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Jin-Hi Choi, MT-BC

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## THE RELATIONSHIPS AMONG CHARACTERISTIC MOODS, MUSIC PREFERENCE, AND MUSIC-LISTENING HABITS: A SURVEY STUDY

By

Jin-Hi Choi, MT-BC

#### A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF MUSIC

Department of Music

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#### **ABSTRACT**

### THE RELATIONSHIPS AMONG CHARACTERISTIC MOODS, MUSIC PREFERENCE, AND MUSIC-LISTENING HABITS: A SURVEY STUDY

By

#### Jin-Hi Choi, MT-BC

The purpose of this study was to expand the current understanding of the connection between music and characteristic moods by exploring the relationships among general characteristic moods, music preference, and music-listening habits in an everyday setting. Two hundred thirty-one people with a wide range of ages participated in this study by completing the Multiple Affect Adjective Check List – Revised (MAACL-R) and a questionnaire designed by the researcher. People who were in more anxiety or more depression spent more time listening to music in their everyday life. People who liked hard rock/ heavy metal music spent more time listening to music in their everyday life (p <.01.). Younger people liked and actually listened to hard rock/ heavy metal music and rap/ hip hop music more than older people did (p < .01.). Older people liked classical music and country music more than younger people did (p < .01.). More educated people liked soft rock/ pop music and rap/ hip hop music less, and they spent less time on rap/ hip hop music listening (p < .01.). More educated people liked classical music and jazz more (p < .01), and they also spent more time on classical music listening than less educated people did (p < .05.). Further study done with a large sample in which age and levels of education are tightly controlled is recommended. Qualitative study of this research topic is also recommended.

Copyright by JIN-HI CHOI 2003 To all dedicated music therapists, music educators, and people who believe the power of music in their emotional lives.

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#### **ACKNOWLEDGMENTS**

Without the support and warm encouragement of the special people in my life, I could never have attempted and completed this project. First, I'd like to thank Dr. Albert LeBlanc, my research advisor, for his help, patience, dedication, and wisdom not only for this study, but also for my academic growth.

Dr. Frederick Tims, my graduate advisor, listened to me, and supported me with warm encouragement and enormous consideration throughout my graduate schooling at Michigan State University. The modest professor Roger Smeltekop inspired me to keep going on with music therapy from my undergraduate days at Michigan State University. I will always respect and believe that he is a model which all music therapists should follow.

I'd like to express a special thank to Dr. David Stowe who showed his interest in my study, as well as music therapy, and kindly allowed me to survey students enrolled in one of his classes at Michigan State University.

I'd also like to express a great deal of appreciation to all the people who volunteered to participate in my study including undergraduate and graduate students at Michigan State University and the senior citizens in Burcham Hills, MI. Without them, this study would not have been possible.

I will always be indebted to my family. Without their tangible and intangible support, I could never have successfully completed my study abroad at Michigan State University. I remember their prayers for me, and they were always there for me. I'd like

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I always thank God for accompanying and guiding me through my life and for allowing me to meet these especially precious people. I also appreciate his plan for me, in hopes that I can fully be qualified to fulfill his project for me.

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#### Chapter 1

#### INTRODUCTION

Since ancient times there has been a persistent interest in the relationship between the mind and music among philosophers, music psychologists, and music educators. Plato believed that because music affected the formation of a human being's mind in an enormous way, a human being should be educated with music that was morally acceptable. Plato recommended frequent uses of Dorian and Phrygian mode, arguing against the use of Lydian and Mixolydian mode, which he believed were not good for the mind.

The relationship between the mind and music appears to still remain an area in need of research. While considerable research has been conducted on this topic, and the results of these studies, as well as personal experiences, support a connection between the mind and music, more remains to be learned. Saying that both music and people are multidimensional, Wheeler (1985) invited researchers to examine the influence of characteristics of both the listener and the music in order to better understand reactions to music.

How do people listen to, feel, and understand music? Like Plato's belief, does music significantly influence the process of forming a person's mind, including general mood and personality, either in a positive way or in a negative way? Does a person listen to a certain type of music because he or she is in a particular mood?

