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2013

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### Recommended Citation

Cavanah, Cassidy R., "Genre, Birth Cohort, and Product Perception: Responses to Background Music in Commercial Advertising" (2013). *Scripps Senior Theses*. Paper 198.  
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**GENRE, BIRTH COHORT, AND PRODUCT PERCEPTION:  
RESPONSES TO BACKGROUND MUSIC IN COMMERCIAL ADVERTISING**

**By**

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**SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT  
OF THE DEGREE OF BACHELOR OF ARTS**

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**April 25<sup>th</sup>, 2013**

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### Abstract

Research shows that music transmits both *embodied* (universally perceptible) and *referential* (culturally specific) meanings. The present study sought to explore the persuasive power of music in commercial advertising, and the complex ties that exist between music, life experience and perception. The study looked at how the perception of a product could be altered in accordance with specific embodied and referential meanings. With a focus on the effects of music genre and birth cohort on product perception, embodied meanings were expected to produce similar results across birth cohorts, and referential meanings were expected to produce significantly different results. A total of 100 participants were administered the survey online. Participants watched 30-second original video clips and were asked to complete a survey. There were 16 videos made with the 4 products types and 4 music genres selected for the experiment. The survey measured perception through ratings of agreement to statements; one set of statements aimed to measure embodied meaning and the other to measure referential meaning. Each measure of the survey was individually analyzed; data used here is from the analysis of a product as *classic*. There was a significant main effect of music genre on product perception for a majority of the measures,  $F(3,273)=13.075, p <.001$ . There was a similarly significant main effect of birth cohort on product perception as well,  $F(2,91)=3.941, p=.023$ . There was no significant interaction between birth cohort and music genre on product perception for any measures,  $F(6,273)=.801, p =.570$ . Results show that the older cohort prefers classic rock and jazz, the younger birth cohort prefers electronic and pop. Results for the questions looking at referential meaning primarily produced insignificant results.

Genre, Birth Cohort, and Product Perception:  
Responses to Background Music in Commercial Advertising

Take a moment to consider how often you were exposed to commercial advertising each day over the past week. Most likely, the number of exposures will be quite high. Whether watching TV, browsing the Internet, or listening to the radio, people are frequently subjected to commercial advertising regardless of personal relevance or interest. Using anything from sex to repetition, advertisers employ a range of finely tuned tactics to grab your attention and entice your business; this research, will focus on developing our understanding of the specific role that music plays in this process. The powerful associations that are created between commercialized products and their jingles exemplify the successful use of music to cognitively engage consumers through advertising. The goal of this research is to examine how music genre might mediate product perception and to explore the differences in these effects as a function of generation. We expect participants to have similar cognitive reactions to music's embodied meaning, yet show significant differences in their affective reactions and preferences for music genre across birth cohorts.

Research shows that music has both an embodied and referential meaning (Zhu & Meyers-Levy, 2005) and that these meanings or associations are actually able to influence a person's feelings when used as background music (Alpert & Alpert, 1990). Music's embodied meaning is considered universal, with an impact that is not based on prior experience and is unmediated by any personal or cultural associations. Most people should similarly perceive a song that embodies the emotion of sadness as sad—regardless

of culture, language, or familiarity. Embodied meaning relates to the *cognitive* components of music processing and attitude formation (Lantos & Cranton, 2012). Music's referential meaning varies by the individual and is mediated by previous attachments to personal and cultural experiences that have created associations between particular songs or styles of music to a broad range of emotions, images, or memories. The referential meaning is related to the *affective* components of music processing and attitude formation (Lantos & Cranton, 2012). A study by Balkwill and Thompson (1999) found evidences to suggest that people are able to determine the intended emotional meaning of music through the use of either universal (embodied) or culturally specific (referential) cues. Musical elements such as structure or tone are a few of the universal auditory cues that allow people to recognize the expressed emotion of music that is culturally unfamiliar (Kwuon, 2009). In their research, Balkwill and Thompson had Canadian listeners evaluate the emotional expression and structural features of Hindustani raga renditions. Results show that participants are able to perceive the correct emotions and found a strong correlation between the participant's understanding of the structural features of the music and their interpretation of the expressed emotions. It can be postulated that these same universal auditory cues would function to transmit similar *embodied* messages to listeners despite variables that might otherwise influence *referential* responses to advertising music such as personal experience and birth cohort. This perspective implies that people would perceive a product trait more strongly if the background music embodied the same trait (e.g. classic rock would increase the rating of a products perceived masculinity), while differences in referential associations might

influence a young adult to rate a product with pop music as more preferable than one with jazz music based on familiarity.

Research suggests that the style or genre of background music can affect consumer perceptions of a product. As defined by van der Merwe (1989), a music genre should encompass a range of productions that all share the same basic musical language, suggesting that what is generally true for an individual song may reflect a similar truth about the genre. In support of this view, North and Hargreaves (1997) found that the style of music plays a greater role than the individual song choice in determining audience response, which supports the ability of individual but representative songs to accurately reflect an entire genre or style at large. Research suggests that the cognitive process of style identification happens within a fraction of a second, with studies showing that style can be identified almost perfectly after only one second of exposure to a song (Gjerdingen & Perrott, 2008; Plazak & Huron, 2010). Evidence of this short threshold for judgment shows how perceptive people are of sounds and emphasizes the importance of capturing the audience's positive attention with the appropriate music choice within those first few moments of a commercial.

Particularly remarkable about music genre and personal preference is the tendency for people to define themselves and their personalities through their individual taste in music, a phenomenon that is well supported with experimental research (Rentfrow & Gosling, 2006). Consider for a moment the hypothetical example of a large-scale music festival with several different stages, one for heavy metal bands, one for country singers, one for hip hop artists, and one for pop stars. While there may be overlap and mixing between the crowds, strong stereotypic associations to these music

styles can potentially lead one to assume that the crowd at the heavy metal stage would have a higher percentage of black-haired 'rockers' than that of the pop crowd, and that the country stage would have a higher percentage of cowboy boots and hats than would be found in the hip hop crowd. This is a product of particular music fan-bases being heavily stereotyped. People associate so strongly with the image, lifestyle and personality type linked to their favorite genres or artists that much of a person's social orientation in the world is mediated by their music preference (North & Hargreaves, 2007; Rentfrow & Gosling, 2006). Because of these stereotyped fan-bases, music can be an intuitive and powerful tool for marketers to artificially influence a target audience by creating a brand-image, associating a lifestyle, and conjuring a mood through careful music selection in commercial advertising. If a song arouses feelings of excitement, sexuality, and fun to an audience representative of a product's target customer, it might be used in an alcohol commercial to conjure up those same associations with the use of the drink by the viewer at home.

