females.**

When one thinks of the audiences of a Justin Bieber or One Direction, one has images of screaming girls who purchase lots of products of their favorite artists, whether it be albums and concert tickets, or memorabilia and endorsed products. However, there seems to be a point in time when males become more vociferous with their music consumption appetite and girls less, and this change seems to happen around 18 years-old.

**4. Music fandom corresponds strongly with respect for all individuals, which differs greatly to sports fandom in which in-group loyalty is the driver.**

The way you cultivate a sports audience differs from the way you cultivate a music audience. In the world of sports, loyalty, which correlates with belief in listening to authority, is a main driver, while in the world of music, the main psychological moral driver is a belief in the reduction of harm to individuals and the increasing care for them, not just those within one's own group. This discovery helps to explain the successful fan-artist relationship people such as Lady Gaga possess.

**5. Ethnicity has no impact on music consumption.**

While in the political arena there might not be the post-racial/ethnic world people had hoped for in 2008, in the world of music consumption it has come already! One's race/ethnicity neither increases nor decreases one's consumption of music.

**6. Employment Matters.**

As we have seen the cost of concerts increase, the cost of artist memorabilia increase, along with the ways of making these purchases more reliant on access to credit cards, it seems that past notions of music fans being at their consumption peak have moved from the student phases of life (high school/college) to the work phases of life. Being employed full-time (or even part-time) makes you much more likely to have high music consumption.

## **Executive Summary: Gracie Management Consumption Model™ Major Insights and Implication for Marketing Strategy**

***While the audience for each artist is different, and we suggest adjusting the model to take that into account, these are the high-level macro-level findings of which all artists and labels should be cognizant:***

1. Increasing the share of cognitive users of music in your audience will increase the share of people consuming your music, thus increasing your potential revenue.
2. People who have musical ecosystems among like-minded people are more likely to have heavy music consumption. Rather than simply instituting generic campaigns that just focus on the release of a product (e.g. new album), artists and labels should focus on platforms and programs that foster these ecosystems, which will help lead to long-term success.
3. For artists whose core audience is most likely to be above 18 years-old, it behooves them to have a marketing plan that heavily takes into account males as they are more likely to be heavy consumers of your music. Not only should messaging take into account this gender skew, but media placement and integration should also be in media properties that are popular with males.
4. Supporting a sports team appeals more to one's traditional side but supporting a music group or an artist does not anywhere to the same degree. With a sports team, the morality of loyalty plays more of a role in one's fandom, but in the case of supporting an artist, the notion of common good has a higher impact. Artists and labels who can appeal to people's better angels are more likely to move their followers from having passive music consumption to active music consumption.
5. When messaging to an audience, while there are some demographics that are still important, race/ethnicity is not one of them. A better marketing plan is one that involves finding the white space that cuts across all people regardless of their racial/ethnic origins.

6. Consider the lifestage of your core audience when making marketing plans more than actual age. If you are looking to appeal within the core music buyer group, you should keep in mind that the most fervent fans are possibly more likely to have already moved from their student lifestage and be in their post-college/first job lifestage. Programs and platforms that enhance the experience of that lifestage are more likely to be successful.

## **Background**

Gracie Management was founded because we believe in the importance of music, and its ability to change the world. As we looked around at the state of the music industry in 2010, we saw many great bands not being able to bring in the revenue they once could when people consumed, i.e. purchased, music and had to exit the music industry, which was a loss to us all. We also saw labels taking fewer chances on new artists and artist development due to a large amount of uncertainty. This has recently been confirmed by US Department of Labor data that found there were 41% fewer musicians in 2011 compared to 1999. So, we set out to discover ways in which to make better marketing plans for artists that could lead to more active consumption of their music rather than passive consumption, but in order to do that it was necessary to get into the mindset of music consumers before the actual creative output of a marketing campaign, rather we believed it was necessary to understand the psychological impacts that lead to attitudinal and behavioral attributes that affect how consumers actually consume music.