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In relation to the issue of 'music and the mind,' Thaut (1989, p.56) pointed out that the majority of the studies he examined provided strong evidence for the following four conclusions: (a) music evokes affective-mood reactions, including emotional peak experiences; (b) music can alter a listener's mood; (c) affective-mood responses to music are accompanied by physiological changes in the individual; and (d) existing mood, music preference, cultural expectations, and arousal needs also play a role in determining affective-mood responses to a given music stimulus. Considering Thaut's comment, it is evident that music influences people both physically and psychologically. In addition, such a connection between music and affective-mood responses evokes the question of what elements are involved in the connection between music and characteristic moods.

LeBlanc (1987) provided an important theoretical basis for the connection between music and characteristic moods. According to LeBlanc's (1982) interactive theory of music preference, 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. For the listener's characteristics, LeBlanc mentioned auditory sensitivity, musical ability, musical training, personality, sex, ethnic group, socio-economic status, maturation, memory, physiological enabling conditions, basic attention, and current affective state. Here, LeBlanc pointed out the crucial role of the listener's current affective state in relation to his or her reaction to input information. He explained that current affective state was best conceptualized as the listener's current mood, which would function more as a filter than a gate, but it

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Wheeler (1985) investigated the influence of mood, personality characteristics, musical taste, musical training, college major, gender, and age, plus hearing music live or recorded, on listeners' moods after hearing music and on their enjoyment of the music. She found that the effect music had on mood was dependent upon both the nature of people's moods and their liking of the music. Specifically, Wheeler reported that mood improved for people who began in a sad mood and heard music they liked, while mood became worse for those who began in a happy mood and heard music they did not like. On the other hand, people who began in a sad mood and heard music they did not like remained in a sad mood, while those who began in a happy mood and heard music they liked remained happy. Wheeler's study did give an insight into the fact that an individual's music preference, as one of the factors with which music interacts, influences a person's mood; however, this study was conducted in an experimentally designed setting as opposed to in a daily life situation.

Studies on the connection between music and characteristic moods have rarely been conducted in a daily life situation. Most of the studies exploring this topic have been conducted in intentionally designed experimental settings in which immediate mood responses to carefully selected music stimuli are examined. As an exception to this, Stratton and Zalanowski (1997) were interested in exploring the relationship between characteristic moods and the types of music most commonly listened to on a daily basis.

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Their study was the pioneer in exploring how everyday music-listening preferences and exposure to music were related to overall persistent moods; however, the researchers were primarily interested in seeing how different people used music listening as a mood induction technique in their everyday life according to different educational levels.

Studies that explored how a person's music-listening habits were related to his or her general characteristic moods had not been found in the 'music and mood' research area.

The present study focused on how people's general characteristic moods were related to the types of music they usually listened to on a daily basis, and how their music preferences were related to their general characteristic moods and their usual music-listening habits as well. "Music-listening habits," in this study, were defined as how many minutes per week people listened to each type of music, how many minutes per week people listened to all kinds of music considered together, and the methods through which people listened to music. The results of this study do not show causality between these variables, but it is expected that exploring the relationship between characteristic moods and music can provide music therapists and music educators with some meaningful implications in their use of music for therapeutic and educational purposes. Also, professionals in the fields of advertising, aesthetics, education, marketing, music, psychology, and sociology are likely to benefit from greater knowledge in this area.

#### Purpose

The purpose of this study was to expand the current understanding of the

relationships between music and characteristic moods by focusing on an everyday life setting and people's general persistent characteristic moods rather than on structured experimental settings and immediate mood responses.

#### **Problems**

The following were specific research foci of this study:

- (1) To explore the relationship between music preference and general characteristic moods in an everyday setting.
- (2) To explore the relationship between music-listening habits and general characteristic moods in an everyday setting.
- (3) To explore the relationship between music preference and music-listening habits.