Advertisements often use psychological appeals or the intentional use of a desirable feature, emotion, or concept (e.g. success, power, and humor), as a way to attract the consumer's interest and attention—or to quote the popular idiom, 'pull on their heart strings'. Because music has been shown to influence the message of an advertisement, music can potentially bolster or emphasize an intended appeal when used appropriately. Baker (1993) and Kroeber-Riel (1993) suggest that rock music or classical music could both be used in a car commercial but would reinforce different ideas about the car. While the rock music would confirm ideas about engine power, sexiness and speed, the classical music would highlight connotations of luxury, fine quality, and

elegance. In this instance, there are two music genres and two messages communicated about a single product.

A content analysis of music placement in primetime television advertising by Allan (2008) suggests that the use of popular music in advertising is often more relevant to the intended 'narrative' of the commercial than to the product itself. In his study, 'A content analysis of music placement in prime-time television advertising', Allan analyzed 3,456 commercial advertisements to both quantify and qualify the strategic use and placement of music in the adverts. He found that 84% of the unique advertisements without repeats used music and that 14% of these ads used popular music in particular. His research indicates that popular music is most likely to be used in advertisements to create perspective and narrative in order to increase the level of involvement a consumer develops with a commercial. The narrative of a commercial relates to the overarching story presented through the visual, audio and textual aspects as a cohesive whole and facilitates the transmission of the main message. An advertisement for children's clothing during the summer months is likely to have a narrative based on the easy excitement of a new school year when a child is confident and eager to wear their new outfits. The take-away message: buy our clothes and have a happy, popular child. Allan claims that the chosen background music will relate more to the ideal fun and easy experience of 'going back to school' than to the clothing itself. In this case, the music is shown not to relate a specific message but rather to present a story or create a distinct atmosphere to augment the intended narrative and message of the commercial to be associated, regardless of relevance, to the product being sold.



The model for classical conditioning in psychology suggests that linking a particular product with a popular and well-liked song or an unpopular and disliked song would lead to an association between the product and the song that would influence a person's perception of the product accordingly (Zander, 2006). Gorn (1982) found significant evidence to support this theory in his notable experiment on music in commercial advertising. Using a classical conditioning experimental design, Gorn had 244 undergraduate participants associate two different pen colors with either a liked or disliked song through repeated exposures and subsequently asked participants to pick their preference after a short period of break time (Gorn, 1982). To a strong affect, the findings indicated that 79 percent of participants chose the pen associated with the well-liked song. This study addresses the mental processes involved in decision-making and shows how there is a significant interaction between the perception of the song and the perception of an associated product. Several subsequent studies confirmed Gorn's original findings but others also found contradicting results certain cases where the product was highly familiar and preference very personal (Allen & Madden, 1985; Pitt & Abratt, 1988). This study shows the limitations of music's influential ability and points out what factors may have a more dominant influence, such as brand reputation or recognition and particularly personal experience. Furthermore, additional studies have found evidence of music's ability to affect people's beliefs, to augment particular factors of the product, and influence their feelings explicitly (Middlestat *et al.*, 1994). These studies confirm that music is strong enough to alter our perception, opinion, and preference towards a product.

A look at other formats and spaces where music use influences consumer behavior outside of commercial advertising may shed more light on the theory, motive and effectiveness behind this sort of musical persuasion. Abercrombie & Fitch, as well as sister company Hollister & Co., play popular club music at a high volume in their dimly lit and powerfully fragranced stores to attract their target audience's attention. In an interview with British newspaper *The Gaurdian*, Karl McKeever, the brand director of retail marketing consultancy at Visual Thinking, states that the store environment is targeted, multi-sensory, and leaves "nothing up to chance"(Saner, 2012 p.1). Elaborating on the role music plays in narrative formation and consumer behavior within Abercrombie and Fitch stores, he states, "Music plays an incredibly important part. They create this intense, nightclub sound. It's very high-energy music, with high beats per minute, and one track is mixed into another so there is this continuous high-energy environment which helps to elevate the heart rate, keeps the audience in a heightened state of emotion. This translates into participation – e.g. they are buying more" (p. 1 Saner, 2012). By associating the brand with a youthful, sexy, club-like environment through loud popular music, Abercrombie and Fitch successfully improves the perception of their product and influences spending behavior among their target customers. Supporting this claim in relationship to use of music in advertisements, Brooker and Wheatly (1994) claim that energetic music with high beats per minute would increase attention to an ad, increasing recall, emotions, attitudes and purchase intent, with the opposite true for music of a slower tempo. In the physical space of a store, music, lighting, scent, and imagery all come together to create an attractive narrative around the charmed life of the quintessential Abercrombie & Fitch customer and relay a persuasive

message to join the club by purchasing the product—the brand’s image—just as it is similarly done in commercial advertisements.

Mike Jefferies, the company’s CEO, confirmed the use of these tactics in an interview with Benoit Denizet-Lewis of *salon.com* in 2006. He claims to create an in-store environment so strongly associated with youth, sex, and beauty that people who don’t fit the standard are physically repelled away from the store (Denizet-Lewis, 2006 p. 1). This intensely sensory environment of the store replicates the “playfulness that exists in this generation...[that], candidly, does not exist in the older generation,” (Jefferies, p. 1). Research on life-cycle effects of music preference does suggest that psychological differences in young adults may be responsible for their desire for risk, excitement, and fun both concerning their actions and the music they listen to (Hamermesh, 1984). As the CEO of one of the leading retailers and brands in the country, Jefferies’ account provides valuable evidence of the corporate use of visual and audio stimuli to influence the purchasing habits of a target audience. Because the music is played while costumers are already in the store there can be a stronger correlation made between music and sales than can be made regarding commercials viewed in the home. In this case, both genre and volume are used to attract specific people from one birth cohort and repel another, and in the present study we are looking to see if a similar phenomenon occurs with music genre in commercials.

While there is extensive research on the role that background music plays in product perception, the previous research has not discussed the relationship between genre, birth cohort, and product perception or the different messages relayed based on modern genres such as electronic music that are used heavily in current commercials.

This leaves a significant gap in the current understanding of the powerful generational effect of music preference in addition to how and why certain products and commercials may appeal to a consumer of one demographic but not the other. Previous research has been so focused on what makes an ad *more* appealing that there has not been much research on what factors might make an ad look *less* appealing to the consumer (Lantos & Cranton, 2012). Thus, music preference across birth cohorts may play an interesting role in the preference for or against an advert. The interaction between background music genre, product perception, and birth cohort is important as it could shed light on the significant influential factors and cognitive processes involved in music perception, memory recall, opinion formation and decision making.

