CAN INDIVIDUAL MUSIC PREFERENCES BE INFLUENCED BY IMPOSED ARTIFICIAL MUSIC PERSONALITY INGROUPS?

by

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ABSTRACT

The purpose of this study was to investigate whether assigning nonmusic majors to artificial music personality ingroups influences their individual music preferences. Participants were recruited from undergraduate nonmusic majors enrolled in a music appreciation course at the University of Alabama (N = 4,737). Survey participants (n = 130) were randomly sorted into three treatment groups, Popular Music Personality Group (n = 29), Classical Music Personality Group (n = 22), and World Music Personality Group (n = 21), and two control groups, Personality-Control (n = 27) and Control (n = 31). Participants listened to 15 samples of popular, classical, and world music. They rated their individual preference for each sample, and predicted the other participants’ preferences for each sample. Responses were recorded using 7-point Likert-type scales. Results showed group assignment did not have a significant effect on participants’ individual preferences for popular, classical, or world music. There were significant differences in how the treatment groups predicted the preferences of the World Music Personality Group for popular music (p < .01) and world music (p < .01). These differences arose between the World Music Personality Group and the other two treatment groups, which may suggest that participants in the World Music Personality Group might not have been convinced that they belonged to their artificial ingroup, but also that participants may have been less sure of how to predict preferences concerning world music.
LIST OF ABBREVIATIONS AND SYMBOLS

ANOVA Analysis of Variance
BFI-10 Big Five Inventory-10
ITMP Interactive Theory of Music Preference
MPG Music Personality Group
SIT Social Identity Theory
$F$ Fisher’s $F$ ratio: A ratio of two variances
$M$ Mean
$N$ Number of participants
$n$ Number of sub-group participants
$p$ Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
$SD$ Standard Deviation
$<$ Less than
$=$ Equals to
$\eta_p^2$ Partial Eta Squared
### DEFINITIONS OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Ingroup</td>
<td>A group which a person believes they are a part of</td>
</tr>
<tr>
<td>Outgroup</td>
<td>A group which a person believes they are not a part of</td>
</tr>
<tr>
<td>Intergroup Discrimination</td>
<td>When people act on prejudices based on what they believe to be ingroups and outgroups</td>
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<tr>
<td>Social Identity Theory</td>
<td>Developed by Tajfel &amp; Turner (1986), “aims to specify and predict the circumstances under which individuals think of themselves as individuals or as group members” (Ellemers, 2017)</td>
</tr>
<tr>
<td>Interactive Theory of Music Preference</td>
<td>“Music preference decisions are based upon the interaction of input information and the characteristics of the listener, with input information consisting of the musical stimulus and the listener’s cultural environment” (Leblanc, 1982, p. 29)</td>
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<tr>
<td>Music Personality Group</td>
<td>Treatment group of present study deceptively based on participant response to the BFI-10 personality test</td>
</tr>
<tr>
<td>Classical Music</td>
<td>Western-art tradition orchestral pieces ranging ranging from the baroque period through the 20th century</td>
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<tr>
<td>Popular Music</td>
<td>Current mainstream Western tradition pieces in genres such as rock, pop, dance, and country</td>
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<tr>
<td>World Music</td>
<td>Non-Western folk or traditional pieces that represent various individual non-Western cultures</td>
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ACKNOWLEDGEMENTS

I would like to thank my committee members, family, the music appreciation course instructors, participants, and myself.
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CHAPTER 1

INTRODUCTION

When people are grouped, they tend to exhibit intergroup discrimination, specifically ingroup favoritism (Tajfel, 1970; Tajfel, Billig, Bundy, & Flament, 1971). Interestingly, there need not be any intragroup similarity between members; merely mentioning the word “group” is sufficient for producing intergroup discrimination (Billig & Tajfel, 1973). The phenomenon of intergroup discrimination is a foundational component of the Social Identity Theory (SIT; Tajfel & Turner, 1986).

Tarrant, North, and Hargreaves (2001) used SIT to predict how adolescent boys rated how much they liked certain musics, verses how they predict boys from a rival school would like the same music. The boys assumed their peers (their ingroup) liked positively stereotyped musics, such as rock or pop, more than the boys from their rival school (Tarrant et al., 2001). What was not explored was whether the boys’ ingroup favoritism had any effect on their individual music preferences: can intergroup discrimination actually influence individual music preferences?

There are many known variables that may influence a listener’s individual preferences for a piece of music, such as the ethnicity and sex of the listener and the music’s performer (Killian, 1990), or the style of the music itself (Brittin, 1991). When attempting to intentionally change a person’s music preferences, researchers have found that a listener’s preference for a piece music can be increased through repeated listenings and explicit teaching (Peery & Peery, 1986; Price, 1988). But, the preference changes do not seem to transfer beyond the explicitly taught piece,
even to pieces of the same musical style (e.g. Shehan, 1985; Morrison, Demorest, Campbell, Bartolome, & Roberts, 2013). At best, explicit teaching produces an increased awareness for the musical style (Price, 1988). This inability to teach for transferable and lasting music preference change could be related to the strong connections between music preference, personality, and identity; specifically, we know there are strong connections between music preference and personality (e.g., Rawlings & Ciancarelli, 1997; Schwartz & Fouts, 2003; Rentfrow & Gosling, 2003; Leung & Kier, 2008), and between music preferences and cultural identity (e.g., Ruth, 2014).

It is not surprising that teaching for music preference change is so difficult when the Interactive Theory of Music Preference (ITMP; Leblanc, 1982) is accounted for, which describes how preferential decisions are made for musical stimuli. In this model, educators are just one of many variables that may influence a listener’s music preference. In addition to the numerous factors involved with developing a musical preference, there are also potential intervening variables, such as listener attention or mood, that can essentially block a genuine preferential decision from being made about a piece of music (Leblanc, 1982). Overall, the process involved in developing musical preferences is much more complex than just teaching a listener to like a piece of music.

Although ITMP applies to how preferential decisions are made for individual musical stimuli, the theory also applies to every musical stimuli, so general trends in music preferences can be still be identified when preference decisions are made for multiple musical stimuli. For example, it was found in one study that fifth graders generally preferred rock, pop, and country music more than Western art-music (Leblanc, 1981). In that study, the preference differences were discussed both in terms of the individual songs, and the general styles being represented: it
was assumed that a general preference for a music style can be identified when the method
directly compares samples of different music styles.

IMPT describes the complexity of developing musical preference, but can also be used to
find general preference trends. SIT describes a relatively simple way to predict ingroup
favoritism, even within musical dimensions. Putting the two theories together, it may be possible
to further explore music preferences within the context of SIT: if intergroup discrimination has
an immediate effect on individual music preference, we may have a way to simplify the complex
process of music preference development.

**Purpose of Study**

The purpose of the present study was to examine the extent to which intergroup
discrimination affects individual music preferences. To investigate this relationship, two specific
research questions were formed:

**Research Questions**

1. Does randomly assigning participants to artificial ingroups, labeled as Popular, Classical, and
   World Music Personality Groups, affect their individual preferences for popular, classical, and
   world music?

2. Does randomly assigning participants to these artificial ingroups affect how they predict
   others’ preferences for popular, classical, and world music?
CHAPTER 2

REVIEW OF LITERATURE

In preparation for this study, the principal investigator reviewed studies on the following topics: intergroup discrimination, factors influencing music preference, how music preference is taught, characteristics of and influences on identity, music participation, multiculturalism and social justice in education, and sociology in music education. The summaries of these studies are grouped by content, with research that is most pertinent to the present study presented last.

Sociology in Music Education

In their review of research in music relating to social psychology, North, Hargreaves, and Tarrant (2002) argue that music should be studied as a social phenomenon. The various topics that could be investigated in music can be categorized using Doise's (1986) distinction between four levels of social behavior: intraindividual, interindividual, sociopositional, and ideological. The present study is on the sociopositional level. Sociopositional level studies tend to examine how external social factors impact music development, and vice versa, putting emphasis on individual and group identity. Examples of sociopositional research in music, provided by North et al. (2002), could be studies on musical prestige, conformity, influence of ingroups and outgroups, music and self esteem, or social associations and music.

Multiculturalism and Social Justice

The home environment of Asian American students was found to have the greatest impact on their academic success, compared with other ethnicities, where Asian American students were more likely than any other group to: live in a two-parent family, spend more time
doing homework, and attend more lessons outside of the regular school (Peng & Wright, 1994). In the United States, there is a stereotype that Asian Americans are monolithically the model-minority: however, a study showed that the Asian American student of one high school differentiated between Koreans, Asians, New wave Asians, or Asian Americans, with each group perpetuating or refuting the model-minority stereotype to varying degrees (Lee, 1994).

Some countries intentionally include more than one type of music study in their schools. In its effort to blend the old and the new, and maintain Thailand’s musical identity, Thailand may be a case-example of a nation consciously choosing to provide a multicultural music education to its citizens: primary school music focuses mostly on teaching vocal folk-songs, secondary school music focuses on Thai composers and music theory, and high school music provides electives of “Thai and Western music appreciation classes, choirs, marching and symphonic bands, folk and classical dance classes and instrumental lessons” (Campbell, 1995, p. 25).

Preservice teachers’ experiences in transformative multicultural classes may transfer to their clinical practices. Using a case study that interviewed three White teacher education students—who had previously been part of a transformative multicultural class—after their practicum experience, researchers found that the student teacher who displayed the highest racial developmental status reported the most incorporation of multicultural education during their practicum (Lawrence, 1997). In a similar study, hands-on multicultural experiences and explicit training in multicultural music lesson planning and classroom implementation was found to improve preservice elementary music teachers’ willingness to teach multicultural music activities, but not necessarily their preparedness to teach multicultural music activities, nor their willingness to teach in a culturally diverse setting (Teicher, 1997).
Music teachers’ desire to know their students’ instrument preferences, the instrumentation needed for their ensemble, and the mouthpiece-fitness of individual students, appears to outweigh racial or sex biases when assigning instruments to students in an ensemble (Johnson & Stewart, 2005). When music teachers assigned band instruments to diverse students based only on photos of the students’ faces or mouths, there was no significant relationship between sex identification and instrument assignment, race identification and instrument assignment, or between how instruments were assigned between the full-face participants and the mouth-only participants.

Multicultural education can increase the racial awareness that can lead to positive racial identity change: data obtained from the written material of White graduate students in the class “The Psychology of Culture and Identity: Power, Privilege, and Oppression” was outlined according to Helms’ White Racial Identity Development (1994) model—which follows the trajectory of contact status, disintegration, reintegration, pseudo-independence, immersion/emersion, and autonomy—and showed that while only 30% of participants showed signs of autonomy, overall participants achieved more racially inclusive identities, and developed an increased awareness for the influence of power, privilege, and oppression in people’s lives (Dass-Brailsford, 2007). Similarly, individual courses have the potential to influence students’ thinking on race: one study found that students who took a race-related course exhibited raised levels of understanding about race –using Helms’ White Racial Identity Attitude Scale (1990) as a pretest and posttest– while participants who did not partake in the race-related course showed no trends of increased racial understanding (Puchner, Szabo, & Roseboro, 2011).
Students from marginalized populations experience the process of becoming a music education majors differently than non-marginalized populations. An examination of factors that may influence marginalized undergraduate music education students—such as Latino, Black, or LGBT students—access to their degree program, and their continued retention in the program, revealed that their personal qualities, prior experiences, accessibility of resources, and external support, were all influential factors (Fitzpatrick, Henninger, & Taylor, 2014). Marginalized undergraduate music education students recommended better communication, mentorship, and the overall better support and resources, to improve the process of preparation, admission, and retention of marginalized students (Fitzpatrick et al., 2014).