#### **Definitions**

I wish to present clear and understandable definitions of relevant terms used in this study. And, in some cases, I believe that general dictionary definitions are very helpful.

1. Mood: The new American Webster handy college dictionary (Morehead, & Morehead (Eds.), 1981) defined the term of mood as a state of mind or feeling, and/ or disposition.

Also, the American college dictionary (Branhart & Stein (Eds.), 1963) defined mood as a frame of mind, or state of feeling, at a particular time. In a dictionary of psychology, the term mood was defined as a temporary but relatively sustained and pervasive affective state, often contrasted in psychology and psychiatry with a more specific and short-term

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emotion (Coleman, 2001). LeBlanc (1987) defined mood as a current affective state, which, in relation to the listener's music preference, is best conceptualized as the listener's current mood. According to Lazarus (1984, p.125), moods usually refer to sustained general states, such as sadness and contentment, that may or may not be considered emotions depending on theoretical and definitional convention. Stratton and Zalanowski (1989) also suggested that moods should be less intense physiologically than emotion, reflected more in subjective responses, cognition, and behavior, and can most appropriately be measured along these dimensions.

For the purpose of this study, "mood" was defined as the participant's long term and characteristic affective state as measured by the Multiple Affective Adjective Check List-Revised (MAACL-R) trait form (Zuckerman and Lubin, 1985).

- 2. This study used the Multiple Affect Adjective Check List-Revised (MAACL-R) trait form (Zuckerman & Lubin, 1985) to measure participants' general characteristic moods. The MAACL-R is a versatile instrument for the measurement of five categories of affect: anxiety, depression, hostility, positive affect, and sensation seeking. Therefore, the following moods were defined:
- 2.1. Anxiety: A term used with many shades of meaning and in many different areas of psychology. It is generally held to be an unpleasant emotional state resulting from stress or conflict and characterized by fear and apprehension. If the fear and apprehension are vague and diffuse and not attached to a specific object, or if they seem excessive, the anxiety is considered neurotic (Statt, 1998).

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- 2.2. Depression: One of the most common forms of emotional disturbance which can vary in intensity from an everyday attack of "the blues" to a psychotic condition of paralyzing hopelessness. It is characterized by anxiety, dejection and a general lowering of activity. There is a difference of opinion as to whether (or to what extent) the causes of depression are to be found in unconscious conflict or in biochemical malfunctioning of the brain (Statt, 1998).
- 2.3. Hostility: The American college dictionary (Branhart & Stein (Eds.), 1963) defined hostility as a hostile state, enmity, and antagonism. It illustrated "animosity, ill will, unfriendliness, and opposition" as synonyms of the term of hostility.
- 2.4. Affect: The term affect means that which arouses emotion rather than cognition or thought and the resulting diffuse mental condition. It is a fundamental controlling element when a person is in an emotional state. In psychology, affect is more frequently used as a description of a response a mental or emotional state. Psychologists think affect is causal, and it influences perception, cognition, and behavioral action. In addition, the term affect is used to describe any motivational condition, whether an emotion or a drive state like sexual urge, hunger, thirst, the need to eliminate, and physical pain (Kazdin, 2000).
- 2.5. Sensation seeking: The concept of sensation-seeking has been described at length in an article by Zuckerman, Eysenck, and Eysenck (1978). An instrument called the Sensation-Seeking Scale was developed by Zuckerman and associates (Zuckerman, Kolin, Price, & Zoob, 1964) in an attempt to provide a measure for the construct "optimal level