To start, there was the need to define who core music consumers are in these times, especially as things have shifted so much with technology, social media et al in just the past five years, let alone, 10 years. With the move away from standing in lines and paying cash for tickets to a show to purchasing tickets online or even with the move away from going to a record store and paying cash for a full-length CD to buying an album off of iTunes with a credit card in an instant, it became apparent that in this digital age discovery of music is easier than ever. This was confirmed via Nielsen's "Digital Music Consumption and Digital Music Access" Report released in January 2011, which found the core digital music audience to be between 21 and 34 as they will consume more on basically every level, whether it being paying to purchase music, streaming music, watching

music videos, which connects with our own observational data. While we still firmly believe that there is a huge psychological importance in connecting with a younger audience, and plan to research music consumption habits of those under 18 in the future, we have taken the 21 - 34 definition, but expanded it to 18-34. We believe artists who make a connection with people at an earlier age, even if those people cannot consume in a direct way of payment has some long-term benefits, and at 18 it is possible to have a credit card, work a full-time job et al.

Next, we explored varied literature on music psychology, with particular attention paid to Prof. Chamorro-Premuzic and his work "Personality and Music" published in the British Journal of Psychology. In it, he and Prof. Furnham first published the Use of Music Scales in 2007, which took into account how people actually use music and the impact it has on how they consume music. Adjustments to their scales were made within our survey to take into account further knowledge gained since they were created, along with factoring in other questions in our model and the fact this was among a US public as it had been tested on populations within the United Kingdom and Malaysia, but there are various cultural and sociological reasons to believe it would play out different among a US populace.

Following that, we next explored moral psychology, especially as it deals with political and sports psychology. We reviewed the Morals Foundations Questionnaire (MFQ) published by John Haidt & Jesse Graham in 2007, and found a series of variables that were used for loyalty that were much stronger at truly measuring how much one is, lives, and breathes loyalty rather than asking a direct descriptive questions such as "do you consider yourself a loyal person – yes or no", which would be problematic for a myriad of reasons. The MFQ was not utilized to measure morality at all in this survey, but it also presented four other moral dimensions to explore among core music buyers such as ideas of fairness/justice and harm. We used a five-point scale, rather than the traditional six-point scale in order to improve the ease of constructing the model as most questions had five-point scales.

Based on the campaigns we have conducted in the marketing world, we believe firmly in most cases that an attitudinal/psychographic understanding has much more of an impact on changing beliefs and behavior than a demographic one, but some demographics do play a role, and we suspected particular ones such as gender would play an even

greater role in music consumption, so a total of 8 demographic variables were used in the survey.

In addition, the survey also included questions that dealt with gauging perceptions in the quality of music today compared to the past, the level of similarities and differences in the music one consumes as individual in relation to what their friends and family consume and what or who has the greatest impact on one's music discovery. A question about purchase intent of vinyl was asked, but not placed into the model, as the sole purpose of this question was to obtain a clear sample of people whom we knew would have high consumption of music and to flesh out their profile to understand who they are.

After all the questions for the survey were determined, we set out to construct a model in which music consumption would be the dependent variable, in other words, the thing we are trying to increase, but as opposed to other work in academic circles around music consumption, the focus here was more on things consumers do that have a direct impact on an artists' or labels' revenue, such as the purchase of a full-length album, the purchase of memorabilia of an artist, etc.

Insights from the model, which would have predictive power, could then be utilized in order to maximize marketing campaigns, platforms and programs. The model informs attitudinal and behavioral understanding, along with demographic constructs, to guide planning and help lead to a bigger return on investment in the form of increased music consumption among core music buyers.

## **Method**

### ***Data Collection***

Online interviews were conducted on June 29, 2012 among 490 adults between the age of 18-34, living in the United States and part of an opt-in panel. Results are based on the total sample of US online adults between 18-34; one can say with 95% confidence that the maximum margin of sampling error is  $\pm 4.3$  percentage points.

### ***Weighting***

The sample targets were set to accurately reflect the US 18-34 online population (94% of total US 18-34 population are online) based upon key

demographic variables - age, gender, ethnicity, education, income, employment status, relationship status and DMA.

Despite our best efforts at recruiting for a representative sample, we observed certain biases in our sample characteristics. In order to correct these, we created a weighting schema for the sample. Post-Stratification Weighting is a common technique that is employed in the post-sampling phase to correct for sampling bias. In this study, race/ethnicity and gender were used to create the weights, based on the 2010 Decennial Census, in order to make our sample and study representative of the U.S. 18-34 population.

### ***Error***

In addition to sampling error, question wording and practical difficulties in conducting surveys can introduce error or bias into any research. We adhered rigidly to survey design best practices in order to report our findings with confidence.