Differences in culture does not necessarily change how emotions are perceived in music (Argstatter, 2016). A study comparing how participants from Asia and Europe perceived basic emotions in instrumental music found that musically-encoded basic emotions were significantly classified as the intended emotion regardless of culture, and that musical training seemed to predict how successfully a participant could identify an emotion in an excerpt.

A series of online and paper surveys, and interviews with public school personnel, regarding perspectives of school personnel on racial school climate and social-emotional responsiveness, found that adults in a diverse elementary school were usually responsive to the social and emotional needs of students, focused around 50% of their discipline practices on punishment versus behavior teaching, and possessed a common perspective of color-blindness regarding race and culture (Blitz, Yull, & Clauhs, 2016). Color-blindness can sometimes be seen in music classrooms. Simply possessing a general idea about the ethnic diversity of a classroom is not adequate for teaching lessons that actually connect with students of different ethnicities (Kelly-McHale, 2013). In a general music classroom heavily designed around Kodaly
methodology, Latino students with immigrant parents did not view their in-class music
experiences as transferable to out-of-class experiences, and described situations in which the
music teacher tried to incorporate Spanish-language songs as feeling strange or wrong (Kelly-
McHale, 2013). A different survey concerned with issues relating to social justice in music
education found that music teacher educators generally maintain a colorblind approach to social
justice, where students’ race, ethnicity, and socioeconomic status should be ignored altogether in
music classrooms (Salvador & Kelly-McHale, 2017).

Eros (2016) recommends music teacher preparation programs should consider the
linguistic abilities of their student teachers when assigning clinical placements. Data obtained
through questionnaires, observation notes, interviews, and journal responses revealed that
linguistically diverse student teachers reported having a strong connection with English-learner
students in their classroom, and a motivation to modify lessons to better serve these students,
although some student teachers reported frustrations with their language barrier, with instances
of freudian-like language slips in class, followed by laughs from the students.

Critical and intentional diversity courses can increase students’ diversity knowledge and
transform them into social justice, equity, and social change advocates (Dyce & Owusu-Ansah,
2016). Elementary education students, who had enrolled in a semester-long course within the
field of diversity studies, were found to be teaching with cultural relevance in mind during their
student-teaching placement (Dyce & Owusu-Ansah, 2016). Students reap academic and social
benefits when teachers apply evidence-based, culturally responsive instructional practices, such
as the following: an implicit, not explicit, focus on culture; ample opportunities for behavior-
specific praise; use of precorrection strategies to address behavior; and opportunities for students
to respond to new information (Green & Stormont, 2017).
Gutentag, Horenczyk, and Tatar (2017) used the Diversity in Organizations: Perceptions and Approaches model to organize discussion of diversity perceptions and approaches into four categories -assets, problems, challenges, and non issues- a questionnaire administered to schoolteachers measuring diversity-related burnout and self-efficacy, and teachers’ attitudes towards multiculturalism, revealed two major findings. The first finding was that pluralistic multicultural attitudes were related to high immigration-related self-efficacy. The second finding was that perceptions of immigrant students as assets instead of problems were related to lower diversity-related burnout and to high immigration-related self-efficacy.

**Music Participation: Attitudes, Frequency, and Effects**

Students have been found to generally have positive attitudes toward music, and many students participate in some sort of music making outside of school; although out-of-school music participation decreases with age, it does less so than in-school music participation (Lamont, Hargreaves, Marshall, & Tarrant, 2003). While motivations to participate in high school music classes vary from parental, musical, academic, psychological, and social reasons, students who do participate in ensembles all generally tend to exhibit pride for their organization (Adderley, Kennedy, & Berz, 2003). However, of those who participate in high school ensembles, there is overrepresentation of white students and underrepresentation of black students, as well as a positive correlation between socioeconomic status and ensemble participation (Elpus & Abril, 2011).

For college students, the frequency of, and reasons for student music participation changes: for example, in one study it was found that 75-80% of nonmusic majors with high school music experience do not continue music participation in college, with time being the most cited reason for non participation (Mantie & Dorfman, 2014). Nonmusic majors who do
participate in music in college have previously reported positive social, musical, and personal impacts of their music involvement (Kokotsaki & Hallam, 2011). Primarily, nonmusic majors valued the social benefits of music participation, in contrast with music majors who valued heightened musical achievement (Kokotsaki & Hallam, 2011). Concerning other types of music participation, among first-year university students, socioeconomic status was found to be most related to their creative activity such as making videos, writing compositions, photography, art, and music, even through digital media and the internet (Hargittai & Walejko, 2008). For music listening, there are prejudices held by young people about classical music. A study in the United Kingdom showed that young adults perceive classical music as being for old people, believe that classical music listeners view popular music listeners as unrefined, have difficulty emotionally connecting with classical music, rarely make transfers from classical music to in-school music experiences, and generally maintain a resistance to classical music (Dearn & Pitts, 2017).

Allowing students to work with friends results in musical and behavior benefits (Macdonald & Miell, 2000). Compositions by friend pairs in elementary school were rated significantly higher in quality than non-friend pairs, and friend pairs tended to speak and play more music in the creation process than the non-friend pairs. Using music-making as a social process also appears to help those with special needs; adults with special needs who participated in a Gamelan workshop significantly improved their musical and communication skills compared to those who did not partake in the workshop.

**Identity: Characteristics and Influences**

A study in the Netherlands found that the internet provides adolescents an important medium for identity exploration, where adolescents can use internet-based identity experimentation to explore of how others react, and explore social compensation and facilitation
(Valkenburg, Schouten, & Peter, 2005). In a follow-up study, a questionnaire for Dutch adolescents who partake in online identity experiments revealed that there is a relationship between the wide variety of people adolescents communicate with online and their higher levels of social competence offline, and that lonely adolescents appear to benefit from online identity experimentation (Valkenburg & Peter, 2008).

Adolescent seem to identify more with the non musical characteristics of their musical role models (Ivaldi & O’Neill, 2008). In England, a study showed that adolescents are likely to choose famous singers as their musical role models, generally because the model is perceived to be dedicated to their work, perceived to be popular/attractive/trendy, or perceived to possess high ability, the latter relating to a perceived overcoming of personal or physical difficulties by the model.

Using a questionnaire, researchers found that important others, the love of music, and the love of teaching were the top three most cited influences on undergraduate music education majors’ decisions to pursue music education; these undergraduates also recommended that current music teachers provide more teaching opportunities for their students, demonstrate job satisfaction, and focus on developing their students’ musical skills, in order to help the profession recruit future music educators (Thornton & Bergee, 2008). Other researchers have further investigated specific factors influencing music education majors occupational identity. A questionnaire concerning the socialization and occupational identity of preservice music teachers found that experiences associated with primary and secondary socialization were significant predictors of occupational identity: primary socialization included parents, pre-college music teachers, private teachers, positive performances, and teaching-related experiences pre-college; secondary socialization included parents, music education faculty, ensemble directors, positive
college performances, and teaching-related experiences (Isbell, 2008). A different survey that investigated the development of music education students’ musical and teacher identities over the course of a year found four main dispositions towards teaching: hopeful, confident, doubtful, or fearful; the students’ musical identities appeared to develop earlier than their teacher identities, suggesting that music teacher identity may be “contextualised within a broader musical identity” (Freer & Bennett, 2012, p. 281).

**Music Preference: Teaching for Preference Change**

Explicitly teaching structural discrimination in classical music examples did not significantly increase university students’ ability to do so, nor their preference for classical music (Bartlett, 1973). Elementary students’ preference for a music can be influenced by the approval level of the music by adults, where high adult approval for a music relates to higher preferences for that music by students (Greer, Dorow, Wachhaus, & White 1973). Lessons in unfamiliar music may increase musical tolerance rather than musical preference (Shehan, 1985). In a pre-post-test of music preference for non-Western music examples, with a 5-week treatment of explicitly teaching some of the music, sixth-grade participants showed a substantial increase in preference for taught non-Western music, but not for untaught non-Western music (Shehan, 1985). Explicitly teaching a music may do more to maintain music preferences than to change them: preschoolers—a group that generally possesses eclectic listening preferences—who were treated with months of weekly classical music lessons maintained their preference for classical music, while preschoolers who did not receive the lessons showed a decline in preference for classical music (Peery & Peery, 1986).

Music appreciation courses appear to produce an increased familiarity with and awareness for, but not an increased preference for, the formal music tradition (Price, 1988).
Upon completion of a college music appreciation course, students were significantly more likely to name taught composers when listing their ten favorite composers. This finding had no significant relationship with students’ musical training, cognitive gains, nor their recording purchasing habits (Price, 1988). Other studies have also examined the effect of music appreciation instruction. In a pre- post-test of undergraduate elementary education majors’ preference for symphonic music, it was discovered that while both undergraduates treated with music appreciation lectures and undergraduates treated with teaching presentations showed an increased post-test preference for symphonic music, there was no significant change in time spent listening to symphonic music, and no change in the undergraduates’ particular preference for faster tempi symphonic music (Flowers, 1988).

 Attempted musical enculturation of students into an unfamiliar culture does not necessarily produce more success in remembering unfamiliar music of that culture (Morrison, Demorest, Campbell, Bartolome, & Roberts, 2013). A pre- post-test of identifying learned Turkish music, with a treatment for some participants of immersional lessons in Turkish music, showed that all students, regardless of their group, were significantly more successful on their music memory posttest than their pretest, and significantly less successful remembering items from the unfamiliar culture (Morrison et al., 2013). The lack of improvement for remembering unfamiliar items could imply that even extended instructional approaches may not modify the music enculturation established early on is students’ lives (Morrison et al., 2013).

**Music Preference: Influential Factors**

According to Leblanc, “*Music preference decisions are based upon the interaction of input information and the characteristics of the listener*” (Leblanc, 1982, p. 29). Music input variables (e.g., musical complexity, performance quality, extramusical meanings) and cultural
environment input variables (e.g., educators, family, peer groups) will initially influence how a preference decision will be made even before the music is processed by a listener (Leblanc, 1982). Assuming intervening variables (e.g., listener mood, hearing impairments, basic attention) do not inhibit the processing of the musical stimulus, listeners’ personal attributes, such as their personality, musical training, or ethnic group, will affect their preference decision (Leblanc, 1982).

The process of developing a music preference as described by Leblanc, known as the Interactive Theory of Music of Music Preference (ITMP; Leblanc, 1982), has been used to inform investigation of specific factors influencing music preference. For example, in a study examining the effects of music style, tempo, and performing medium on fifth graders’ music preferences, it was found that rock, pop, and country music were preferred over Western art-music, fast tempos over slow tempos, and instrumental music over vocal music (Leblanc, 1981).