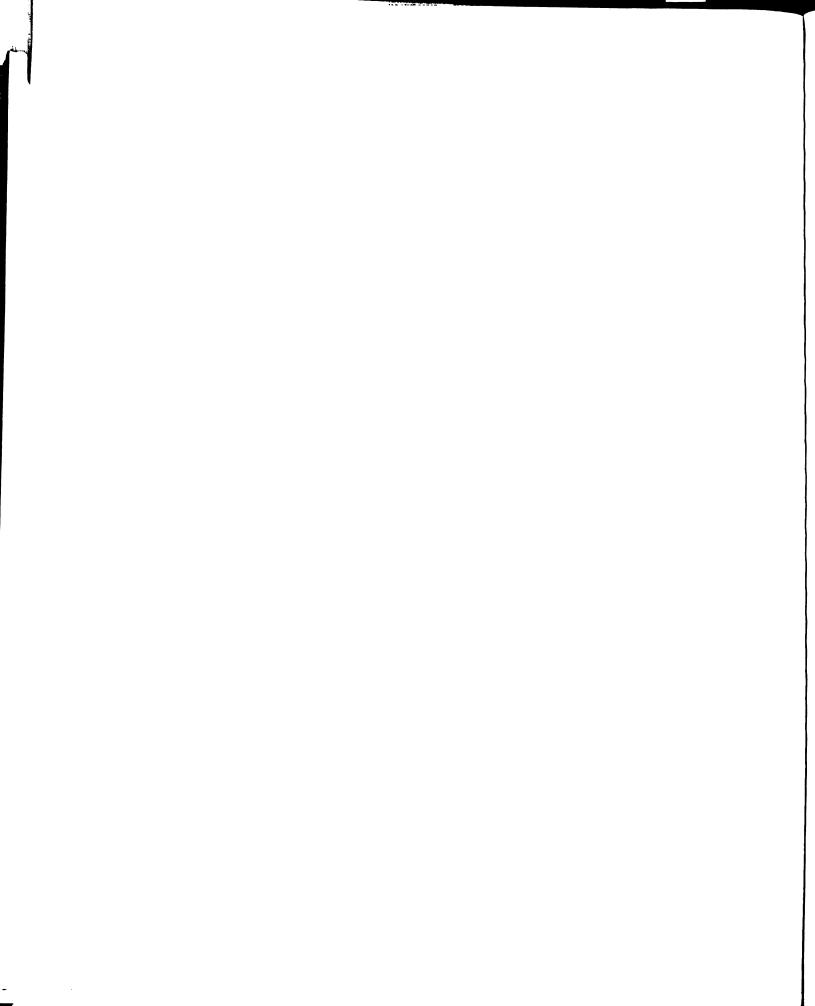
of stimulation," which these authors stated could also be viewed as "optimal level of arousal." The Sensation-Seeking Scale derived from factor analyses of items reflecting a positive reaction to or a desire for stimulating, exciting, and novel kinds of experiences. Zuckerman (1971) described the following four factors in the dimension of sensation seeking (in Zuckerman, Eysenck, & Eysenck, 1978, p.140): "The first factor was called Thrill and Adventure Seeking (TAS), and it contained items expressing a desire to engage in sports or other activities involving speed or danger. The second factor was called Experience Seeking (ES), and it represented the seeking of experience through the mind and senses, travel, and a nonconforming life-style. The third factor was labeled Disinhibition (Dis), which seemed to represent the desire for social and sexual disinhibition as expressed in social drinking, partying, and variety in sexual partners. The fourth factor, called Boredom Susceptibility (BS), represented an aversion to repetition, routine, and dull people, and restlessness when things are unchanging."

#### **Assumptions**

I assumed that the six styles of music that were carefully defined in this study not only represented the most commonly recognized categories, but also would not cause any confusion or misunderstandings among participants in responding.

I assumed that participants really knew what these styles of music sounded like, even when they did not hear them but only saw the name of the style in print.

I assumed that participants would tell the truth when responding to the mood scale, the MAACL-R.



#### Limitations

Perhaps the most important limitation of this study was the fact that I did not play actual music examples for participants to hear.

There might have been a possibility that the actual number of listening minutes per week reported by the participants were not as accurate as would have been desirable.

There might also have been a possibility that some participants did indicate their current moods during the survey rather than their general persistent characteristic moods. However, this study was based on general persistent characteristic moods.