In the present study, we expect to find that background music in commercial advertising can influence the perception of a product in accordance with a song's embodied meaning across all birth cohorts, yet also stimulate a range of responses between birth cohorts based on differences in referential associations towards the four separate genres of music. Because research has shown how adept people are at picking up on the universal auditory cues that trigger the perception of embodied meanings and characteristics, we expect that a song with heavier notes and faster beats per minute (e.g. classic rock or electronic) would be more likely to influence a person's perception of a product as powerful regardless of their age. If this classic rock song also embodied masculinity, coolness, and long lasting quality, one would expect the ratings of a product as masculine, cool and classic to increase when the song is used as background music as well. Following this process, one would similarly expect jazz to increase the rating of a product as more sophisticated and luxurious, pop music to increase the rating as silly,

youthful and feminine, and electronic music to increase the rating as cool, new and innovative.

Life-cycle effects and birth-cohort effects both contribute to a song's referential meaning and are shown to be significant factors in a person's response to and preference for music. Life-cycle effects include issues that arise with the ageing process, such as how young adults are likely to seek adrenaline inducing sounds and environments while the elderly, who may tire easily or struggle with hearing, seek quiet or intellectually stimulating sounds (Lantos & Cranton, 2012). Birth-cohort effects relate to the year a person was born and the consequent cultural environment they grew up in, creating differences in music preference, nostalgic associations, and emotional or experiential memories linked to their experience (Lantos & Cranton, 2012). Electronic music is extremely popular among young adults as indicated by songs like 'Don't You Worry Child' by Swedish House Mafia and 'Sweet Nothing' by Calvin Harris remaining at the top of the BBC1's Top 40 chart and artists like Tiesto, Avicii and Skrillex headlining the world's largest music festivals. This popularity might suggest that young adults are more likely to have powerful referential associations with an electronic track or nostalgic pop sounds than those from older birth cohorts because they are more likely to have ties with these genres to particular experiences, concepts, or memories in their recent life. Older generations may have similar reasons for powerful embodied/referential meanings to music, but they would likely be associated with different genres. While a classic rock riff or the familiar sound of jazz may elicit strong memories or associations in an older birth cohort, those from a younger generation might just think of their grandparents. Thus, participants in older birth cohorts may perceive products linked with pop or electronic

music less favorably, showing more of a preference towards the familiar genres of classic rock or jazz instead (Lantos & Cranton, 2012). Similarly, participants from the young adult birth cohort may likely prefer products paired with electronic music, potentially perceiving the product as newer and more appealing due to their positive referential ties to the genre.

The overall goal of this research was to determine whether or not there is an interaction between the cognitive perception and affective reactions to embodied and referential meanings of background music in advertising and a person's perception of the advertised product, focusing on how this interaction varies over birth cohort. Changes in the perception of inherent qualities of the product (e.g. *femininity* vs. *masculinity*) reflecting features of the music genre (e.g. aggressive tone) used in the commercial would indicate that cognitive responses to the music influence the cognitive perception of the product. Gauging differences in preference for or against a product (e.g. intent to purchase) between birth cohorts would indicate that differences in affective responses to background music could influence product perception as well. These two factors were measured with questions about the products that were specifically designed to assess perception of embodied meaning and reactions to referential associations with the music. To assess the level to which the embodied meaning was being perceived, questions such as 'is this product sophisticated' or 'is this product masculine' were asked and answered on a scale of 1 to 10 (see Appendix A). To assess the reactions to referential associations with the music genre, questions about intent to purchase or product appeal were asked on the same scale. We expect that birth-cohort and life cycle effects would create a distinct difference in genre associations leading the oldest birth-cohort to respond more positively

to the jazz or classic rock genres and less positively to the pop and electronic genres when looking at their response to a products utility, desirability, relevance, and comparative appeal over similar products. Conversely, we expect that the youngest birth cohort would respond more positively to the pop and electronic music genres, and less positively to the jazz and classic rock genres. Overall positivity was measured by the strength of agreement in response to positive statements, which include all but two measures (*silly* and *cheap*). In order to comprehensively measure perceptions of embodied and referential meanings of the music genre, participants were asked to list the first three adjectives that came to mind about each commercial to create an opportunity to detect qualities that may not have been considered when forming the survey.

I predict a main effect for age such that the oldest birth cohort will respond most positively in their ratings for the products with jazz, followed by classic rock, in the category of reaction-based questions, and the least positively with pop and electronic music. I predict the opposite to be true for the youngest birth cohort, such that ratings will be most positive with electronic and pop as background music, and least positively with jazz and classic rock. These reaction-based questions are designed to measure the transmission of a songs referential meaning, which should differ between the birth cohorts. For the perception-based questions, I predict a main effect of jazz music on ratings of a product as *classic*, *sophisticated*, *luxurious* and *smart*, and a main effect of classic rock on ratings of a product as *masculine* and *powerful*. I further predict a main effect of pop music on ratings of a product as *youthful*, *feminine*, and *silly*, and a main effect of electronic music on ratings of a product as *cool* and *innovative*. These

perception-based questions are designed to measure the transmission of a songs embodied meaning, which should be similarly interpreted across birth cohorts.

## **Method**

### *Participants*

The target participant population is representative of the standard audience reached by mass communication sources in the U.S., specifically current American residents with television or Internet access from a range of demographics and locations across the country. This research did not involve participants from protected populations. Utilizing the Amazon Mechanical Turk (MTurk) and Survey Monkey, the survey was administered to 100 anonymous participants throughout the USA, including men and women ages 18 and older. Participants were not asked to report their names or any significant identifying factors in the data-collecting portion of the survey and IP address information was not collected to further protect participant identity. Participants on MTurk were given financial compensation of 80 cents per person for their time.

### *Design*

This study focuses on the influence of background music genre and age on product perception across the typical audience touched by mass media in the United States today. Research was formatted around an approximately 15 minute long question and answer survey that included four 30 second video clips. The first independent variable in the study is music genre (classic rock, pop, jazz, and electronic). All chosen songs were not currently or popularly associated to any other product from commercial use to avoid contamination and no vocals were used. Informal inquiries among friends were used to determine that each song was representative of its genre, in addition to only



selecting instrumental versions of lesser-known songs by highly popular artists considered to be strongly representative of the intended genre. The second independent variable is age, which was divided into three different generational groups based on the distribution of participants during data analysis. The age divisions for the three birth cohorts were 18 to 29 years old for the youngest birth-cohort, 30 to 40 years old for the mid-age birth cohort, and 41 and above for the oldest birth cohort. The four music genres played as background music over slideshows with images of four different product types: Parker Pen, Keep It Up (tooth brush stand), Martini Brut Champagne, and Multi-Tool. These four product types were only a nuisance variable. Products chosen were considered generally non-gendered and to have minimal brand name recognition. Sixteen video clips of these slideshows were created using iPhoto, but the survey randomly assigned participants to batches with only four videos. The dependent variable was the participant's perception of the product, which is measured by their ratings of agreement to a series of preference/perception-based statements (see Appendix A).