Listeners’ preferences for a music can be influenced by the characteristics of the model performing the music, namely their ethnicity and gender (Killian, 1990). Black, White, and Hispanic/Latino middle school music students watched a video containing several popular Black and White singer performing a song, rated how they liked each performer, and which performer’s solo they would like to sing for themselves: results showed same-race performer preferences among White and Black students and strong same-sex preferences for the solos participants wanted to sing (Killian, 1990).

Music preferences may be less influenced by the semantic label of the music, and more by the style of music itself (Brittin, 1991). Compared with participants who only provided their preferences for music examples, participants who additionally labeled and categorized the music examples did not display significant differences in preference for the music (Brittin, 1991).
People’s ethnic identity and age appear to influence their music preferences (McCary, 1993). When participants were asked to identify the ethnicity of the performer and provide their preference for unfamiliar music examples, Black participants of all ages—more so for older participants—preferred examples in which performers were identified as black, while White participants showed no significant preferences (McCary, 1993). If music educators intend to shape the musical preferences of their students, they must take into account the backgrounds of their students when introducing unfamiliar music (McCary, 1993).

There is a relationship between multicultural attitudes and preferences for different types of world music (Fung, 1994). Results from a questionnaire assessing participants’ world music preferences and multicultural attitudes showed a significant positive correlation between multicultural attitudes and world music preference (Fung, 1994). However, the world music preference means fell below the neutral point across all styles, suggesting participants did not really like any of the music presented (Fung, 1994). A different study of culturally diverse students’ music preferences found a positive correlation between how strongly students identified with a culture and their high preference responses for music within that culture; the performer, style of music, and listener familiarity, were thought to have tempered the role language played in the students’ musical preferences (Brittin, 2014).

The personality dimensions of extraversion and openness are systematically related to patterns of music preference (Rawlings & Ciancarelli, 1997). A questionnaire which included a music preference scale and the NEO Personality Inventory showed that extraversion predicted higher preference scores for popular music, and openness predicted a preference for a wide variety of music (Rawlings & Ciancarelli, 1997). Similarly, Rentfrow & Gosling (2003) identified four dimension of music preference in university students that uniquely relate to
various personality dimensions: Reflective and Complex, Intense and Rebellious, Upbeat and Conventional, and Energetic and Rhythmic (Rentfrow & Gosling, 2003).

Music preference may be a way to help assess the internal reality of adolescents, and particularly strong music preferences may be a sign of an adolescent experiencing “personality adjustment and/or developmental issues” (Schwartz & Fouts, 2003, p. 212). A questionnaire that assessed music preferences and included the Millon Adolescent Personality Inventory found that heavy music predicted anti-conformity and instability, and light music predicted conformity and emotional restraint (Schwartz & Fouts, 2003). There are also relationships between listeners’ preferred genres of music and their levels of engagement in civic activism (Leung & Kier, 2008).

**Intergroup Discrimination**

People display ingroup favoritism and outgroup discrimination when categorized into groups (Tajfel, 1970; Tajfel et al., 1971). Billig and Tajfel (1973) sought to isolate the variable of social categorization from intragroup similarity when examining intergroup discrimination. Participants allotted real money to other participants after examining paintings by two different artists. The subjects were then placed into one of four condition groups: the *Categorization: Similarity* group was told they were being grouped based on which artist they liked; the *Categorization: Non-similarity* group was told they were being grouped, but the paintings had no part in making the decision; the *Non-categorization: Similarity* group was told they are not being grouped, but a participant’s coded number was assigned based on which artist they liked out of convenience to the researchers; the *Non-categorization: Non-similarity* group was only told that they would be given a random coded number. All condition groups were in fact random. Results showed that all four conditions produced varying degrees of favoritism in allotting more funds to ingroup members than outgroup. Without the *Categorization* condition
however, no other groups could produce significant results on their own. Billig and Tajfel (1973) suggest that the mere mention of the word “group” may be sufficient for producing intergroup discrimination; this phenomenon was later described as the Social Identity Theory (SIT; Tajfel, 1978; Tajfel & Turner, 1979).

Tarrant, North, and Hargreaves (2001) used SIT to predict the intergroup behavior of adolescent boys in a musical context, while also examining the extent to which self-esteem may affect intergroup discrimination. Using a survey of Likert-type scale, participants rated the following items: how well they liked the boys of their own school compared to boys of other schools; how well different positive and adjectives matched the boys of their school as opposed to boys of other schools; how much the boys of their school liked certain positively and negatively stereotyped music; how much they thought boys of other schools liked positively and negatively stereotyped music. Results showed significant ingroup favoritism in all categories, where subjects liked their peers more, associated their peers with positive adjectives, and assumed their peers liked positively stereotyped music more than boys from other schools. Results from a pretest-posttest of self esteem revealed that boys with lower self esteem showed greater differentiation between groups, and greater derogation of the outgroup. Tarrant et al. (2001) conclude that SIT may predict behavior when groups make comparisons along valued dimensions, and that music appears to be a valued dimension for male adolescents.

**Conclusion**

The present study investigates the effect of imposing artificial ingroups on participants individual music preferences. The literature reviewed for this study describes many factors and circumstances that may affect people’s music preferences, and identities. It also provides context for the present study: first SIT was developed (Billig & Tajfel, 1973), then it was applied to a
music context (Tarrant et al., 2001), and now it is being investigated as a potential influence on individual music preference. The reviewed literature on music preference and identity helped in making methodological decisions, such using multiple music samples to directly compare different music styles and find a general preference difference (Leblanc, 1981). The non-music literature helped frame discussion related to extramusical factors and considerations.
CHAPTER 3

METHOD

A proposal for the present study was submitted to and approved by the Institutional Review Board (Appendix A). This study was designed to examine the following research questions.

1. Does randomly assigning participants to artificial ingroups, labeled as Popular, Classical, and World Music Personality Groups, affect their individual preferences for popular, classical, and world music?

2. Does randomly assigning participants to these artificial ingroups affect how they predict others’ preferences for popular, classical, and world music?

The approach used to examine the effect of group assignment on nonmusic majors’ individual and predicted music preferences was of experimental design. The experiment used five independent samples with pre- and post-testing with three different treatments: the pretest was a personality assessment, the treatments were group assignments, and the posttest was a music preference survey. The experimental design is illustrated in Figure 1.

Participants were recruited from undergraduate nonmusic majors enrolled in a music appreciation course at the University of Alabama (N = 4,737). The course covers the basic elements of music, and focuses on examining composers, forms, musical characteristics, and contexts of baroque, classical, romantic, and 20th century music. Participant recruitment occurred at the end of the fall semester, and the beginning of the spring semester the following year, some participant had recently completed the music appreciation course while others had
just started. The instructors of the course were contacted prior to participant recruitment, and agreed to allot in-class time for the principal investigator to describe the study and distribute flyers providing the study’s information (Appendix B). This flyer was also e-mailed to the students by the course instructors.

The Music Preference Survey (Appendix C), referring to the entire online survey used for the present study, was constructed using the online survey provider Qualtrics. The full design of the Music Preference Survey is illustrated in Figure 2. Accessing the survey automatically assigned participants to one of five conditions (Figure 2, level 1), with no notification to the participants: three Music Personality Groups (MPG), Popular MPG, Classical MPG, and World MPG, and two control groups, Personality-Control and Control.

The first page of the online survey was the informed consent form (Figure 2, level 2). After obtaining consent, all participants were asked two pre-survey questions about their year in school and gender. After the descriptive data questions, all groups except the Personality-Control completed the Big Five Inventory-10 (BFI-10; Rammstedt & John, 2007) personality test. The exclusion of the Personality-Control from the BFI-10 was to control for the possible influence of taking the personality test on participant music preferences. The BFI-10 contained 10 personality statements that participants could agree or disagree with using a Likert-type scale (Figure 3). The BFI-10 was used as a deceptive device for participants’ group assignments; the test played no part in participants’ actual group assignment, and the personality results were not used for any analysis (Figure 2, level 4).
**Figure 1.** Experimental design of study.