### ***Survey Measures***

#### ***Main Questionnaire***

1. Belief in Quality of Music Today Compared to Past
2. Emotional Use of Music Battery
3. Cognitive Use of Music Battery
4. Background Use of Music Battery
5. Sameness/Difference of Friends' Taste in Music
6. Music Consumption Battery
7. Greatest Impact on Music Discovery Battery/Open-End
8. Purchase of Vinyl in Immediate Future
9. Binding & Individual Concerns Battery I
10. Binding & Individual Concerns Battery II

#### ***Demographic Variables***

1. Age
2. Gender
3. Ethnicity
4. Education
5. Income
6. Employment Status
7. Relationship Status
8. DMA

## **Statistical Procedures**

### **1. Dependent Variable: Music Consumption**

This variable was constructed using a weighted sum of the 5 individual variables in the Music Consumption Battery: the self-reported frequency of watching music videos, streaming music, paying to download a music track or album, paying to see a singer or band in concert, and purchasing memorabilia of a singer or band. The last 3 variables were weighted higher as they are potentially the more direct revenue streams for a band or artist.

The weights assigned were:

Frequency of watching music videos: 1

Frequency of streaming music : 1

Frequency of paying to download a music track or album: 1.5

Frequency of purchasing memorabilia of a singer or band: 1.8

Frequency of paying to see a singer or band in concert: 2

Once the weighted score was calculated, the dependent variable was constructed as a binary variable to indicate the respondent's presence in one of two groups: Consumers of music were those with an above-average music consumption score (higher than the average of 22.96) while Non-Consumers of music were those that had a below-average score (less than or equal to 22.96)

This divided the modeling dataset into 2 groups:

Consumers	226
Non-Consumers	264

### **2. Correlations against music consumption**

We started the initial descriptive analysis by evaluating the cross-tabulated distributions of various variables within these 2 groups of people: consumers vs. non-consumers. Additionally, we ran bi-variate parametric and non-parametric correlations of the independent variables against our dependent variable: music consumption. For parametric results, we relied on Pearson's r correlation coefficient, using chi-square tests of significance at a 90% confidence level. For non-parametric correlation results, we used Kendall's tau-b statistic, also evaluated using chi-square tests of significance at a 90% confidence level. The results of the correlation tests of significance provided a shortlist of variables to consider in the predictive

model. An interesting finding was that most of the demographic variables, such as age, income, education level, and ethnicity, were not significantly correlated with music consumption. On the other hand, the 3 users of music batteries as well as the binding and individual concerns batteries were highly correlated with music consumption.

### **3. Factor Analyses and Dimension Reduction**

The second part of the pre-modeling exploratory analysis involved factor analysis as a technique of dimension reduction. The variables that were evaluated in this phase were the demographic variables, belief in quality of music today compared to past, each of the individual questions in the emotional, cognitive, and background use of music batteries, the impact of friends on music consumption, and the impact of various external sources. One of the biggest findings was that the individual questions in the cognitive users battery and the emotional users battery were very highly correlated with the other questions within each battery. Based on the common components, we decided to construct one variable for each of these batteries which would be a combined score of the individual questions in them. On the other hand, the background users battery only had 2 significantly correlated variables, which were considered in the model separately and not as a whole.

The questions in the Binding and Individual Concerns batteries were combined according to the scoring convention specified by the Moral Foundations Questionnaire.

### **4. Binary Logistic Regression**

Since the dependent variable (music consumption) is a binary variable with only 2 possible values, a logistic regression is used to fit the model, using maximum likelihood estimation techniques. MLE methods are based on the principle of using repetitive iterations to estimate the coefficients that maximize the likelihood of observing the dependent variable, given the predictors and the constraints. Once the change in log-likelihood becomes insignificant with every successive iteration, the logistic model is said to have achieved convergence.

Using the learnings from the correlations and factor analyses, we used the independent variables as predictors in several step-wise logistic procedures. The forward (or backward) step-wise regression procedures consider the contribution of each variable that is entered (or removed) at

each step. Using this procedure helps further narrow the list of successful predictors which contribute to the model fit. The final logistic regression used an enter procedure so that all the variables were entered into the model at once.