#### *Apparatus and Materials*

The experiment was conducted online through Survey Monkey and MTurk, which required participants to have computer access. Survey Monkey is an online tool to create academic surveys and MTurk is a system hosted by Amazon that links surveys with populations around the world with the ability to pay and manage participation. The survey created was embedded into MTurk and distributed to participants through its own system.

Approximately 7 photos of each product were used to create the four slide show based video clips used in the survey. These photos were brought into iPhoto and edited

in the ‘Create Slideshow’ option. Utilizing the ken-burns effect, the images were set to play through the slide show with one of the four possible genres set as the background track music. The ken-burns effect is a popular tool used to create movement and focus in slide shows with a combination of zooming in or out and panning across the image in different directions—ultimately creating a film like effect to still images. This process was repeated to create 16 different video clips featuring all combinations of the 4 products with the 4 music genres. Slide shows were strictly thirty-seconds long to replicate standard commercial run time. The video clips were exported as .MOV files and uploaded into YouTube with coded titles so participants would not accidentally find any clues to the survey’s intention. The videos were then embedded into the survey using HTML codes that each video would be played at the top of each new page. Participants were required to have working computer speakers or headphones on to complete the experiment because audio could not be compromised, but actual emitted volume level could not be controlled.

The survey used was designed to measure product perception through ratings of agreement to a series of original statements. The statements were designed to measure the snap judgments consumers make about the products and aimed to gauge any influence or transmission of a song’s *embodied* or *referential* meanings (see Appendix A). Statements looking at *referential* meaning were categorized as “preference” based measures, regarding things such as willingness to purchase and product desirability. The theory here is that ratings of agreement might reveal changes in perception of a product in accordance with different genres, such that a participant from the older birth cohort would rate a product more preferably when paired with music they had referential

associations with (as they might have to classic rock or jazz) but rate the same product less favorably when paired with an electronic music background track. These preference-based statements included “I am interested in buying this product” and “In comparison to similar products, this product is more appealing than its competition”. The second category of statements was designed to measure the influence or transmission of a song’s *embodied* meaning through statements about how participants *perceived* the products. The theory behind this method is that certain sounds embody different characteristics that should be distinguishable by the majority of American citizens across all birth cohorts, such as the masculine qualities of classic rock and the light-hearted youthfulness of pop music. The ability to answer each question on a scale of 1 to 10 allowed for the range of possible attitudes to be accurately assessed and reported.

### *Procedure*

Participants were given all necessary information before proceeding with the survey in an informed consent form. They were told that they were going to take a survey regarding perceptions of the mass media and were asked to watch four 30- second video clips with standard advertising content and to answer several questions about each video. They were not told the specific song names, artists, or genres of the background music in the slide show clips. Participants were directed to one of four possible sets of videos that included different combinations of the sixteen videos made. Participants were asked to watch each thirty-second clip and then answer a set of questions directly following the video about the specific product featured in the clip they just watched. Participants were asked to rate their level of agreement on a scale from 1 to 10 with the different statements

created to measure the influence of a songs embodied or referential meaning. After completing the surveys regarding all four products, participants were asked a series of follow up questions to gather information regarding their age, gender, ethnicity, and location within the United States. This was a within-subjects experimental design.

### Results

I will only be looking at the analysis for three of the six preferences based questions, and four of the eight perception based questions for brevity. These data points were chosen for analysis based on relevance to the hypothesis prior to being analyzed. All other results are included in Appendix C and Tables 1 through 10. The measures of a product as *classic*, *youthful*, *masculine*, and *innovative* were chosen to gauge how much the different music genres may have influenced the perception of these qualities. The measures of *interest in purchase*, *product appeal* and *expected usefulness* were chosen to assess any influence of a genre's referential meaning by looking at their overall preference for or against a product. *Classic* was chosen intentionally to measure jazz music, *youthful* was chosen for pop, *masculine* for classic rock, and *innovative* for electronic.

Ratings of a product as *classic* were subjected to a test of within-subjects effects having four levels of genre (rock, jazz, electronic, pop) and three levels of birth cohort (young, mid-age, old). A repeated measures general linear model test showed a strong main effect of music genre on ratings of a product as *classic*,  $F(3,273)=13.075$ ,  $p < .001$ . Mean estimates for the ratings of a product as *classic* by genre shows that people gave higher ratings with jazz music in the background ( $M=6.15$ ,  $SE=.29$ ), followed by classic rock ( $M=5.30$ ,  $SE=.29$ ), electronic music ( $M=4.32$ ,  $SE=.28$ ), and pop music ( $M=3.97$ ,

SE=.28). Pairwise comparisons show that ratings of a product as *classic* differed significantly between classic rock and pop music ( $p=.005$ ), jazz and electronic music ( $p<.001$ ), and jazz and pop music ( $p<.001$ ). A test of between-subject effects showed a significant main effect of birth cohort on ratings of a product as *classic*,  $F(2,91)=3.941$ ,  $p=.023$ . Analysis of the mean ratings show the youngest birth-cohort gave the strongest ratings of the products as *classic* ( $M=5.44$ ,  $SE=.26$ ), followed by the mid-aged birth cohort ( $M=4.98$ ,  $SE=.29$ ), and the oldest birth-cohort  $M=4.37$ ,  $SE=.28$ ). Pairwise comparisons show the youngest birth cohort differed significantly from the oldest birth cohort ( $p=.018$ ). There was no significant interaction shown between music genre and birth-cohort on ratings of a product as *classic*,  $F(6,273)=.801$ ,  $p=.570$ .

A repeated measures general linear model test of within-subject effects showed a strong main effect of music genre on ratings of a product as *youthful*, with an  $F$  ratio of  $F(3,273)=12.677$ ,  $p<.001$ . Mean estimates of the measure show that people tended to rate a product as more *youthful* with pop as the background music ( $M=5.71$ ,  $SE=.30$ ), followed by electronic music ( $M=4.6$ ,  $SE=.29$ ), classic rock ( $M=3.97$ ,  $SE=.27$ ), and jazz ( $3.71$ ,  $SE=.26$ ). Pairwise comparisons show that ratings of a product as *youthful* differ significantly between rock and pop music ( $p<.001$ ), jazz and electronic ( $p=.016$ ), jazz and pop ( $p<.001$ ), electronic and jazz ( $p<.001$ ), pop and rock ( $p<.001$ ) and pop and jazz ( $p<.001$ ). A test of between-subject effects found no significant main effect of birth cohort on ratings of a product as *youthful*,  $F(2,91)=1.267$ ,  $p=.287$ . There was no significant interaction found between music genre and birth-cohort on ratings of a product as *youthful*,  $F(6,273)=1.506$ ,  $p=.176$ .