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Experimental Design of Study
O₁ X₁ O₂
O₁ X₂ O₂
O₁ X₃ O₂
O₁ O₂
```

**Figure 2.** Full design of the Music Preference Survey

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21
Instruction: How well do the following statements describe your personality?

<table>
<thead>
<tr>
<th>I see myself as someone who ...</th>
<th>Disagree strongly</th>
<th>Disagree a little</th>
<th>Neither agree nor disagree</th>
<th>Agree a little</th>
<th>Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>… is reserved</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… is generally trusting</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… tends to be lazy</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… is relaxed, handles stress well</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… has few artistic interests</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… in outgoing, sociable</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… tends to find fault with others</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… does a thorough job</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… gets nervous easily</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… has an active imagination</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
</tbody>
</table>

**Figure 3.** Big Five Inventory-10 (BFI-10). Adapted from “Measuring in on minute or less: A 10-item short version of the Big Five Inventory in English and German,” by B. Raamstedt, and O. P., John, 2007, *Journal of Research in Personality, 41*, p. 203-212.

**Figure 4.** Group assignment for the Classical MPG. This figure shows one of the three group assignment notifications displayed to participants during the Music Preference Survey.
Following the BFI-10, the three treatment groups (Popular MPG, Classical MPG, and World MPG) were notified of their group assignments, supposedly based on the results of their personality test, see Figure 4. The notification also revealed which MPG participants were not assigned to, ensuring all participants in the treatment groups were aware of the three MPGs (Figure 2, level 5). The Control received no notification of group assignment.

Next, all five conditions were administered the listening portion of the Music Preference Survey, which began with a drone to allow participants to adjust their devices’ playback volume (Figure 2, level 6). The listening portion contained fifteen music samples: five of popular, five of classical, and five of world music, each with a duration of 20 seconds (Table 1). Participants were not provided any information about the samples. All music samples used only instrumental music; if the source of the music sample contained words, a version was located in which the words had been removed. Popular samples were located from the Billboard website and represented various types of popular music (country, dance, rock, pop). Classical samples focused on orchestral performances of music ranging from the baroque period through the 20th century. World music sample selection was guided by Roots & Branches: A Legacy of Multicultural Music for Children (Campbell, McCullough-Brabson, & Tucker, 1994), and the Smithsonian Folkways World Music Collection website; samples were selected with an attempt to have musical representation from every continent.

The music samples were set to automatically play, and a visible countdown timer prohibited participants from advancing in the survey until 20 seconds had elapsed. This procedure was implemented to help ensure that participants actually listened to each music sample before they answered the preferential questions about the samples.
Table 1

*Music Samples in Preference Survey*

<table>
<thead>
<tr>
<th>Music Source</th>
<th>Composer</th>
<th>Style</th>
<th>Section Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danse Macabre</td>
<td>Camille Saint-Saens</td>
<td>Classical</td>
<td>01:27 - 01:47</td>
</tr>
<tr>
<td>Jupiter, The Planets</td>
<td>Gustav Holst</td>
<td>Classical</td>
<td>00:10 - 00:30</td>
</tr>
<tr>
<td>Finale, 5th Symphony</td>
<td>Dmitri Shostakovich</td>
<td>Classical</td>
<td>00:17 - 00:37</td>
</tr>
<tr>
<td>Toccata &amp; Fugue, D Minor</td>
<td>J.S. Bach</td>
<td>Classical</td>
<td>04:24 - 04:44</td>
</tr>
<tr>
<td>Queen of Sheba, War Dance</td>
<td>Ottorino Respighi</td>
<td>Classical</td>
<td>01:11 - 01:31</td>
</tr>
<tr>
<td>Don’t Let Me Down</td>
<td>The Chainsmokers</td>
<td>Popular</td>
<td>00:48 - 01:08</td>
</tr>
<tr>
<td>Feel Good Inc.</td>
<td>The Gorillaz</td>
<td>Popular</td>
<td>00:06 - 00:26</td>
</tr>
<tr>
<td>Heartache on the Dancefloor</td>
<td>Jon Pardi</td>
<td>Popular</td>
<td>00:46 - 01:06</td>
</tr>
<tr>
<td>Moves Like Jagger</td>
<td>Maroon 5</td>
<td>Popular</td>
<td>00:39 - 00:59</td>
</tr>
<tr>
<td>Toi Toi Toi</td>
<td>Dimitri Dourakine</td>
<td>Popular</td>
<td>00:04 - 00:24</td>
</tr>
<tr>
<td>Las Alazanas</td>
<td>Bruno Mars</td>
<td>World</td>
<td>00:08 - 00:28</td>
</tr>
<tr>
<td>Treasure</td>
<td>Tex Mex Y Mex</td>
<td>World</td>
<td>01:05 - 01:25</td>
</tr>
<tr>
<td>Raqset al-Hajjalah</td>
<td>Hossam Ramzy</td>
<td>World</td>
<td>00:32 - 00:52</td>
</tr>
<tr>
<td>Thunder Lights</td>
<td>Shinichi Kinoshita &amp;</td>
<td>World</td>
<td>00:26 - 00:46</td>
</tr>
<tr>
<td></td>
<td>Hiroshi Motofuji</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thai Ponglang Dance</td>
<td>Unknown</td>
<td>World</td>
<td>05:19 - 05:39</td>
</tr>
</tbody>
</table>

*Note.* All samples used instrumental versions of the music source.

Depending on their group, participants were asked up to four questions per sample to assess their preferences for that sample. The *MPGs* were asked all four questions, while the *Control* and *Personality-Control* were only asked the first question. The first question assessed participant individual preference:

1. How do you PERSONALLY feel about this music sample?

The next three questions asked participants to predict the preference of each *MPG* (questions 2-4 are worded for the *Popular MPG* below, however the wording was automatically adjusted for each treatment group during the survey):
2. How do you think YOUR GROUP (Popular Music Group) feels about this music sample?

3. How do you think people in the Classical Music Group feel about this music sample?

4. How do you think people in the World Music Group feel about this music sample?

The questions’ responses were recorded using a 7-point Likert-type scale labeled with the following statements: (1) I REALLY DISLIKE this music; (2) I dislike this music; (3) I dislike this music a little; (4) I am indifferent about this music; (5) I like this music a little; (6) I like this music; (7) I REALLY LIKE this music. For fluency, the labels were reworded for each question: for question 1 the labels used “I dislike...”; for question 2 the labels used “We dislike...”; for questions 3 and 4 the labels used “They dislike...”.

For compensation, after the listening portion of the Music Preference Survey participants had the option to answer a concert etiquette question for entry into a gift-card drawing. The full design of the Music Preference Survey is shown in Figure 4.
CHAPTER 4

RESULTS

Participants

Participants were undergraduate non-music majors enrolled in a music appreciation course at the University of Alabama ($N = 4,737$). A total of 240 responses were received. Only responses that answered every question of the online survey were used for analysis ($n = 130$). Respondents were men ($n = 56$) and women ($n = 74$) of freshman ($n = 95$), sophomore ($n = 22$), junior ($n = 10$), and senior status ($n = 3$). Participants were randomly sorted into one of five conditions: Personality-Control ($n = 27$), Control ($n = 31$), Popular MPG ($n = 29$), Classical MPG ($n = 22$), and World MPG ($n = 21$). Table 2 provides a description of participants.

Descriptive Statistics

Participants listened to fifteen music samples; five of popular, classical, and world music. For each sample, participants were asked about their individual preference for that sample. Each group’s mean individual preference was calculated for each music sample; those means were averaged to find each group’s mean individual preference for each music style, see Table 3.

Participants in the three test groups (Popular MPG, Classical MPG, World MPG) were asked to predict the music preferences of all three test groups (example: how do you think groups A, B, and C felt about musics a, b, and c?). Each group’s mean preference predictions were calculated for each music sample; those means were averaged to find each group’s mean preference predictions for each music style, see Table 4.
### Table 2

**Description of Participants**

<table>
<thead>
<tr>
<th>Group</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality-Control</td>
<td>21</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td>Men</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Women</td>
<td>12</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Control</td>
<td>20</td>
<td>7</td>
<td>4</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td>Men</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Women</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Popular MPG</td>
<td>25</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Men</td>
<td>10</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Women</td>
<td>15</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>Classical MPG</td>
<td>16</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Men</td>
<td>6</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Women</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>World MPG</td>
<td>13</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Men</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Women</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>22</td>
<td>10</td>
<td>3</td>
<td>130</td>
</tr>
<tr>
<td>Men</td>
<td>39</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>56</td>
</tr>
<tr>
<td>Women</td>
<td>56</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>74</td>
</tr>
</tbody>
</table>

*Note.* Group assignments of participants.

### Controlling for the Personality Test

Three one-way ANOVAs were conducted to compare the effect of the BFI-10 personality test on the individual preferences of the *Control* and *Personality-Control* groups for popular, classical, and world music. Results indicated non-significant differences in the individual preferences of the *Control* and *Personality-Control* groups for popular music, $F(1, 56) = .039, p = .85, \eta_p^2 = .001$, classical music $F(1, 56) = 0.017, p = .90, \eta_p^2 < .001$, and world music, $F(1, 56) = .33, p = .57, \eta_p^2 = .006$. 
Table 3

Mean Individual Preferences of All Groups for Each Music Style

<table>
<thead>
<tr>
<th>Group</th>
<th>Music Style</th>
<th>M</th>
<th>SD</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality-Control</td>
<td>Popular</td>
<td>5.26</td>
<td>0.92</td>
<td>4.90, 5.63</td>
</tr>
<tr>
<td></td>
<td>Classical</td>
<td>4.42</td>
<td>1.24</td>
<td>3.93, 4.91</td>
</tr>
<tr>
<td></td>
<td>World</td>
<td>3.50</td>
<td>0.88</td>
<td>3.15, 3.85</td>
</tr>
<tr>
<td>Control</td>
<td>Popular</td>
<td>5.21</td>
<td>1.12</td>
<td>4.80, 5.62</td>
</tr>
<tr>
<td></td>
<td>Classical</td>
<td>4.46</td>
<td>1.24</td>
<td>4.01, 4.92</td>
</tr>
<tr>
<td></td>
<td>World</td>
<td>3.66</td>
<td>1.20</td>
<td>3.25, 4.07</td>
</tr>
<tr>
<td>Popular MPG</td>
<td>Popular</td>
<td>5.34</td>
<td>0.90</td>
<td>4.99, 5.69</td>
</tr>
<tr>
<td></td>
<td>Classical</td>
<td>4.04</td>
<td>1.82</td>
<td>3.33, 4.74</td>
</tr>
<tr>
<td></td>
<td>World</td>
<td>3.23</td>
<td>1.33</td>
<td>2.71, 3.44</td>
</tr>
<tr>
<td>Classical MPG</td>
<td>Popular</td>
<td>5.29</td>
<td>1.09</td>
<td>4.81, 5.77</td>
</tr>
<tr>
<td></td>
<td>Classical</td>
<td>4.48</td>
<td>1.69</td>
<td>3.73, 5.23</td>
</tr>
<tr>
<td></td>
<td>World</td>
<td>3.54</td>
<td>1.19</td>
<td>3.02, 4.07</td>
</tr>
<tr>
<td>World MPG</td>
<td>Popular</td>
<td>5.40</td>
<td>0.67</td>
<td>5.09, 5.70</td>
</tr>
<tr>
<td></td>
<td>Classical</td>
<td>4.26</td>
<td>1.38</td>
<td>3.63, 4.89</td>
</tr>
<tr>
<td></td>
<td>World</td>
<td>3.64</td>
<td>1.04</td>
<td>3.16, 4.11</td>
</tr>
</tbody>
</table>

*Note.* Individual preferences were recorded using a 7-point Likert-type, where 1 corresponds with a weak preference and 7 corresponds with a strong preference.

The results of these ANOVAs suggest the BFI-10 test did not affect individual preferences for popular, classical, or world music: the individual music preferences of participants who took the personality test did not significantly differ from the individual music preferences of participants who did not take the personality test. Subsequent analyses described do not include the *Personality-Control*. 
Table 4

*All MPG* Predictions of Group Preference for Each Music Style*

<table>
<thead>
<tr>
<th>Group</th>
<th>Predicting Preference of...</th>
<th>For Music Style...</th>
<th>M</th>
<th>SD</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular MPG</td>
<td><em>Popular MPG</em></td>
<td>Popular</td>
<td>5.78</td>
<td>0.87</td>
<td>5.44, 6.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>2.89</td>
<td>0.99</td>
<td>2.55, 3.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>2.66</td>
<td>0.88</td>
<td>2.32, 3.00</td>
</tr>
<tr>
<td></td>
<td><em>Classical MPG</em></td>
<td>Popular</td>
<td>2.84</td>
<td>0.99</td>
<td>2.46, 3.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>6.47</td>
<td>0.46</td>
<td>6.29, 6.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>3.64</td>
<td>0.91</td>
<td>3.29, 4.00</td>
</tr>
<tr>
<td></td>
<td><em>World MPG</em></td>
<td>Popular</td>
<td>3.89*</td>
<td>0.89</td>