*Note: SPSS 19 was used for all data preparation, initial descriptive analyses and the various modeling procedures.*

## **Results**

Before analyzing results, we needed to test the goodness of fit of the music consumption model by looking at any discrepancies between observed values and expected values. The model proved to be well fitted according to Hosmer-Lemeshow tests of model fit (chi-square= 6.581, with a p-value of 0.582). Additionally, according to the classification (contingency) table shown below, the model was able to explain an overwhelming % of variance and accurately predict 74% of the modeled cases.

		Predicted	
		Non-Consumers	Consumers
Observed	Non-Consumers	209	55
	Consumers	72	154

Sensitivity: 31% (this indicates the %correctly classified as consumers)

Specificity: 43% (this indicates the %correctly classified as non-consumers)

Overall Correctly Predicted Cases: 74%

While we started out with 20 independent variables in our model, the finalized model contained 12 independent variables, which were chosen on the basis of their statistical significance.

Statistically significant independent variables that made it into the final model: cognitive use of music, employment status, music lonely, social events, harm/care battery, study in silence, friends' music same/different, greatest impact on music discovery, loyalty #1, loyalty# 2, emotional use of music and gender. Chart #1 sums all explanatory variables vs. the intercept, while Chart #2 shows the percentage of explanation each variable contributed to the model.

Chart #1

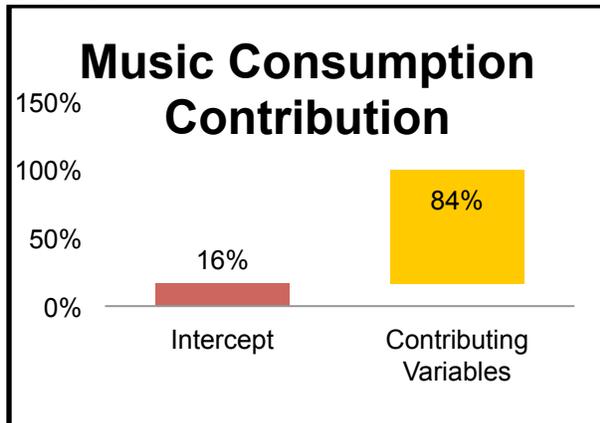
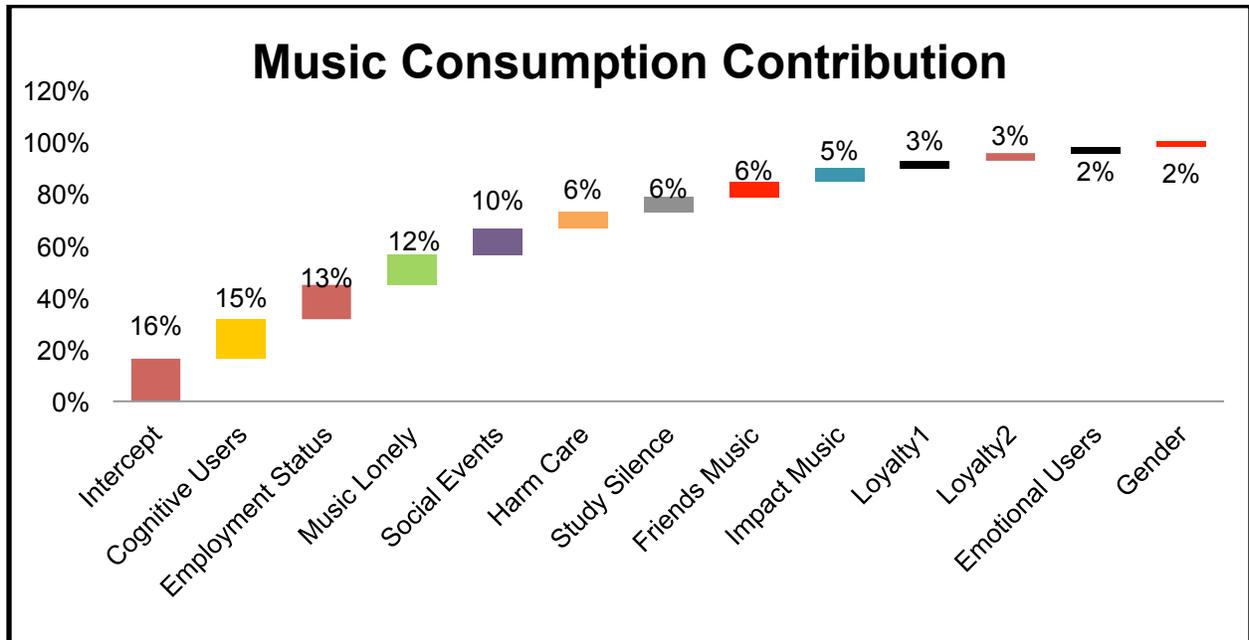