#### Chapter 2

#### **REVIEW OF LITERATURE**

#### Music and Characteristic Moods

Many studies (Rohner & Miller, 1980; Hanser, Larson, & O'Connell, 1983; Stratton & Zalanowski, 1989; Thaut & De l'Etoile, 1993; Carter, Wilson, Lawson, & Bulik, 1995; Kerr, Walsh, & Marshall, 2001; De l'Etoile, 2002) and personal experiences show that music can change moods, either in a positive or a negative way. The mood-modifying properties of music can play a significant role in one's affective system.

Rohner and Miller (1980) found a trend that sedative music had some anxiety-reducing effects upon high state anxiety participants. Stratton and Zalanowski (1989) examined the ability of music and paintings to change moods in college students who were enrolled in introductory level psychology and music courses. The music and paintings used in this study were chosen to reflect the mood states of depression, positive affect, and neutrality. They found that paired music and paintings did have significant effects on changing moods with the mood change always going in the direction of the music. With their findings, Stratton and Zalanowski suggested that music appears to be dominant in determining the direction of mood change.

According to De l'Etoile (2002), in the mid-1970s psychologists began to recognize the profound effect of emotional states on cognitive processes. Research from the field

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of cognitive science has demonstrated that emotion and moods constrain a number of cognitive processes such as memory, learning, and perception (Kerr, Walsh, & Marshall, 2001). Memory, learning, and perception are especially critical cognitive processes in the context of therapy. In terms of memory performance, research findings in this area have contributed to the identification of a cognitive phenomenon known as mood statedependent recall. That and De l'Etoile's study (1993) supported the influence of musical mood induction procedures on a cognitive process of memory retrieval. Musical mood induction means using musical selections to produce affect change (Durand & Mapstone, 1998). Thaut and De l'Etoile (1993) investigated the effects of music used as background stimulus or as a mood induction technique on a cognitive learning task. They sought to determine if music can produce a mood-state dependent recall effect in which music is integrated as part of the internal environmental context of the learning situation. They compared the effect of background music on encoding and recall of a list of words with the effect of musical mood induction on the same processes. The researchers expected that the induced mood would become associated with the cognitive information of a list of words in these processes. Thaut and De l'Etoile reported that subjects who participated in the mood induction condition recalled significantly more information than did those in the no music condition and the condition with background music present only during encoding.

Later, De l'Etoile (2002) conducted another experiment to replicate and expand upon this study by examining the effect of a musical mood induction procedure on mood

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state-dependent word retrieval. In this experiment, to assess the effect of the musical mood induction procedure on mood-state dependent word retrieval, the participants were randomly assigned to one of the following four conditions: (a) musical mood induction prior to encoding only, (b) musical mood induction prior to recall only, (c) no musical mood induction prior to encoding or recall, and (d) musical mood induction prior to both encoding and recall. Providing additional evidence for mood state-dependent effects on memory, De l'Etoile reported that the high success rate (85%) for this technique of musical mood induction procedure concurred with the results obtained previously by Thaut and De l'Etoile (1993). Through the results from both studies, the researchers proposed clinical applications of affect modification through music for cognitive and behavior therapy, and for music therapy respectively. In addition, it will be useful for music therapists to explore musical mood induction techniques in their music psychotherapy approaches to address clients' clinical disorders such as depression. However, it cannot be assumed that the same piece of music will be equally effective at eliciting a certain mood state across a range of individuals (Carter, Wilson, Lawson, & Bulik, 1995). The importance of individualizing music for subjects of the musical mood induction procedure should be highlighted.

The assumption that a relationship may exist between music and behavior has long been intuitively held. How does music affect human behavior? This question has been systematically investigated in a variety of settings as evidenced by research conducted in music therapy and psychology as well as other fields of study. Some studies (Wass,

Miller, & Redditt, 1991; Harris, Bradley, & Titus, 1992; Wooten, 1992; Gowensmith & Bloom, 1997; Durand & Mapstone, 1998) suggest that certain types of music, for example, heavy metal music, may induce negative and antisocial emotions that could lead to destructive behaviors. Harris and Bradley (1992) compared the inappropriate behavior of clients at a state mental health hospital when hard rock and rap music were played for 21 days, followed by easy listening and country and western music for 21 days. The results of this study demonstrated that more inappropriate behavior was observed under the condition in which hard rock and rap music were played than when easy listening and country western music were played.