<td>3.55, 4.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>4.44</td>
<td>1.09</td>
<td>4.01, 4.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>6.14**</td>
<td>0.78</td>
<td>5.84, 6.45</td>
</tr>
<tr>
<td>Classical MPG</td>
<td><em>Popular MPG</em></td>
<td>Popular</td>
<td>6.20</td>
<td>0.71</td>
<td>5.89, 6.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>3.08</td>
<td>1.19</td>
<td>2.55, 3.61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>3.09</td>
<td>1.22</td>
<td>2.55, 3.63</td>
</tr>
<tr>
<td></td>
<td><em>Classical MPG</em></td>
<td>Popular</td>
<td>2.87</td>
<td>0.95</td>
<td>2.45, 3.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>6.31</td>
<td>0.56</td>
<td>6.06, 6.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>3.80</td>
<td>1.05</td>
<td>3.33, 4.26</td>
</tr>
<tr>
<td></td>
<td><em>World MPG</em></td>
<td>Popular</td>
<td>4.14</td>
<td>0.94</td>
<td>3.73, 4.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>4.44</td>
<td>0.80</td>
<td>4.09, 4.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>6.17**</td>
<td>0.83</td>
<td>5.80, 6.54</td>
</tr>
<tr>
<td>World MPG</td>
<td><em>Popular MPG</em></td>
<td>Popular</td>
<td>5.93</td>
<td>0.67</td>
<td>5.62, 6.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>2.61</td>
<td>1.08</td>
<td>2.10, 3.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>2.68</td>
<td>1.01</td>
<td>2.21, 3.15</td>
</tr>
<tr>
<td></td>
<td><em>Classical MPG</em></td>
<td>Popular</td>
<td>2.75</td>
<td>1.01</td>
<td>2.27, 3.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>6.33</td>
<td>0.50</td>
<td>6.09, 6.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>3.57</td>
<td>1.07</td>
<td>3.07, 4.07</td>
</tr>
<tr>
<td></td>
<td><em>World MPG</em></td>
<td>Popular</td>
<td>4.70*</td>
<td>0.79</td>
<td>4.33, 5.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Classical</td>
<td>4.55</td>
<td>0.82</td>
<td>4.17, 4.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World</td>
<td>5.24**</td>
<td>1.07</td>
<td>5.80, 6.54</td>
</tr>
</tbody>
</table>

*Note.* Preference predictions were recorded using a 7-point Likert-type, where 1 corresponds with a predicted weak preference and 7 corresponds with a predicted strong preference.

* significant at $p < .05$; ** significant at $p < .005$

*a* difference between *Popular MPG* and *World MPG*, Tukey’s HSD at $p < .05$

*b* difference between *Classical MPG* and *World MPG*, Tukey’s HSD at $p < .05$
**Effect of Group Assignment on Individual Music Preferences**

Three one-way ANOVAs were conducted to compare the effect of group assignment (Control, Popular MPG, Classical MPG, and World MPG) on individual preferences for popular, classical, and world music. Results indicated that group assignment was non-significant for popular music, $F(3, 98) = .17, p = .91, \eta^2_p = .005$, classical music $F(3, 99) = 0.52, p = .66, \eta^2_p = .016$, and world music, $F(3, 99) = .55, p = .65, \eta^2_p = .016$.

The results of these ANOVAs suggest that assigning participants to groups had no effect on their individual preferences for popular, classical, or world music.

**Effect of Group Assignment on Predictions of Group Music Preferences**

Nine one-way ANOVAs were conducted to compare the effect of group assignment (Popular MPG, Classical MPG, and World MPG) on predictions of group preferences for popular, classical, and world music (e.g. how did groups A, B, and C think group A felt about musics a, b, and c?). There was a significant difference in the group predictions of the World MPG preference for popular music, $F(2, 69) = 5.24, p = .008, \eta^2_p = .132$. Post-hoc analyses using Tukey’s HSD indicated that the Popular MPG predicted the World MPG would prefer popular music less than the World MPG predicted for themselves ($p = .006$). However, there were no significant differences in the preference predictions between the Popular MPG and Classical MPG ($p = .64$), or between the Classical MPG and World MPG ($p = .08$).  

There was a significant difference in the group predictions of the World MPG preference for world music, $F(2, 69) = 7.97, p = .001, \eta^2_p = .188$. Post-hoc analyses using Tukey’s HSD indicated that the Popular MPG predicted the World MPG would prefer world music more than the World MPG predicted for themselves ($p = .002$). The Classical MPG also predicted the World MPG would prefer world music more than the World MPG predicted for themselves ($p = .002$).
There was no significant difference in preference prediction between the Popular MPG and Classical MPG ($p = .99$).

There were no significant differences in the group predictions of: the Popular MPG preference for popular music, $F(2, 68) = 1.90, p = .16, \eta^2_p = .053$, classical music, $F(2, 68) = 1.16, p = .32, \eta^2_p = .033$, or world music, $F(2, 68) = 1.33, p = .26, \eta^2_p = .038$; the Classical MPG preference for popular music, $F(2, 69) = .04, p = .96, \eta^2_p = .001$, classical music, $F(2, 69) = .99, p = .38, \eta^2_p = .028$, or world music, $F(2, 69) = .24, p = .78, \eta^2_p = .007$; or the World MPG preference for classical music, $F(2, 69) = .17, p = .84, \eta^2_p = .005$.

The results of these ANOVAs suggest that participants of the World MPG predicted group preferences differently for popular and world music samples than all other participants. Significant results always involved a disagreement in preference prediction between the World MPG and the Popular MPG, or the World MPG and the Classical MPG. However, there was never disagreement between the Popular MPG and Classical MPG. The non-significant results for predicted group preferences for classical music suggest that participants, regardless of their group, appear to all be in agreement on how everyone should feel about classical music.

**Detailed Analyses of Significant Results**

To better understand the significant results concerning how participants predicted the World MPG preference for popular and world musics, further statistical tests were conducted to analyze the predicted preferences for individual popular and world music samples.

**Predictions of World MPG preference for individual popular samples.**

Five one-way ANOVAs were conducted to compare group predictions of the World MPG preference for each popular music sample, see Table 5. There was a significant difference in the predictions of the World MPG preference for “Don’t Let Me Down”, $F(2, 69) = 8.51, p < .001$,
\( \eta_p^2 = .20 \). Post-hoc analyses using Tukey’s HSD indicated that the *Popular MPG* predicted the *World MPG* would prefer “Don’t Let Me Down” less than the *World MPG* predicted for themselves \((p = .001)\). The *Classical MPG* also predicted the *World MPG* would prefer “Don’t Let Me Down” less than the *World MPG* predicted for themselves \((p = .004)\). There was no significant difference in the preference prediction between the *Popular MPG* and *Classical MPG* \((p = .95)\).

There was a significant difference in the group predictions of the *World MPG* preference for “Treasure”, \(F(2, 69) = 6.27, p = .001, \eta_p^2 = .15\). Post-hoc analyses using Tukey’s HSD indicated that the *Popular MPG* predicted the *World MPG* would prefer “Treasure” less than the *World MPG* predicted for themselves \((p = .002)\). There was no significant difference in preference prediction between the *Popular MPG* and *Classical MPG* \((p = .95)\), or between the *Classical MPG* and *World MPG* \((p = .26)\).

There were no significant differences in the group predictions of the *World MPG* preference for “Feel Good Inc.”, \(F(2, 69) = .53, p = .58, \eta_p^2 = .015\), “Heartache on the Dancefloor”, \(F(2, 69) = .57, p = .57, \eta_p^2 = .016\), or “Moves Like Jagger”, \(F(2, 69) = 1.55, p = .22, \eta_p^2 = .043\).

The results of these ANOVAs suggest that the *Popular MPG* and *Classical MPG* may have assumed participants in the *World MPG* would not like some popular music as much as the rest of the participants. However, the significant differences found in 2 of the 5 popular music samples do not appear suggest this predicted preference difference transfers to all types of popular music.
Predictions of World MPG preference for individual world samples.

Five one-way ANOVAs were conducted to compare group predictions of the World MPG preference for each world music sample, see Table 6). There was a significant difference in the group predictions of the World MPG preference for “Las Alazanas”, $F(2, 69) = 3.79, p = .027, \eta_p^2 = .099$. Post-hoc analyses using Tukey’s HSD indicated that the Popular MPG predicted the World MPG would prefer “Las Alazanas” more than the World MPG predicted for themselves ($p = .04$). The Classical MPG also predicted the World MPG would prefer “Las Alazanas” more than the World MPG predicted for themselves, but non-significantly so ($p = .051$). There was no significant difference in preference prediction between the Popular MPG and Classical MPG ($p = .99$).

There was a significant difference in the group predictions of the World MPG preference for “Raqset al-Hajjalah”, $F(2, 69) = 6.70, p = .002, \eta_p^2 = .16$. Post-hoc analyses using Tukey’s HSD indicated that the Popular MPG predicted the World MPG would prefer “Raqset al-Hajjalah” more than the World MPG predicted for themselves ($p = .004$). The Classical MPG also predicted the World MPG would prefer “Raqset al-Hajjalah” more than the World MPG predicted for themselves ($p = .008$). There was no significant difference in preference prediction between the Popular MPG and Classical MPG ($p = 1.00$).

There was a significant difference in the group predictions of the World MPG preference for “Thunder Lights”, $F(2, 69) = 3.25, p = .045, \eta_p^2 = .086$. Post-hoc analyses using Tukey’s HSD indicated that the Popular MPG predicted the World MPG would prefer “Thunder Lights” more than the World MPG predicted for themselves, but non-significantly so ($p = .07$). The Classical MPG also predicted the World MPG would prefer “Thunder Lights” more than the World MPG predicted for themselves, but also non-significantly so ($p = .07$). There was no
significant difference in preference prediction between the *Popular MPG* and *Classical MPG* (*p* = .98).

Table 5

*All MPGs Predictions of World MPG Preference for Popular Music Samples*

<table>
<thead>
<tr>
<th>Group</th>
<th>Predicting World MPG Preference for...</th>
<th>M</th>
<th>SD</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular MPG</td>
<td>Don’t Let Me Down</td>
<td>3.52⁎⁎&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.33</td>
<td>3.01, 4.02</td>
</tr>
<tr>
<td></td>
<td>Feel Good Inc.</td>
<td>4.31</td>
<td>1.23</td>
<td>3.84, 4.78</td>
</tr>
<tr>
<td></td>
<td>Heartache on the Dancefloor</td>
<td>4.07</td>
<td>1.22</td>
<td>3.60, 4.53</td>
</tr>
<tr>
<td></td>
<td>Moves Like Jagger</td>
<td>3.97</td>
<td>1.38</td>
<td>3.44, 4.49</td>
</tr>
<tr>
<td></td>
<td>Treasure</td>
<td>3.76⁎⁎&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.09</td>
<td>3.34, 4.17</td>
</tr>
<tr>
<td>Classical MPG</td>
<td>Don’t Let Me Down</td>
<td>3.64⁎⁎&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.36</td>
<td>3.03, 4.24</td>
</tr>
<tr>
<td></td>
<td>Feel Good Inc.</td>
<td>4.41</td>
<td>1.33</td>
<td>3.82, 5.00</td>
</tr>
<tr>
<td></td>
<td>Heartache on the Dancefloor</td>
<td>4.41</td>
<td>1.37</td>
<td>3.80, 5.02</td>
</tr>
<tr>
<td></td>
<td>Moves Like Jagger</td>
<td>3.86</td>
<td>1.55</td>
<td>3.18, 4.55</td>
</tr>
<tr>
<td></td>
<td>Treasure</td>
<td>4.41</td>
<td>1.26</td>
<td>3.85, 4.97</td>
</tr>
<tr>
<td>World MPG</td>
<td>Don’t Let Me Down</td>
<td>5.00⁎⁎&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>1.34</td>
<td>4.39, 5.61</td>
</tr>
<tr>
<td></td>
<td>Feel Good Inc.</td>
<td>4.67</td>
<td>1.06</td>
<td>4.18, 5.15</td>
</tr>
<tr>
<td></td>
<td>Heartache on the Dancefloor</td>
<td>4.38</td>
<td>1.24</td>
<td>3.81, 4.95</td>
</tr>
<tr>
<td></td>
<td>Moves Like Jagger</td>
<td>4.57</td>
<td>1.40</td>
<td>3.93, 5.21</td>
</tr>
<tr>
<td></td>
<td>Treasure</td>
<td>5.00⁎⁎&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>1.38</td>
<td>4.37, 5.63</td>
</tr>
</tbody>
</table>

*Note.* Preference predictions were recorded using a 7-point Likert-type, where 1 corresponds with a predicted weak preference and 7 corresponds with a predicted strong preference.  
⁎⁎ significant at *p* < .005.

<sup>a</sup> significant difference between *Popular MPG* and *World MPG*, Tukey’s HSD at *p* < .05  
<sup>b</sup> significant difference between *Classical MPG* and *World MPG*, Tukey’s HSD at *p* < .05
Table 6

*All MPGs Predictions of World MPG Preference for World Music Samples*

<table>
<thead>
<tr>
<th>Group</th>
<th>Predicting World MPG Preference for ...</th>
<th>M</th>
<th>SD</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular MPG</td>
<td>Toi Toi Toi</td>
<td>6.21</td>
<td>1.08</td>
<td>5.80, 6.62</td>
</tr>
<tr>
<td></td>
<td>Las Alazanas</td>
<td>6.10*a</td>
<td>1.26</td>
<td>5.62, 6.58</td>
</tr>
<tr>
<td></td>
<td>Raqset al-Hajjalah</td>
<td>6.14***a</td>
<td>0.95</td>
<td>5.78, 6.50</td>
</tr>
<tr>
<td></td>
<td>Thunder Lights</td>
<td>6.14*</td>
<td>1.03</td>
<td>5.75, 6.53</td>
</tr>
<tr>
<td></td>
<td>Thai Ponglang Dance</td>
<td>6.21***a</td>
<td>0.82</td>
<td>5.90, 6.52</td>
</tr>
<tr>
<td>Classical MPG</td>
<td>Toi Toi Toi</td>
<td>6.00</td>
<td>1.35</td>
<td>5.40, 6.60</td>
</tr>
<tr>
<td></td>
<td>Las Alazanas</td>
<td>6.14*</td>
<td>1.21</td>
<td>5.60, 6.67</td>
</tr>
<tr>
<td></td>
<td>Raqset al-Hajjalah</td>
<td>6.14***b</td>
<td>1.17</td>
<td>5.62, 6.65</td>
</tr>
<tr>
<td></td>
<td>Thunder Lights</td>
<td>6.18*</td>
<td>1.01</td>
<td>5.74, 6.63</td>
</tr>
<tr>
<td></td>
<td>Thai Ponglang Dance</td>
<td>6.41***b</td>
<td>0.80</td>
<td>6.06, 6.67</td>
</tr>
<tr>
<td>World MPG</td>
<td>Toi Toi Toi</td>
<td>5.52</td>
<td>1.47</td>