Chart #2



### *Cognitive Use of Music*

Cognitive use of music is the biggest predictor of music consumption. It explains 15% of variance and cognitive users of music are more likely to have a high consumption of music than emotional users and background users (note - background use of music as a composite variable was not used in the final model since it was not statistically significant as a whole).

### *Employment Status*

If one is either a full-time or part-time employee, that person is more likely to have a high consumption of music than one in another employment category (e.g. solely a student). If one is not employed and falls into any other category, they are less likely to be high consumers of music.

### *“I Often Feel Very Lonely If I Don't Listen to Music”*

Originally part of the background use of music composite battery, this statement on its own was the third largest contributor to high music consumption, driven by people who either strongly agree or somewhat agree with the statement, with those who strongly agree being 2.5X more likely have high music consumption.

### *“I enjoy listening to music in social events”*

Correlating strongly and positively with cognitive use of music, those who strongly or somewhat disagree with this statement are highly more likely to have high music consumption, including those who strongly disagree being more than 5.7X more likely to have high music consumption.

### *Do No Harm/Care for Others*

The fifth biggest predictor of high music consumption, this was one of only two morality variables that were significant, thus making it into the final model. While this predictor pops in the world of music, it does not in the world of sports fandom.

### *“Music is very distracting so whenever I study I need to have silence”*

The more one disagrees with this statement, the more likely they are to have high consumption of music. This variable correlated strongly with those who found pop music to be primitive and those for whom the impact of their friends' music (see next variable) was great.

### *Friends' Music - Same*

The more your friends share the same musical taste as you, the more likely you are to have high music consumption - and if you have virtually the same taste as your friends, you are more than 5X more likely to have high music consumption.

### *Greatest Impact on Musical Discovery*

Music and video streaming sites and their curators are highly more likely to impact one to have a high music consumption than radio DJs, blogs et al.

### *Loyalty #1 and Loyalty# 2*

After examining the data in its descriptive form, followed by correlation analysis, it became evident there were two corners of loyalty - loyalty #1 which deals with loyalty at a more general level, and loyalty#2 which deals with loyalty as it relates to traditional norms and values, thus feeling it must be done for historical reasons. Loyalty #1 was a slightly stronger predictor of high music consumption than Loyalty #2.

### *Emotional Use of Music*

Those who use music for emotional reasons, while having an impact on music consumption, is not as strong as of a predictor as cognitive use of music or particular components of background use of music.

### *Gender*

Males are highly more likely to have high music consumption than females, in fact, they are more than 1.5X more likely.

### **Conclusion**

The Gracie Management Music Consumption Model™ has shown that the variables in our model explain most of the nuances of music consumption among the core music consumer demographic of 18-34 in the United States.

The model demonstrates that use of music plays a key role in how much one consumes music - especially in a way that has high revenue impact on artists and labels. Thus, it is in the best interest of most artists and labels to increase the cognitive users of their music, or to even reframe how the artist is perceived among his/her audience who might not be cognitive users.

The model shows that the more you share the same musical taste of your friends, the more likely you are to have a high consumption of music. While it may not be a surprise that many people share similar interests in music as their friends, this study proves that the more similarity, the more it is that these friends form ecosystems that create a domino effect that lead to greater music consumption. Artist and labels need to concentrate more of their energy on helping to foster and curate these ecosystems rather than just zoning in on promoting new album releases.

The model also confirmed observational data we have at Gracie Management and made it more concrete - males and females have different periods when they are more likely to have heavy consumption of music. For females, it appears that when they are tweens and early teens, they exhibit a greater propensity for consumption based on observation, but our data shows that between the ages of 18-34, males are significantly more likely to demonstrate high music consumption.