Ratings of a product as *masculine* were subjected to a test of within-subjects effects. A repeated measures general linear model test showed a strong main effect of music genre on ratings of a product as *masculine*, with an  $F$  ratio of  $F(3,273)=5.817, p = .001$ . Mean estimates show that participant's gave the highest rating of a product as masculine with electronic music in the background ( $M=5.91, SE=.30$ ), followed by classic rock ( $M=5.00, SE=.28$ ), jazz music ( $M=4.67, SE=.25$ ), and pop music ( $M=4.37, SE=.28$ ). Pairwise comparisons show that ratings of a product as *masculine* differed significantly between classic rock and electronic ( $p=.001$ ), electronic and pop ( $p=.006$ ). A test of between-subject effects showed no significant effect of birth cohort on ratings of a product as *masculine*,  $F(2,91)=2.610, p=.079$ , however as it was nearly significant the results do suggest a trend. Further analysis of mean ratings show the youngest birth-cohort tended to give the strongest ratings of the products as *masculine* ( $M=5.27, SE=.22$ ), followed by the mid-age birth cohort ( $M=5.13, SE=.25$ ), and the oldest birth-cohort ( $M=4.56, SE=.24$ ). There was no significant interaction shown between music genre and birth-cohort on ratings of a product as *masculine*,  $F(6,273)=1.158, p = .329$ .

A repeated measures general linear model test showed a strong main effect of music genre on ratings of a product as *innovative*,  $F(3,273)=10.140, p < .001$ . Mean estimates showed that participant's gave the highest rating of a product as innovative with pop music in the background ( $M=6.06, SE=.31$ ), followed by electronic music ( $M=5.23, SE=.30$ ), classic rock ( $M=4.31, SE=.30$ ), and jazz music ( $M=4.17, SE=.29$ ). Pairwise comparisons show that ratings of a product as *innovative* differed significantly between classic rock and pop music ( $p<.001$ ), jazz and pop music ( $p=.001$ ), and jazz and electronic music ( $p=.013$ ). A test of between-subject effects did not show a significant

effect of birth cohort on ratings of a product as *innovative*,  $F(2,91)=.227, p=.797$ . There was no significant interaction shown between music genre and birth-cohort on ratings of a product as *innovative*,  $F(6,273)=.856, p=.528$ .

Ratings of *interest in purchase* were subjected to a test of within-subjects effects having four levels of genre (rock, jazz, electronic, pop) and 3 levels of birth cohort (young, middle age, old). A repeated measures general linear model test showed no significant effect of music genre on *interest*,  $F(3,273)=.672, p=.57$ . Similarly, no significant interaction was found between music genre and birth cohort on ratings of *interest in purchasing* a product,  $F(6,273)=1.08, p=.38$ . However, a test of between-subjects effects showed a nearly significant effect between *interest in purchase* and birth cohort, yielding an  $F$  ratio of  $F(2,91)=2.59, p=.08$ . The mean measures of *interest in purchase* suggests a trend for the younger birth cohorts to show the most interest in purchasing a product ( $M=5.49, SE=.285$ ), followed by the mid-age birth cohort ( $M=5.08, SE=.32$ ), with the oldest birth cohort showing the least *interest* ( $M=4.54, SE=.30$ ).

Ratings of a product's *appeal* were analyzed with the same test of within-subjects effects to similarly insignificant results. Analysis showed no significant effect of music type on product *appeal*  $F(3,273)=1.129, p=.338$ , and no significant interaction between music type and birth cohort  $F(6,273)=.726, p=.629$ .

A test of within-subject effects showed a strong main effect of music genre on ratings of a product's expected level of *usefulness*, with an  $F$  ratio of  $F(3,273)=3.716, p=.012$ . Mean estimates show that people tended to rate a product as more *useful* with pop as the background music ( $M=5.61, SE=.33$ ), followed by classic rock ( $M=5.00, SE=.31$ ), electronic ( $M=4.74, SE=.30$ ), and jazz ( $M=4.24, SE=.31$ ). Pairwise

comparisons show that ratings of *usefulness* were significantly different between jazz and pop music ( $p=.014$ ). Results showed no significant interaction between birth cohort and music genre on reported levels of *usefulness*,  $F(6,273)=.843$ ,  $p=.538$ . A test of between subject effects showed no significant effect of birth cohort on ratings of a product as *useful*,  $F(2,91)=2.023$ ,  $p=.138$ .

### Discussion

The results and supported several aspects of the experimental hypothesis. It was hypothesized that music genre would influence product perception similarly across birth cohorts via its embodied meaning but would influence product perception differently between birth cohorts via its referential meanings. Overall, it was found that music genre can have a significant effect on particular types of product perception across all birth cohorts, and that each birth cohort tends to react differently to the four possible music genres. However, upon further review of the experimental method, the results did not provide sufficient evidence of the transmissions of embodied and referential meanings of the different genres as they were designed to do in the hypothesis.

The results for the perception-based questions about the products as *innovative*, *classic*, *youthful* and *masculine* show the highest rate of significant findings and were part of the set designed to detect embodied meaning. The four specific measures were chosen based on their relevance to the hypothesis before analyzing the rest of the data to ensure that the results discussed were not biased. The analysis of the measure of a product as *classic* showed significant effects in several areas of analysis, with ratings significantly effected by genre, a significant difference between the ratings by genre, and a significant difference between ratings by birth cohort. The results strongly support the hypothesis.



As predicted, jazz music influenced the rating of a product as *classic* the most significantly, followed in second by classic rock. This shows that for all birth cohorts, jazz and classic rock music was perceived as more *classic* than electronic and pop music—and that this difference in perception was noticeably transmitted onto the products. These results make sense for the population sampled (Americans) considering the different time periods each of the genres grew into popularity. Both young and old participants are likely to understand that classic rock and jazz music are now considered ‘classics’, where as more current music such as pop and especially electronic are still considered new and fresh. Furthermore, the results showed that the youngest birth cohort gave the highest ratings of a product as *classic* and the oldest birth cohort gave the lowest. These results suggest a difference in the referential meaning transmitted between the birth cohorts, as the youngest birth cohort is more likely to have grown up perceiving jazz and classic rock as *classic*—thus having a stronger association with those genres as classic sounds—while participants in the oldest birth cohort are likely to have grown up at a time when classic rock and jazz were new and fresh, thus leading to a weaker association with the genres as *classic*. Although the results of the measure of a product as *luxurious* were not discussed in the results section, they were very similar in significance to the results for *classic* (See Appendix C). These similar effects on the perception of a product as *classic* and *luxurious* follow common sense as they both reflect a similar attribute—one that represents quality, taste and longevity. However, it is also interesting to note that results for the measure of a product as *smart* were completely insignificant despite being somewhat similar in category to *classic*, *luxurious* and *sophisticated*, which all had significant main effects.