Duran and Mapstone (1998) studied the experimental manipulation of conditions associated with affect change and the influence of affect change on challenging behaviors. They intended to examine how musical manipulations that were associated with certain affective responses influenced challenging behaviors such as aggression and self-injurious behavior (SIB) among the mentally retarded. The researchers designed two experiments. Experiment 1 was designed to identify stimulus conditions predictive of high rates of the participant's challenging behavior and these conditions were used in Experiment 2 as the baselines. In Experiment 2, the high rate condition determined in Experiment 1 was repeated with the addition of fast and slow beat music. Duran and Mapstone reported that participants displayed differential expressions of affect in these conditions. They said that playing fast beat music during conditions previously associated with high rates of challenging behavior resulted in reliable reductions in these behaviors.

Meanwhile, it was reported that rates of challenging behavior became higher than in the previously assessed high rate condition when slow beat music was played. Duran and Mapstone suggested that varying music may serve as an establishing operation for challenging behavior in that it can moderate the effects of immediate stimulus conditions such as task demands or tangible reinforcers. "Establishing operations" mean situations that affect the reinforcing properties of other events.

Thaut (1989) mentioned that considering the influence of affect on cognition and behavior, research in music therapy must investigate the potential of music as an affective stimulus to influence behavioral learning and change in therapeutic context. Emotional experience is often at the center of many of the problems that bring people to a therapy situation. Investigators studying the therapy process have repeatedly found that primary emotional change is correlated with therapeutic outcome; therefore, they say that affective processes are critical to understanding and promoting lasting therapeutic change (Kerr, Walsh, & Marshall, 2001). The behavioral effects of music such as relaxation and anxiety-reduction have been investigated. Using a sample of 40 anxious adults, Kerr, Walsh, and Marshall examined the use of music to increase affect modification and emotional restructuring in a cognitive reframing intervention. Reframing is one technique that could potentially benefit from the mood stimulating properties of music.

In the reframing process, the therapist or client generate new positive cognitive understandings or frames of reference for a given situation or experience. Any emotional change is understood as a consequence of shifts made in the client's cognitive awareness.

Kerr, Walsh, and Marshall found that the music-assisted reframing intervention was more efficacious than the typical reframing intervention in reducing anxiety, modifying affect, and promoting imagery-vividness. In addition, the results showed that subjects in the music-assisted reframing group reported more positive affective reactions than subjects in the standard reframing group. Kerr, Walsh, and Marshall suggested that the success of the music-assisted intervention in this study indicates that music may be effectively used to promote emotional change. Hanser and Larson (1983) also found the effectiveness of musical stimuli to reduce anxiety and/ or increase relaxation. They reported that a combination of patient-selected and experimenter-chosen music reduced pain perception and increased relaxation in expectant mothers. These studies encourage therapists to employ music systematically to elevate mood. In music therapy, whether music should match the client's present mood or oppose it in order to influence the client most effectively is a central issue (Stratton & Zalanowski, 1989).

### Music Preference and Characteristic Moods

There has been strong evidence that existing mood, music preference, cultural expectations, and arousal needs play a role in determining affective-mood responses to a given music stimulus (Thaut, 1989). Researchers (Stratton & Zalanowski, 1984; Wheeler,1985; Litle & Zuckerman, 1986; Davis & Thaut, 1989; McNamara & Ballard, 1990; Arnett, 1991; Metzger, 1991; Wass, Miller, & Redditt, 1991; Martin, Clarke, & Pearce, 1993; Singer, Levine, & Jou, 1993; Thaut & Davis, 1993; Lester, Whipple, &