We also saw that music fandom and sports fandom seem to differ. While those who have high levels of sports fandom tend to have in-group loyalty and beliefs in authority et al, this is not the case at all in music fandom. Music fandom does not involve liking on group and challenging others, and in fact, music fandom is more driven by a common good belief of doing no harm to others and care for people. This helps explain why music fans do not tend to like just a single artists or why artists who have messages that seem more inclusive tend to have more fanatical followings.

The model also demonstrates the impact of employment status, specifically being employed full-time or part-time. As the cost of concerts, memorabilia has increased, and the ease of purchasing products of an artist has become more difficult, the point in one's life when they are at their peak of music consumption has increased. Rather it being that period in school of following bands around the country and experimentation, it is now more likely to occur as one has their first full-time job or one maybe working part-time while also going to graduate school.

The model seems to indicate that, in 2012 USA, while we may not have reached the predicted 'post-racial' period in spheres such as the political situation, in the world of music consumption, it may have already occurred. Whether you are Caucasian or multicultural, your race/ethnicity has no impact on likelihood to have high music consumption. This is further proof that marketing plans for artist should be broader and more bold in their approach and not rely on racial demographic perspectives of the past.

The Gracie Management Music Consumption Model™ Report demonstrates that artists and labels need to move beyond simple campaigns that solely promote a release, as it is nearly impossible to get at broader drivers of music consumption, such as cognitive use of music or male sociological/psychological between the ages of 18-34, within such constructs. Artists and labels need to be building platforms and programs,

in addition to campaigns, in order to create and grow fanbases and establish messaging that resonates with those fanbases, so whether we are talking one year or ten years down the road, all will continue to be rewarded. The more the drivers of music consumption are understood and used in marketing for artists, the more likely fans are to consume music in a revenue generating way, thus generating a greater return on investment. Gracie Management is around to help you achieve this long-term success, rather than being “here today, gone today.”

### **Contact Gracie Management**

To have Gracie Management help you with your campaigns, platforms and programs or for more information on this report, please contact

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## Appendix 1: Logistic Regression Output

Variable	Category	B	S.E.	Wald	df	Sig.	Exp(B)
Gender	Male	.448	.264	2.877	1	.090	1.565
	Female	Reference Category					
Employment Status	Part-Time Employee	.003	.361	.000	1	.994	1.003
	Self Employed/Military	-.860	.526	2.672	1	.102	.423
	Student	-.952	.344	7.652	1	.006	.386
	Unemployed/Retired	-.896	.346	6.707	1	.010	.408
	Homemaker	-1.207	.410	8.649	1	.003	.299
	Missing	-.256	.587	.191	1	.662	.774
	Full-time employee	Reference Category					
Social Events	Strongly Disagree	1.743	1.106	2.482	1	.115	5.714
	Somewhat Agree	.134	.521	.066	1	.797	1.143
	Somewhat Agree	-.677	.373	3.290	1	.070	.508
	Strongly Agree	.115	.389	.088	1	.767	1.122
	Neutral	Reference Category					
Music Lonely	Strongly Disagree	-.568	.422	1.813	1	.178	.567
	Somewhat Agree	-.079	.332	.057	1	.811	.924
	Somewhat Agree	.685	.308	4.960	1	.026	1.983
	Strongly Agree	.954	.394	5.851	1	.016	2.595
	Neutral	Reference Category					
Friends Music	I like none of the music my friends listen to	-.446	.716	.389	1	.533	.640
	I like little of the music my friends listen to	-.271	.671	.163	1	.687	.763
	I like most of the	.050	.685	.005	1	.942	1.051

	music my friends listen to						
	I like all of the music my friends listen to	1.671	1.040	2.580	1	.108	5.318
	Like some of the music my friends listen to	Reference Category					
Impact Music	Radio DJ	-.503	.311	2.605	1	.107	.605
	Music Streaming	.350	.260	1.811	1	.178	1.419
	Others	Reference Category					
Study Silence	Strongly Disagree	.501	.364	1.895	1	.169	1.650
	Somewhat Agree	.303	.358	.716	1	.397	1.353
	Somewhat Agree	.129	.379	.115	1	.734	1.137
	Strongly Agree	-.634	.449	1.991	1	.158	.531
	Neutral	Reference Category					
Emotional Users		.066	.037	3.205	1	.073	1.068
Loyalty1		-.145	.074	3.802	1	.051	.865
Loyalty2		.076	.040	3.669	1	.055	1.079
Cognitive Users		.145	.032	20.099	1	.000	1.157
Harm/Care		.104	.036	8.229	1	.004	1.110
Constant		-5.650	1.218	21.522	1	.000	.004

## **Appendix 2: Music Consumption Main Questionnaire**

Q1

Thinking about music today compared to the past, would you say that...  
it is the worst it has ever been  
it is worse than it has been in the past  
it is better than it has been in the past  
it is the best it has ever been

Q2

Please tell us how much you agree or disagree with the following statements.