The significant results for the measure of a product as *youthful* also supported the hypothesis that pop music would produce the strongest perception of a product as *youthful*, and that jazz music would produce the least strong perception of a product as *youthful*. There were no significant differences found between the birth cohorts on the ratings of this measure, suggesting that there was no difference in transmission of embodied or referential meanings between the birth cohorts. The song used for the pop music background track was by Britney Spears and featured very light-hearted, bouncy and airy sounds, which may carry a young and playful message to the listeners. Electronic music produced the second strongest perception of a product as *youthful*, which also follows common sense as it is a relatively new sound that is familiar with the current youth culture today, yet still has a heavier tone and beat than what is found in a traditional pop song. Although the results for the measure of a product as *silly* were not discussed, they were similar but more significant than the results for a product as *youthful*. One can easily recognize how *silly* and *youthful* may be similar measures, though they target a slightly different aspect of a larger quality. The results for the measure of a product as *silly* showed *nearly* significant results ( $p=.061$ ) in the pairwise comparisons of the ratings between birth cohorts, suggesting a slight trend in response where the mid-age birth cohort had the highest ratings of a product as *silly*, followed by the youngest birth cohort, and lastly the oldest birth cohort. This suggests that the mid-age birth cohort has the strongest association with pop music as *silly*, which makes sense because those in the mid-age birth cohort were in their teens at the time when pop music was at its height in the 90's, leading to a stronger referential association to pop music and silliness than the other two cohorts.

Results showed that electronic music produced the most significant rating of a product as *masculine*, which differed from the hypothesis that classic rock would produce the highest rating for this measure. Instead, classic rock produced the second highest ratings of a product as *masculine*. This may be because the particular track used for the electronic background music is by the produced Deadmau5, who is famous for his smart and melodic, yet notably heavy and intense beats and bass. These very strong sounds may have embodied a more masculine energy than the classic rock song, which could be why the ratings were higher with electronic than not. The results for the measure of *masculinity* also showed nearly significant differences between the birth cohorts ( $p=.079$ ), where the youngest birth cohort gave the highest ratings of a product as *masculine* and the oldest birth cohort gave the lowest ratings of a product as *masculine*. However, there was a notable trend for the youngest birth cohort to give the strongest ratings and the oldest the least across nearly all of the measures. Of the perception-based questions, the measures with the most significant results were *classic* and *luxurious*. The measures for *smart* and *powerful* had the most insignificant results (See Appendix C).

The results for the reaction-based questions designed to measure referential meaning showed fewer significant effects. This included the measures of a participants rating of *interest* in purchasing the product, perceived *appeal* of the product, and expected *usefulness* of the product. The only measure with significant results in this category was the measure of *usefulness*, which showed a significant main effect of music genre on the rating of a product as *useful*. Pairwise comparisons showed a significant difference between the genres that produced the highest and lowest ratings of a product as *useful*, which were jazz and pop music. Somewhat surprisingly, pop music produced the

highest rating of a product as *useful* and jazz music the least. Since pop music produced the highest ratings of a product as *youthful* and *silly*, one might expect that participants would have less confidence in the usefulness of a product. However, the youthful qualities and bouncy, active sounds may have relayed a sense of energy that induced a stronger belief in the potential use of a product. While one might expect jazz or classic rock to instill more confidence and trust in a product than pop music as more stable and classic sounds, they may have instead caused participants to view the product as older or more dated. These results somewhat contrast the findings of Gorn (2008), who found that associating popular and well liked songs with a product produces a higher preference for the product the song is associated with. His results align with my hypothesis that the older birth cohort should show a general overall preference towards products paired with jazz or classic rock and the younger birth cohort should show a preference towards products paired with pop or electronic music. However, since participants were only exposed to each 30-second video clip once, they may not have developed a strong enough association between the songs they liked or disliked and the products they were paired with. A future study could potentially combine the two experimental methods and expose participants to the same 30-second commercial multiple times and then test for overall ratings of *appeal* or *interest*. This method would be an accurate representation of the way people view commercials in real life, where they are exposed to the same advert repeatedly during a show, on a particular channel, or at certain standard times.

In the same category of reaction-cased questions, the results for the measure of a product's *appeal* were completely insignificant. There were no significant main effects of music genre on ratings of a product's appeal and no significant difference between

ratings by birth cohort. There was one other significant main effect of music genre on the rating of a product's ability to *improve* an aspect of a person's life, but the subsequent analyses were all insignificant. There were no further significant main effects of music genre on product perception relating to intent to purchase the product, interest in the product, and expected enjoyment from using the product (See Appendix C). Again, there was a significant trend found for the younger birth cohort to give higher ratings across almost all measures than the older birth cohort. The results show that younger participants expressed more interest in purchasing the products, found the products more appealing, and were more easily influenced by background music than the older participants. Perhaps this suggests that older participants are more seasoned consumers than their younger counterparts, and that they look for more legitimate signs of quality, practicality and function when considering a product for purchase.

Only two of six measures (33.3%) for the reaction-based questions found significant main effects in comparison to the nine of twelve (75%) perception based questions with significant main effects. These results for the reaction-based questions (directed at gauging the influence on perception of the referential meanings from each genre) and the perception-based questions (directed at gauging the influence on perception of the embodied meanings from each genre) may be indicative of the problem with the experimental design. The concept behind the division of the questions is that the reaction-based questions (e.g. 'would you buy this product') should test the participant's initial positive or negative response to the genre based on their positive or negative referential associations, and that the perception-based questions (e.g. 'is this product masculine') should test changes in participant's judgments of the product based on the

embodied meaning transmitted by the genres. However, this design actually contradicts the definitions of embodied and referential discussed in the introduction, because embodied meanings should be consistent across not just birth cohorts—but countries and cultures. The previous literature and research regarding embodied meaning is specific to the music only, such that the sort of embodied meanings tested were primarily human emotions like *sad*, *happy*, and *angry* (Kwoun, 2009). However, since the present experiment aimed at understanding the reflected message of the song *onto* the product, the meanings tested could not be those same human emotions. This is because people do not tend to view inanimate objects as having human emotions, and it would be less natural to ask a participant to rate a product as *happy* rather than to rate a product as *cool*. Thus, it was decided that items such as *masculine*, *classic* and *youthful*, would be best used to gauge the embodied meaning of a song instead. Unfortunately, the definition of embodied in this experiment is then specific to embodied meanings that are recognized across all birth cohorts for participants who grew up in America's popular culture only—as referential associations may help us determine what we perceive as masculine or luxurious or youthful. In this case, anything that is at all culturally specific is actually referential, thereby blurring the line between the referential and embodied question division. This issue presents a large flaw with the experimental design, but it does not significantly effect or diminish the significant findings of this study. Rather, these results suggests a new way to frame these questions in future studies while still providing a great deal of significant data to work with and learn from. Given that both question sets addressed referential meaning yet produced very different results, it could suggest that there are two categories of referential meaning rather than just one when music meaning