<td>4.85, 6.19</td>
</tr>
<tr>
<td></td>
<td>Las Alazanas</td>
<td>5.19*a</td>
<td>1.44</td>
<td>4.54, 5.84</td>
</tr>
<tr>
<td></td>
<td>Raqset al-Hajjalah</td>
<td>5.05***ab</td>
<td>1.36</td>
<td>4.43, 5.67</td>
</tr>
<tr>
<td></td>
<td>Thunder Lights</td>
<td>5.43*</td>
<td>1.29</td>
<td>4.84, 5.67</td>
</tr>
<tr>
<td></td>
<td>Thai Ponglang Dance</td>
<td>5.10***ab</td>
<td>1.37</td>
<td>4.47, 5.72</td>
</tr>
</tbody>
</table>

*Note.* Preference predictions were recorded using a 7-point Likert-type, where 1 corresponds with a predicted weak preference and 7 corresponds with a predicted strong preference.

* significant at $p < .05$; ** significant at $p < .005$; *** significant at $p < .001$

*a* significant difference between *Popular MPG* and *World MPG*, Tukey’s HSD at $p < .05$

*b* significant difference between *Classical MPG* and *World MPG*, Tukey’s HSD at $p < .05$

There was a significant difference in the group predictions of the *World MPG* preference for “Thai Ponglang Dance”, $F(2, 69) = 10.81, p < .001$, $\eta^2 = .24$. Post-hoc analyses using Tukey’s HSD indicated that the *Popular MPG* predicted the *World MPG* would prefer “Thai Ponglang Dance” more than the *World MPG* predicted for themselves ($p = .001$). The *Classical MPG* also predicted the *World MPG* would prefer “Thai Ponglang Dance” more than the *World MPG* predicted for themselves ($p < .001$). There was no significant difference in preference prediction between the *Popular MPG* and *Classical MPG* ($p = .76$).
There was no significant difference in the group predictions of the *World MPG* preference for “Toi Toi Toi”, $F(2, 69) = 1.75, p = .18, \eta^2_p = .048$.

The results of these ANOVAs suggest that the *Popular MPG* and *Classical MPG* likely assumed participants in the *World MPG* would like world music more than the rest of the participants. The significant differences found in 4 of the 5 world music samples appear to suggest this predicted preference difference transfers to all types of world music.
CHAPTER 5
DISCUSSION

Effect of Group Assignment on Individual Music Preferences

Randomly assigning participants to artificial ingroups did not seem to affect their individual preferences for popular, classical, and world music styles. Across all conditions, participants preferred popular music over classical music, and classical music over world music, which is consistent with previous research (e.g., Leblanc, 1982; Fung, 1994; Tarrant et al., 2001; Dearn & Pitts, 2017). Specifically, all participants generally reported liking popular music, feeling indifferent about classical music, and disliking world music. Interestingly, the only music style that was preferred less than the neutral point—and for every group—was world music, suggesting that participants overall did not like non-Western music, echoing the findings of Fung (1994). It is worth mentioning that world music is not explicitly covered in the music appreciation course participants were recruited from, and it is likely that world music was their least familiar music style.

It could be that individual music preferences cannot be influenced by SIT alone because people’s established strong connections between their musical preferences and their personal identity characteristics (e.g. Rawlings & Ciancarelli, 1997; Schwartz & Fouts, 2003; Rentfrow & Gosling, 2003; Leung & Kier, 2008; Ruth, 2014) override the immediate effects of intergroup discrimination. Another consideration is that, according to ITMP peer group and personality are just two of more than twenty potential variables that may influence music preference (Leblanc, 1982). Even if participants bought into their artificial ingroups—relating to the peer group and
personality variables described by Leblanc—it seems plausible that the many other influential variables in ITMP might have outweighed the ones examined in this study.

It could also be that the effect of SIT on individual music preference does not manifest itself in a short fifteen-minute survey. A qualitative post-survey questionnaire administered well after the present study could be a way to explore the long-term effect of participants essentially being told what music they supposedly prefer based on their personality. It is also possible SIT did not affect individual music preferences because SIT was not properly utilized. This possibility is discussed below.

**Effect of Group Assignment on Predictions of Group Music Preferences**

To an extent, randomly assigning participants to artificial ingroups produced some intergroup discrimination when participants were asked about others’ music preferences: participants predicted that the different groups would like or dislike certain types of music differently, which is consistent with the research of Tarrant et al. (2001).

However, the way intergroup discrimination was displayed may have been confounded by the labels of the groups (e.g., popular, classical world). In the study by Billig and Tajfel (1973), intergroup discrimination was displayed through blatant ingroup favoritism by allocating money; in the study by Tarrant et al. (2001), adolescent boys in one school display ingroup favoritism by predicting they would like positively stereotyped music more than boys from another school. In both studies, the labels of participants’ ingroups were unrelated to the valued dimensions being investigated (i.e., money or positively stereotyped music). In the present study, participants’ ingroups had labels that matched the styles of the music samples: some of these music styles may not have been positively stereotyped by participants—classical music with young adults is actually negatively stereotyped (Dearn & Pitts, 2017)—and therefore not a
valued dimension. It is possible that SIT was not utilized if participants interpreted the task of predicting music preferences as identifying the music style (e.g., X sounds like classical music, so the Classical MPG will like it because that’s their name). This seems unlikely though, as participants were still asked to predict how non-congruent groups would like the music as well (e.g., X sounds like classical music, but how would someone in the World or Popular MPG like it?), which would require more consideration than just sorting music samples by style.

Another consideration involves participant buy-in: if a participant who truly thrives on popular music was placed in the World MPG, would they agree with the placement? Knowing the limited success of attempted enculturation into an unfamiliar musical style (Morrison et al., 2013), it seems doubtful that something much less complex—labeling participants as part of a new group—would produce any better buy-in. Also, some of the music styles were not seen as valued dimensions by participants, i.e., positively stereotyped. If a person assigned to the World MPG—who already did not like their group assignment—was asked to predict how their group liked world music (an unvalued dimension), is seems unlikely that their prediction would be predictably influenced by their group assignment: specifically, they might not predict the World MPG would like world music as much as the other groups would, or as much as the Popular MPG would like popular music. Indeed, looking at the significant results, this seems to be the case.

**Interpretation of Significant Results**

All significant results involved predicting the music preferences of the World MPG. In almost every significant case, the Popular and Classical MPGs had similar, sometimes near identical, predictions of the World MPG’s music preferences. Everyone seemed to confidently agree on which music samples the Popular and Classical MPGs would like, and which samples
they would not like as much. Disagreement only arose when participants were asked about the World MPG.

The most likely reason for these significant differences comes from what was discussed earlier: participant buy-in of their assigned artificial ingroup. Those assigned to the Popular MPG were likely unphased by their assignment. Participants in the Classical MPG may not have agreed with their group, but seeing how the individual preferences for classical music were generally indifferent, it seems likely participants felt indifferent about being in the Classical MPG. But participants assigned to the World MPG likely disagreed with their placement and, considering the general dislike of world music by participants, were unhappy with their placement. Indeed, the significant differences all involved the World MPG predicting their group’s preferences differently than the other groups: specifically, participants in the World MPG seemed to base their predictions for their group on their individual preferences for the music in question.

For the popular music samples, the World MPG predicted they would like the music more than the other MPG’s predicted they would seem to be informed by the World MPG’s actual preference (individual preference) for popular music. More saliently, the World MPG was more conservative in how they predicted their group’s preference for world music than the other MPG’s were. Concerning the non-significant predictions relating to classical music, it is not surprising: again, all participants showed a general indifference towards classical music. Perhaps, in an air of rebelliousness, participants in the World MPG wanted to disprove their group assignment? In spite of any potential resistance from World MPG members, they still exhibited some intergroup discrimination—albeit not as extreme as the other two MPG’s—as they still predicted their own group would like world music the most of the three musical styles.
Generally, all three MPGs predicted the World MPG would like non-world music more than the Popular MPG would like non-popular music, or the Classical MPG would like non-classical music. Indeed, all groups predicted that the Popular MPG and Classical MPG would actually dislike music incongruous with their groups’ labels. The significant results relating to world music may have possible stemmed from a broad interpretation of the term “world music” by participants. Popular and classical musics are technically styles of world music (Western-art, and Western-popular styles). If participants interpreted “world music” in this broad sense, it seems likely they would have assumed participants in the World MPG were more open to all styles of music, including popular and classical. If this was the case, the significant differences in the predictions for the World MPG may be a result in a disagreement to the extent the World MPG is accepted of various styles of music.

Limitations and Suggestions of Future Research

This study sought to manipulate individual music preferences using SIT. However, unlike previous studies (e.g., Billig & Tajfel, 1973; Tarrant et al., 2001) the present study did not clearly provide a valued dimension for participants to consider, such as allotting real money or comparing preferences for a single, desirable style of music. Because of this, SIT may have not been fully present. Also, the labeling of the MPGs (popular, classical, world) may have confounded the task of predicting preferences: participants may have just been using the groups’ labels to identify the styles of the music samples. The effect of the groups’ labels did not appear to influence individual music preferences though, which is consistent with the findings of Britain (1991).

To better tap into SIT, future researchers should consider removing the labels of the groups, or changing them to something unrelated to the music. However, the present study
required labels in order to test whether the artificial ingroups influenced participants’ individual music preferences (assuming they actually believed their group assignments), causing a bit of a dilemma: how can the artificial ingroups be tested if labels are not used? To work around this issue, future studies should consider two options: reduce the number of groups to just one, or reduce the number of music styles represented to just one. It may have been that too many conditions were examined in the present study. As far as the present study is concerned, a simple post-survey question such as “which music group would you have placed yourself in?” may have been a simple way to examine participant buy-in.

**Conclusion**

The findings of this study can be distilled into one statement: simply telling someone what music they should like is probably not an effective way to make them like that music. Randomly assigning participants to artificial music personality ingroups produced varying degrees of intergroup discrimination, but certainly did not influence their individual music preferences. That a phenomenon so straightforward as SIT—where simply mentioning the word group produces intergroup discrimination (Tajfel & Turner, 1986)—cannot influence music preference suggests that the process of altering music preferences is greatly complex. Music educators should bear this in mind when developing curricula for music appreciation courses: if the goal of music appreciation courses is to increase people's preference for Western-art music, then it is worth knowing how difficult that goal is to achieve.
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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

November 14, 2017

Jonathan Stegall
Department of Music Education
College of Arts & Sciences
The University of Alabama
Box 870366

Re: IRB # EX-17-CM-071 “The Effect of Ingroup Identity on Nonmusic Majors’ Music Preferences”

Dear Mr. Stegall:

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your protocol has been given exempt approval according to 45 CFR part 46.101(b)(2) as outlined below:

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.