Strongly disagree      Somewhat disagree      Neither agree nor disagree  
Somewhat agree      Strongly agree

Listening to music really affects my mood  
I am not very nostalgic when I listen to old songs I used to listen to  
Whenever I want to feel happy I listen to a happy song  
When I listen to sad songs I feel very emotional  
Almost every memory I have is associated with a particular song

Q3

Please tell us how much you agree or disagree with the following statements.

Strongly disagree      Somewhat disagree      Neither agree nor disagree  
Somewhat agree      Strongly agree

I often enjoy analyzing complex musical compositions  
I seldom like a song unless I admire the technique of the musicians  
I don't enjoy listening to pop music because it's very primitive  
Rather than relaxing, when I listen to music I like to concentrate on it  
Listening to music is an intellectual experience for me

Q4

Please tell us how much you agree or disagree with the following statements.

Strongly disagree      Somewhat disagree      Neither agree nor disagree  
Somewhat agree      Strongly agree

I enjoy listening to music while I work  
Music is very distracting so whenever I study I need to have silence  
If I don't listen to music while I'm doing something, I often get bored  
I enjoy listening to music in social events  
I often feel very lonely if I don't listen to music

Q5

Thinking about the music most of your friends listen to, would you say...

I like none of the music my friends listen to  
I like little of the music my friends listen to  
I like some of the music my friends listen to  
I like most of the music my friends listen to  
I like all of the music my friends listen to

Q6

How often do you do the following...

Very rarely    Somewhat rarely    Sometimes    Somewhat often    Very often

Watch music videos on your computer or cell phone  
Stream music on your computer or cell phone  
Pay to download a music track or album to your computer or cell phone  
Pay to see a singer or band in concert you like  
Purchase memorabilia of a singer or band you like

Q7

Which of the following has the greatest impact on your music discovery?

Music blogs

Music magazines

Friends

Music streaming services

Video streaming services

Radio DJs

Club DJs

Other, please specify: [Open-ended answer]

Q8

Thinking about vinyl records, do you plan to buy a full-length LP within the next 12 months?

No

Yes

Not Sure

Q9

We will now shift the discussion for these final two questions.

When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?

Not at all relevant   Not very relevant   Somewhat relevant   Relevant   Very relevant

Whether or not someone suffered emotionally

Whether or not some people were treated differently than others

Whether or not someone's action showed love for his or her country

Whether or not someone showed a lack of respect for authority

Whether or not someone violated standards of purity and decency

Whether or not someone was good at math (catch question)

Whether or not someone cared for someone weak or vulnerable

Whether or not someone acted unfairly

Whether or not someone did something to betray his or her group

Whether or not someone conformed to the traditions of society

Whether or not someone did something disgusting  
Whether or not someone was cruel  
Whether or not someone was denied his or her rights  
Whether or not someone showed a lack of loyalty  
Whether or not an action caused chaos or disorder  
Whether or not someone acted in a way that God would approve of

Q10

Please read the following sentences and indicate your agreement or disagreement.

Strongly disagree      Somewhat disagree      Neither agree nor disagree  
Somewhat agree      Strongly agree

Compassion for those who are suffering is the most crucial virtue  
When the government makes laws, the number one principle should be ensuring that everyone is treated fairly

I am proud of my country's history  
Respect for authority is something all children need to learn  
People should not do things that are disgusting, even if no one is harmed  
It is better to do good than to do bad  
One of the worst things a person could do is hurt a defenseless animal  
Justice is the most important requirement for a society  
People should be loyal to their family members, even when they have done something wrong

Men and women each have different roles to play in society  
I would call some acts wrong on the grounds that they are unnatural  
It can never be right to kill a human being  
I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing

It is more important to be a team player than to express oneself  
If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty

Chastity is an important and valuable virtue