is studied in a culturally specific sample rather than a cross-cultural sample, such as with a population of US residents. In future research, these questions might be better framed with a modified category for referential meaning that has become somewhat embodied by the population being studied. This method could provide a more accurate assessment of how certain sub-groups of people (e.g. California residents vs New York residents) react to or interpret music similarly or differently within one culturally specific population sample (e.g. Americans). According to the Cue Redundancy model by Balkwill and Thompson (1999), “listeners perceive emotional meanings of music using either universal auditory or culturally specific cues” (p. 219 Kwuon, 2009), which might suggest that the referential meanings being measured are perceptible by a combination of embodied elements such as the universal auditory cues, as well as referential elements such as the culturally specific cues. Although they are not typically considered emotional descriptors, there are certainly emotions and energies associated with the concepts of *power, luxury, and youth*.

Two over-arching trends were identified within the majority of the data sets. The first trend was for the youngest birth cohort to give the highest ratings for a product across most measures and for the oldest birth cohort to give the lowest ratings for a product across all measures. This trend is particularly notable in the first set of reaction based questions, where the youngest birth cohort was significantly more likely to express interest in purchasing a product for themselves or a friend as well as to find a product as more appealing overall than participants from the oldest birth cohort, who expressed the least interest in purchase and found the products the least appealing overall (See Tables 1 through 8). This is not something I found explicit evidence for in any of the previous

research or literature referenced, although there is research to support the decline of interest and acceptance of music for older listeners. Hargreaves (1982) offers that “younger children may be more ‘open-eared’ to forms of music regarded by adults as unconventional; their responses [to music] may show less evidence of acculturation to normative standards of ‘good taste’ than those of older subjects”(p. 51). This hypothesis provides a possible explanation as to why the younger birth cohort tends to perceive the products more favorably and be more strongly influenced by music than the older birth cohort. The second overall trend identified in the research was that there was never a significant interaction found between birth cohort and music genre in the test of within subject effects (See Appendix B). However, as it has been shown, significant results were found for both music genre and birth cohort independently of each other. Further research could attempt to better isolate or amplify the interaction for a greater understanding of this specific relationship, as the current data does not sufficiently exclude a possible interaction. My only suggestion for how to amplify this interaction would be through the classical conditioning method inspired by Gorn (1982) of repeated exposures to the commercials to strengthen the associations between the products and songs, as was mentioned earlier in this discussion.

Ultimately, this research attempts to better understand the complex relationship between people, music, and perception. The intention of this research is not only to identify how to best persuade potential buyers of a product, but it is also to understand how much control people really have over their own perceptions and views, as well as to further explore the highly persuasive role that music plays in the media and advertising. My findings suggest that people do not have complete control over their own perceptions,



and that something as simple as background music can actually influence the way a person perceives or interprets a product or event. Understanding the vulnerabilities of the human psyche can both help manipulate, and help *protect* people from manipulation by external persuasive factors. The significant results found in this study suggest that music is a powerful tool of persuasion that is able to transmit specific messages and features onto something like a product, despite that product being completely unrelated and distinct from the song being played. In an age where people are confronted by the media at every corner, critical knowledge of the persuasive tactics used can help people be sure that the decisions they are making are their own, and not a decision made by an advert without permission.

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**Appendix A**

## Dependent Measures

## Instructions:

On a scale of 1 to 10, please state how much you agree with each statement (1 being completely disagree and 10 being completely agree).

## Referential Statements:

- 1) I am interested in buying this product.
- 2) I would buy this product for someone I know.
- 3) This product would help improve an aspect of my life.
- 4) I would enjoy using this product.
- 5) I would use this product regularly.
- 6) In comparison to similar products, this product is more appealing than its competition.

## Embodied Statements:

- 1) This product is new and innovative.
- 2) This product has a cool factor.
- 3) This product is silly.
- 4) This product is classic.
- 5) This product looks cheap.
- 6) This product is masculine.
- 7) This product is luxurious.
- ~~7~~8) This product is feminine.
- ~~8~~9) This product is powerful.
- ~~9~~10) This product is sophisticated.
- ~~10~~11) This product is smart.
- ~~11~~12) This product is youthful.

**Appendix B**

## Statistical Summaries of Main Effects for Remaining Measures

1. Measure: *Cool*

Results found no main effect of music genre on ratings of a product as *cool*,  $F(3,273)=2.21$ ,  $p= 0.116$ . Results also show no main effect of birth cohort on ratings of a product as *cool*,  $F(2,91)=0.80$ ,  $p= 0.452$ . There is no significant interaction between music genre and birth cohort on ratings of a product as *cool*,  $F(6,273)=0.80$ ,  $p= 0.574$ .

Data continued in Table 1.

2. Measure: *Silly*

Results show a significant main effect of music genre on ratings of a product as *silly*,  $F(3,273)=4.28$ ,  $p= 0.006$ . Results show a nearly significant main effect of birth cohort on ratings of a product as *silly*,  $F(2,91)=2.89$ ,  $p= 0.061$ . There is no significant interaction between music genre and birth cohort on ratings of a product as *silly*,  $F(6,273)=0.69$ ,  $p= 0.656$ . Data continued in Table 2.

3. Measure: *Cheap*

Results show a significant main effect of music genre on ratings of a product as *cheap*,  $F(3,273)=2.94$ ,  $p= 0.034$ . Results show no main effect of birth cohort on ratings of a product as *cheap*,  $F(2,91)=0.12$ ,  $p= 0.883$ . There is no significant interaction between music genre and birth cohort on ratings of a product as *cheap*,  $F(6,273)=0.42$ ,  $p= 0.868$ .

Data continued in Table 3.

4. Measure: *Feminine*

There is no main effect of music genre on ratings of a product as *feminine*,  $F(3,273)=1.92$ ,  $p= 0.127$ . However, there is a significant main effect of birth cohort on

ratings of a product as *feminine*,  $F(2,91)=3.24$ ,  $p= 0.044$ . There is no significant interaction between music genre and birth cohort on ratings of a product as *feminine*,  $F(6,273)=1.25$ ,  $p= 0.282$ . Data continued in Table 4.

#### 5. Measure: *Powerful*

There is no main effect of music genre on ratings of a product as *powerful*,  $F(3,273)=2.56$ ,  $p= 0.055$ . There is also no main effect of birth cohort on ratings of a product as *powerful*,  $F(2,91)=0.69$ ,  $p= 0.503$ . Results show no significant interaction between music genre and birth cohort on ratings of a product as *powerful*,  $F(6,273)=0.41$ ,  $p= 0.873$ . Data continued in Table 5.