Your application will expire on November 13, 2018. If your research will continue beyond this date, complete the relevant portions of the Continuing Review Form. If you wish to modify the application, complete the Modification of an Approved Protocol Form. When the study closes, complete the appropriate portions of FORM: Continuing Review and Closure.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number.

Good luck with your research.

Sincerely,

[Signature]
APPENDIX B

RECRUITMENT FLYER FOR PARTICIPANTS

UA Music Preference Survey
Participate in a Research Study!

https://tinyurl.com/UAMPS

PRINCIPAL INVESTIGATOR
Jonathan H. Stegall

WHO?
Nonmusic majors 18 years of age or older.

WHAT?
A research study investigating nonmusic majors’ music preferences. The online survey will explore potential factors that may influence participants’ music preferences.

WHEN?
The online survey takes approximately 15 minutes to complete, and is accessible from the time you receive this flyer until January 26, 2018.

WHERE?
Wherever is convenient for you, with this link! https://tinyurl.com/UAMPS
The survey can be completed on a computer OR on your phone!
Headphones or speakers are the only other requirement.

WHY?
Findings of this study may guide conversation for how music appreciation classes are taught for nonmusic majors. Upon completion of the survey, participants may earn eligibility for a SUPeSTORE gift-card drawing!

HOW?
This link! https://tinyurl.com/UAMPS
The first page of the survey details your informed consent to participate in the study.
All you need is a computer or phone, and headphones or speakers!

Questions? Contact Jonathan Stegall at jhstegall1@crimson.ua.edu
MUSIC PREFERENCE SURVEY

**APPENDIX C**

**MUSIC PREFERENCE SURVEY**

"This survey contains audio, and requires the use of headphones or speakers."

Dear Prospective Participant,

I am Jonathan Stegall, and I am now pursuing a Masters degree in Music Education at the University of Alabama. I am conducting a research study to gather data on nonmusic majors' music preferences. Please read through the study's description and information below before continuing on to the survey.

**TOPIC**

The following survey focuses on gathering information about the music preferences of nonmusic majors. This brief survey takes 10-15 minutes to complete, and has been reviewed and approved by the University of Alabama Institutional Review Board (IRB) for the Protection of Human Subjects.

**RISKS & BENEFITS**

There are no known risks in this study. The benefits in participating in this study include a greater understanding of personal musical preferences. At the end of the survey, participants will have the opportunity to be entered into a SUBSTORE gift-card drawing by correctly answering a music question.

If at any point during the survey you wish to stop participating, you may exit out of the application being used to take the survey.

**ANONYMITY**

This study is anonymous. The results of this study may be published, but your name will not be known. The completed surveys will be stored securely and only the researcher will have access to the records.

**QUESTIONS**

If you have any questions, please email jstegall1@crimson.ua.edu. You may also contact my faculty advisor, Dr. Carl Hancock at (205) 348-6335.

If you have questions about your rights as a person taking part in a research study, make suggestions, or file complaints and concerns, you may call Ms. Tanta Myles, the University of Alabama Research Compliance Officer at (205) 348-8461 or toll-free at 1-877-826-3099. You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach.
Proceeding to the attached questionnaire/survey constitutes your consent to participate and certifies that you are 18 years of age or older. Please keep a copy of this informed consent form for your records.

Note: You can keep track of your survey completion with the progress bar at the top of your screen!

Descriptives

Please take a moment to answer 2 pre-survey questions

What year are you?
Freshman
Sophomore
Junior
Senior
Graduate

What is your gender?
Male
Female
Other

Personality Index

For the first part of the survey, you will be asked to describe your personality.
Please read the prompts carefully and respond honestly.

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Page Submit: 0 seconds
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How well do the following statements describe your personality?

I see myself as someone who...

<table>
<thead>
<tr>
<th></th>
<th>Disagree strongly</th>
<th>Disagree a little</th>
<th>Neither agree nor disagree</th>
<th>Agree a little</th>
<th>Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>...is reserved</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...is generally trusting</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...tends to be lazy</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...is relaxed, handles stress well</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...has few artistic interests</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...is outgoing, sociable</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...tends to find fault with others</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...does a thorough job</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...gets nervous easily</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>...has an active imagination</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Analyzing personality...

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You have been placed in the WORLD MUSIC GROUP based on how you described your personality.

Participants in your group displayed personality traits that are generally associated with people who prefer, or have deep understanding of world music.

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Click Count: 0 clicks

Listening Instructions

SPEAKERS or HEADPHONES are needed for the survey
Please take a moment to adjust the volume of your audio playback device.

Note: If you are on a mobile device, you will need to manually hit the "play" button for each sample.

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Last Click: 0 seconds
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Click Count: 0 clicks
Group Assignments

Your personality puts you in the Popular Music Group!

Popular Music Group
Classical Music Group
World Music Group

You have been placed in the POPULAR MUSIC GROUP based on how you described your personality.

Participants in your group displayed personality traits that are generally associated with people who prefer, or have deep understanding of popular music.

Your personality puts you in the Classical Music Group!

Popular Music Group
Classical Music Group
World Music Group

You have been placed in the CLASSICAL MUSIC GROUP based on how you described your personality.

Participants in your group displayed personality traits that are generally associated with people who prefer, or have deep understanding of classical music.

Your personality puts you in the World Music Group!
You will now listen to 15 music samples of varying styles, and will be asked to describe your preferences for each sample.

Each music sample is 20 seconds in duration.

*YOU WILL ONLY HAVE ONE CHANCE TO LISTEN TO EACH SAMPLE*

Please read each question carefully, and answer honestly.

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Page Submit: 0 seconds
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sampleA

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample

These page timer metrics will not be displayed to the recipient.
First Click: 0 seconds
Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks
How do you think YOUR GROUP (\$e://Field/Group\}) feels about this music sample?

<table>
<thead>
<tr>
<th>We REALLY DISLIKE this music</th>
<th>We dislike this music</th>
<th>We dislike this music a little</th>
<th>We are indifferent about this music</th>
<th>We like this music a little</th>
<th>We like this music</th>
<th>We REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do YOU PERSONALLY feel about this music sample?

<table>
<thead>
<tr>
<th>I REALLY DISLIKE this music</th>
<th>I dislike this music</th>
<th>I dislike this music a little</th>
<th>I am indifferent about this music</th>
<th>I like this music a little</th>
<th>I like this music</th>
<th>I REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the \$e://Field/notGroupPop\} feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the \$e://Field/notGroupClassical\} feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the \$e://Field/notGroupWorld\} feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>
sampleC

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample

These page timer metrics will not be displayed to the recipient.
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Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks

How do you think YOUR GROUP (#{e://Field/Group}) feels about this music sample?

We REALLY DISLIKE this music
We dislike this music
We dislike this music a little
We are indifferent about this music
We like this music a little
We like this music
We REALLY LIKE this music

How do YOU PERSONALLY feel about this music sample?

I REALLY DISLIKE this music
I dislike this music
I dislike this music a little
I am indifferent about this music
I like this music a little
I like this music
I REALLY LIKE this music
How do you think YOUR GROUP $(e://Field/Group)$ feels about this music sample?

We REALLY DISLIKE this music
We dislike this music a little
We are indifferent about this music
We like this music a little
We like this music
We REALLY LIKE this music

How do YOU PERSONALLY feel about this music sample?

I REALLY DISLIKE this music
I dislike this music a little
I am indifferent about this music
I like this music a little
I like this music
I REALLY LIKE this music

How do you think people in the $(e://Field/notGroupPop)$ feel about this music sample?

They REALLY DISLIKE this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

How do you think people in the $(e://Field/notGroupClassical)$ feel about this music sample?

They REALLY DISLIKE this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

How do you think people in the $(e://Field/notGroupWorld)$ feel about this music sample?
How do you think people in the $(e://Field/notGroupPop)$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the $(e://Field/notGroupClassical)$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the $(e://Field/notGroupWorld)$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

sampleD

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample

▶
sampleG

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

**Please listen to the entirety of the music sample**

The page timer metrics will not be displayed to the recipient.
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Click Count: 0 clicks

How do you think YOUR GROUP ($\{e://Field/Group\}$) feels about this music sample?

- We REALLY DISLIKE this music
- We dislike this music
- We dislike this music a little
- We are indifferent about this music
- We like this music a little
- We like this music
- We REALLY LIKE this music

How do YOU PERSONALLY feel about this music sample?
Please listen to the entirety of the music sample

These page timer metrics will not be displayed to the recipient.
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Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks

How do you think YOUR GROUP ($\{e://Field/Group\}$) feels about this music sample?

- We REALLY DISLIKE this music
- We dislike this music a little
- We are indifferent about this music
- We like this music a little
- We like this music
- We REALLY LIKE this music

How do YOU PERSONALLY feel about this music sample?

- I REALLY DISLIKE this music
- I dislike this music a little
- I am indifferent about this music
- I like this music a little
- I like this music
- I REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupPop\}$ feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupClassical\}$ feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music
| I REALLY DISLIKE this music | I dislike this music | I dislike this music a little | I am indifferent about this music | I like this music a little | I like this music | I REALLLY LIKE this music |

**How do you think people in the ${e://Field/notGroupPop}$ feel about this music sample?**

| They REALLY DISLIKE this music | They dislike this music | They dislike this music a little | They are indifferent about this music | They like this music a little | They like this music | They REALLY LIKE this music |

**How do you think people in the ${e://Field/notGroupClassical}$ feel about this music sample?**

| They REALLY DISLIKE this music | They dislike this music | They dislike this music a little | They are indifferent about this music | They like this music a little | They like this music | They REALLY LIKE this music |

**How do you think people in the ${e://Field/notGroupWorld}$ feel about this music sample?**

| They REALLY DISLIKE this music | They dislike this music | They dislike this music a little | They are indifferent about this music | They like this music a little | They like this music | They REALLY LIKE this music |

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sampleH
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As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.
How do you think people in the ${e://Field/notGroupWorld} feel about this music sample?

They REALLY DISLIKE this music  They dislike this music  They dislike this music a little  They are indifferent about this music  They like this music a little  They like this music  They REALLY LIKE this music

Please listen to the entirety of the music sample