#### 6. Measure: *Sophisticated*

Results show a strong main effect of music genre on ratings of a product as *sophisticated*,  $F(3,273)=9.90$ ,  $p= 0.000$ . However, results show no main effect of birth cohort on ratings of a product as *sophisticated*,  $F(2,91)=0.51$ ,  $p= 0.605$ . There is no significant interaction between music genre and birth cohort on ratings of a product as *sophisticated*,  $F(6,273)=0.43$ ,  $p= 0.857$ . Data continued in Table 6.

#### 7. Measure: *Smart*

Results show no main effect of music genre on ratings of a product as *smart*,  $F(3,273)=0.90$ ,  $p= 0.441$ . Results also show no main effect of birth cohort on ratings of a product as *smart*,  $F(2,91)=0.49$ ,  $p= 0.617$ . There is no significant interaction between music genre and birth cohort on ratings of a product as *smart*,  $F(6,273)=0.25$ ,  $p= 0.959$ . Data continued in Table 7.

#### 8. Measure: *Improve*

There was a significant main effect of genre on rating of a product's ability to *improve* the participants life,  $F(3,273)=3.52, p= 0.016$ . There was no significant main effect of birth cohort on rating of a product's ability to *improve* the participants life,  $F(2,91)=0.55, p= 0.581$ . There was no significant interaction between music genre and birth cohort on rating of a product's ability to *improve* the participants life,  $F(6,273)=1.37, p= 0.225$ .

Data continued in Table 8.

#### 9. Measure: *Buy*

There was no significant main effect of genre on ratings of the participant's desire to *buy* the product,  $F(3,273)=0.23, p= 0.874$ . However, there was a significant main effect of birth cohort on ratings of a participant's desire to *buy* the product,  $F(2,91)=3.22, p= 0.045$ . There was no significant interaction between music genre and birth cohort on ratings of a participant's desire to *buy* the product,  $F(6,273)=0.23, p= 0.874$ . Data continued in Table 9.

#### 10. Measure: *Enjoy*

There is no main effect of genre on ratings of expected product *enjoyment*,  $F(3,273)=0.67, p= 0.569$ . There is no main effect of birth cohort on ratings of expected level of product *enjoyment*,  $F(2,91)=2.21, p= 0.116$ . There is no significant interaction between music genre and birth cohort on ratings of expected product *enjoyment*,  $F(6,273)=0.99, p= 0.431$ . Data continued in Table 10.



Table 1

*Mean Ratings of Perceived Product Coolness as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	6.17	2.82	5.46	2.92	5.03	2.86
Jazz	5.40	2.69	5.96	2.80	5.74	2.95
Electronic	6.60	2.40	6.18	2.82	5.55	2.92
Pop	6.77	2.85	6.32	2.57	6.39	2.70

Table 2

*Mean Ratings of Perceived Product Silliness as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	3.31	3.17	2.86	2.19	2.48	2.36
Jazz	2.40	1.75	3.54	2.82	2.23	1.98
Electronic	3.06	2.40	3.71	2.42	3.13	2.69
Pop	3.57	3.00	4.61	3.06	3.74	2.97

Table 3

*Mean Ratings of Perceived Product Cheapness as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	3.03	2.54	2.54	1.67	2.74	2.13
Jazz	2.60	1.80	3.14	2.56	2.90	2.39
Electronic	3.34	2.24	3.14	2.46	3.06	2.31
Pop	3.60	2.60	3.93	2.51	3.42	2.01

Table 4

*Mean Ratings of Perceived Product Femininity as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	4.54	2.38	3.89	2.33	3.00	1.77
Jazz	3.86	2.30	4.43	2.15	3.32	2.20
Electronic	3.83	2.11	3.50	2.10	3.13	1.98
Pop	3.97	2.35	4.61	2.10	4.00	2.10

Table 5

*Mean Ratings of a Product as Powerful as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	4.91	2.33	5.37	3.01	4.35	2.87
Jazz	4.54	2.54	4.86	2.29	4.58	2.84
Electronic	5.11	2.52	4.57	2.44	4.39	2.97
Pop	4.23	2.91	3.93	2.98	3.71	2.37

Table 6

*Mean Ratings of Perceived Product Sophistication as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	5.71	2.90	6.50	2.95	5.47	2.98
Jazz	6.09	2.83	6.11	2.70	5.45	3.04
Electronic	4.51	2.27	4.61	2.62	4.48	2.98
Pop	4.20	2.58	4.14	2.76	4.39	2.68

Table 7

*Mean Ratings of Product as Smart as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	5.60	2.58	5.75	3.17	5.29	2.70
Jazz	5.00	2.75	5.82	2.83	5.52	3.44
Electronic	5.89	2.27	6.11	2.92	5.48	2.83
Pop	5.09	2.68	5.43	3.08	5.16	2.83

Table 8

*Mean Ratings of Predicted Ability for Product to Improve Life as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	3.57	2.56	3.79	2.44	4.10	2.95
Jazz	3.71	2.60	3.75	2.44	4.10	2.98
Electronic	5.03	3.17	4.86	3.03	3.94	2.87
Pop	5.54	3.38	4.93	2.89	3.97	2.83

Table 9

*Mean Ratings of Desire to Buy Product as a Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	5.71	2.90	6.50	2.95	5.42	2.98
Jazz	6.09	2.83	6.11	2.70	5.45	3.04
Electronic	4.51	2.27	4.61	2.62	4.48	2.98
Pop	4.20	2.58	4.14	2.76	4.39	2.68

Table 10

*Mean Ratings of Predicted Enjoyment from Product Use as Function of Genre*

Genre	Young		Mid-Age		Old	
	Mean	SD	Mean	SD	Mean	SD
Classic Rock	5.60	2.58	5.75	3.17	5.79	2.70
Jazz	5.00	2.75	5.82	2.83	5.52	3.44
Electronic	5.89	2.27	6.11	2.92	5.48	2.83
Pop	5.09	2.68	5.43	3.08	5.16	2.83

### Acknowledgements

First and foremost, I would like to thank Professor Alan Hartley for his excellent ability to share his knowledge, for his continued support with my studies in psychology, and his complete faith in my work over these past years at Scripps College. His guidance was crucial for the development and success of my thesis research in its entirety, and his support was always appreciated. I would like to thank Zoe Ravich for being so gracious with her time and help; her knowledge of SurveyMonkey and SPSS were instrumental in

the experimental design of my survey and my ability to tackle the complex statistical analyses of my data. I would also like to thank Professor Stacey Wood for agreeing to come on as my second thesis reader even when she already had a full load, her support and guidance through the last leg of this process has been greatly appreciated. Thank you all for your help, I couldn't have done it without you!