These page timer metrics will not be displayed to the recipient.
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Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks

How do you think YOUR GROUP (${e://Field/Group}) feels about this music sample?

We REALLY DISLIKE this music  We dislike this music  We dislike this music a little  We are indifferent about this music  We like this music a little  We like this music  We REALLY LIKE this music
How do YOU PERSONALLY feel about this music sample?

I REALLY DISLIKE this music
I dislike this music
I dislike this music a little
I am indifferent about this music
I like this music a little
I like this music
I REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupPop\}$ feel about this music sample?

They REALLY DISLIKE this music
They dislike this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupClassical\}$ feel about this music sample?

They REALLY DISLIKE this music
They dislike this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupWorld\}$ feel about this music sample?

They REALLY DISLIKE this music
They dislike this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.
As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample

These page timer metrics will not be displayed to the recipient.
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Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks

How do you think YOUR GROUP ($e://Field/Group$) feels about this music sample?

<table>
<thead>
<tr>
<th>We REALLY DISLIKE this music</th>
<th>We dislike this music</th>
<th>We dislike this music a little</th>
<th>We are indifferent about this music</th>
<th>We like this music a little</th>
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<th>We REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do YOU PERSONALLY feel about this music sample?

<table>
<thead>
<tr>
<th>I REALLY DISLIKE this music</th>
<th>I dislike this music</th>
<th>I dislike this music a little</th>
<th>I am indifferent about this music</th>
<th>I like this music a little</th>
<th>I like this music</th>
<th>I REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the $e://Field/notGroupPop$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>
How do you think people in the $\{e://Field/notGroupClassical\}$ feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupWorld\}$ feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music

sampleK

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample

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Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks
How do you think YOUR GROUP ($\{e://Field\}/Group$) feels about this music sample?

<table>
<thead>
<tr>
<th>We REALLY DISLIKE this music</th>
<th>We dislike this music a little</th>
<th>We are indifferent about this music</th>
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<th>We like this music</th>
<th>We REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do YOU PERSONALLY feel about this music sample?

<table>
<thead>
<tr>
<th>I REALLY DISLIKE this music</th>
<th>I dislike this music a little</th>
<th>I am indifferent about this music</th>
<th>I like this music a little</th>
<th>I like this music</th>
<th>I REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the $\{e://Field\}/notGroup\_Pop$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the $\{e://Field\}/notGroup\_Classical$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the $\{e://Field\}/notGroup\_World$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

sampleL
As you listen, think about how you feel about this music.

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As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample

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Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks

How do you think YOUR GROUP ({$e://Field/Group}) feels about this music sample?

We REALLY DISLIKE this music
We dislike this music a little
We are indifferent about this music
We like this music a little
We like this music
We REALLY LIKE this music

How do YOU PERSONALLY feel about this music sample?

I REALLY DISLIKE this music
I dislike this music a little
I am indifferent about this music
I like this music a little
I like this music
I REALLY LIKE this music

How do you think people in the {$e://Field/notGroupPop} feel about this music sample?
<table>
<thead>
<tr>
<th>Really Dislike</th>
<th>Dislike</th>
<th>Dislike a Little</th>
<th>Indifferent</th>
<th>Like a Little</th>
<th>Like</th>
<th>Really Like</th>
</tr>
</thead>
<tbody>
<tr>
<td>this music</td>
<td>this music</td>
<td>this music</td>
<td>about this</td>
<td>this music</td>
<td>this music</td>
<td>this music</td>
</tr>
</tbody>
</table>

**How do you think people in the $\text{Field/notGroupClassical}$ feel about this music sample?**

<table>
<thead>
<tr>
<th>Really Dislike</th>
<th>Dislike</th>
<th>Dislike a Little</th>
<th>Indifferent</th>
<th>Like a Little</th>
<th>Like</th>
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<tr>
<td>this music</td>
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<td>this music</td>
<td>this music</td>
<td>this music</td>
</tr>
</tbody>
</table>

**How do you think people in the $\text{Field/notGroupWorld}$ feel about this music sample?**

**sampleM**

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

**Please listen to the entirety of the music sample**

These page timer metrics will not be displayed to the recipient.

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Last Click: 0 seconds
As you listen, think about how you feel about this music.

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Please listen to the entirety of the music sample

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Page Submit: 0 seconds
Click Count: 0 clicks

How do you think YOUR GROUP ($e://Field/Group$) feels about this music sample?

How do YOU PERSONALLY feel about this music sample?
How do you think YOUR GROUP \( \{e://\text{Field/Group}\} \) feels about this music sample?

<table>
<thead>
<tr>
<th>We REALLY DISLIKE this music</th>
<th>We dislike this music a little</th>
<th>We are indifferent about this music</th>
<th>We like this music a little</th>
<th>We like this music</th>
<th>We REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do YOU PERSONALLY feel about this music sample?

<table>
<thead>
<tr>
<th>I REALLY DISLIKE this music</th>
<th>I dislike this music</th>
<th>I dislike this music a little</th>
<th>I am indifferent about this music</th>
<th>I like this music a little</th>
<th>I like this music</th>
<th>I REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the \( \{e://\text{Field/notGroupPop}\} \) feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the \( \{e://\text{Field/notGroupClassical}\} \) feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the \( \{e://\text{Field/notGroupWorld}\} \) feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>
How do you think YOUR GROUP (${e://Field/Group}) feels about this music sample?

- We REALLY DISLIKE this music
- We dislike this music a little
- We are indifferent about this music
- We like this music a little
- We like this music
- We REALLY LIKE this music

How do YOU PERSONALLY feel about this music sample?

- I REALLY DISLIKE this music
- I dislike this music a little
- I am indifferent about this music
- I like this music a little
- I like this music
- I REALLY LIKE this music

How do you think people in the ${e://Field/notGroupPop} feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music

How do you think people in the ${e://Field/notGroupClassical} feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music

How do you think people in the ${e://Field/notGroupWorld} feel about this music sample?
How do you think people in the `$e://Field/notGroupPop$` feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the `$e://Field/notGroupClassical$` feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
<th>They REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the `$e://Field/notGroupWorld$` feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
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</tr>
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</table>

sampleQ

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample 🎶
sampleR

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.

Please listen to the entirety of the music sample

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How do you think YOUR GROUP ({$e://Field/Group$}) feels about this music sample?

We REALLY DISLIKE this music
We dislike this music
We dislike this music a little
We are indifferent about this music
We like this music a little
We like this music
We REALLY LIKE this music
How do YOU PERSONALLY feel about this music sample?

<table>
<thead>
<tr>
<th>I REALLY DISLIKE this music</th>
<th>I dislike this music</th>
<th>I dislike this music a little</th>
<th>I am indifferent about this music</th>
<th>I like this music a little</th>
<th>I like this music</th>
<th>I REALLY LIKE this music</th>
</tr>
</thead>
</table>

How do you think people in the ${e://Field/notGroupPop}$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
<th>They are indifferent about this music</th>
<th>They like this music a little</th>
<th>They like this music</th>
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</tr>
</thead>
</table>

How do you think people in the ${e://Field/notGroupClassical}$ feel about this music sample?

<table>
<thead>
<tr>
<th>They REALLY DISLIKE this music</th>
<th>They dislike this music</th>
<th>They dislike this music a little</th>
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<th>They REALLY LIKE this music</th>
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</table>

How do you think people in the ${e://Field/notGroupWorld}$ feel about this music sample?

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<tr>
<th>They REALLY DISLIKE this music</th>
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sampleS

As you listen, think about how you feel about this music.

You can see your survey progress at the top of your screen.

As you listen, think about how you, your assigned group, and other groups feel about this music.

You can see your survey progress at the top of your screen.
Please listen to the entirety of the music sample

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How do you think YOUR GROUP ($e://Field/Group$) feels about this music sample?

- We REALLY DISLIKE this music
- We dislike this music
- We dislike this music a little
- We are indifferent about this music
- We like this music a little
- We like this music
- We REALLY LIKE this music

How do YOU PERSONALLY feel about this music sample?

- I REALLY DISLIKE this music
- I dislike this music
- I dislike this music a little
- I am indifferent about this music
- I like this music a little
- I like this music
- I REALLY LIKE this music

How do you think people in the $e://Field/notGroupPop$ feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music

How do you think people in the $e://Field/notGroupClassical$ feel about this music sample?

- They REALLY DISLIKE this music
- They dislike this music
- They dislike this music a little
- They are indifferent about this music
- They like this music a little
- They like this music
- They REALLY LIKE this music
How do you think people in the ${e://Field/notGroupWorld} feel about this music sample?

They REALLY DISLIKE this music  They dislike this music  They dislike this music a little  They are indifferent about this music  They like this music a little  They like this music  They REALLY LIKE this music

sampleU

As you listen, think about how you feel about this music.

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As you listen, think about how you, your assigned group, and other groups feel about this music.

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Click Count: 0 clicks

How do you think YOUR GROUP (${e://Field/Group}) feels about this music sample?
How do YOU PERSONALLY feel about this music sample?

I REALLY
DISLIKE this music
I dislike this music
I dislike this music a little
I am indifferent about this music
I like this music a little
I like this music
I REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupPop} feel about this music sample?

They REALLY
DISLIKE this music
They dislike this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupClassical} feel about this music sample?

They REALLY
DISLIKE this music
They dislike this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

How do you think people in the $\{e://Field/notGroupWorld} feel about this music sample?

They REALLY
DISLIKE this music
They dislike this music
They dislike this music a little
They are indifferent about this music
They like this music a little
They like this music
They REALLY LIKE this music

postSurvey

ALMOST DONE!

The listening portion of the survey is now complete.
Answer the following question correctly to be eligible for a gift-card drawing

You are attending an orchestra concert. The ensemble is playing a four-movement symphony. How should you respond?

Clap at the end of each movement
Wait until all four movements are through before clapping
Text on your phone the whole time

CORRECT!

Please SCREEN CAP or EMAIL YOURSELF the code below to be entered into the gift-card drawing.

${e://Field/surveyCode}$

If your code is randomly selected as a gift-card winner, you MUST present a SCREEN CAP or EMAIL of the code as proof in order to redeem the gift-card.

THIS IS YOUR ONE CHANCE TO WRITE DOWN YOUR CODE!!!!

Once you hit the "next" button, you will never again see the above code.

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Incorrect...
The correct response is to wait to clap until the very end of the symphony.