Melissa, 1996; Forsyth, Barnard, & McKeganey, 1997) have investigated how music preference influences affective-mood and behavioral responses to a given music stimulus. Stratton and Zalanowski (1984) suggested that individual preferences must be considered when using music to aid relaxation. Thirty-six college freshmen and sophomores who were enrolled in an introductory psychology course participated in their study designed to examine the role of listening to music in relaxation. Stratton and Zalanowski reported that no single type of music was found to lead to significantly more relaxation; rather, the most important factor in relaxation was the degree of liking for the music. They mentioned that precategorized soothing music may not always be soothing. Davis and Thaut (1989) also emphasized the importance of music preference in reducing anxiety and/ or increasing relaxation. They conducted a study to measure physiological and psychological responses to preferred and relaxing music. The results of this study showed that listening to preferred music was effective in reducing state anxiety and in enhancing relaxation. According to Davis and Thaut, it is important to note that very different types of music are effective in bringing about positive change, possibly because preference, familiarity, or past experience with the music may have been more important than type of music in determining relaxation and/ or anxiety reduction potential.

Meanwhile, Litle and Zuckerman (1986) reported that sensation seeking, that is, a trait characterized by the need for varied, novel, and complex sensations and experience, and the willingness to take physical and social risks for the sake of such experiences (McNamara & Ballard, 1990, p.231), was positively correlated with a music preference

for all types of rock music and negatively correlated with a preference for bland soundtrack music. McNamara and Ballard (1990) also found that people who preferred more arousing types of music had higher scores on the Sensation Seeking Scale (Zuckerman, Eysenck, & Eysenck, 1978) than people who preferred more soothing types of music.

The negative influences of heavy metal music on adolescents' moods and behaviors have continuously been emphasized by researchers. Arnett (1991) intended to delineate some of the characteristics of adolescents who like heavy metal music. He found a significant relationship between a preference for heavy metal music and reckless and dangerous activities in adolescents. According to Arnett, boys who like heavy metal music reported a higher rate of a wide range of reckless behavior, including driving behavior, sexual behavior, and drug use. Arnett also reported that girls who like heavy metal music were more reckless in the areas of shoplifting, vandalism, sexual behavior, and drug use, and had lower self-esteem. Regarding drug use, Arnett also found that adolescents who preferred heavy metal music were more likely to use, but not abuse, illegal drugs than those who did not like heavy metal music. Similarly, Forsyth and Barnard (1997) reported that a relationship existed between adolescent drug use and identification with styles of music linked to specific youth culture. Forsyth and Barnard found fans of dance music were more likely to have used drugs than those who preferred other types of music. Singer, Levine, and Jou (1993) examined the relationship between a preference for heavy metal music and delinquency as well as delinquent associations.

They reported that heavy metal music did have an effect on delinquency when parental control was low.

Some researchers (Metzger, 1991; Martin, Clarke, & Pearce, 1993; Lester & Whipple, 1996) have investigated the relationship between music preference and psychological vulnerability such as depression and suicidal preoccupation. Lester and Whipple (1996) explored the question of whether or not individuals who prefer country and Western music or heavy metal music have stronger suicidal tendencies than those preferring other kinds of music. The results showed that a preference for country and Western music was not associated with depression and suicidal preoccupation; however, although preference for heavy metal music was not associated with current depression and suicidal ideation, those with a stronger preference for such music were more likely to have considered suicide in the past. Interestingly, Lester and Whipple reported that psychoticism scores were associated with a stronger preference for jazz and rhythm and blues, whereas neuroticism scores were not associated with music preferences. Martin, Clarke, and Pearce (1993) investigated possible relationships between adolescents' music preference and aspects of their psychological health and life style. They reported that significant associations appeared to exist between a preference for rock/ metal and suicidal thoughts, acts of deliberate self-harm, depression, delinquency, drug taking, and family dysfunction. In addition, the researchers suggested that people who feel sadder after listening to rock and heavy metal music appear to be most vulnerable to acting out the lyrics or themes from the music. Martin, Clarke, and Pearce believed that a

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preference for rock/ heavy metal music particularly among young females may be an indicator for vulnerability, as were depression, suicidal thoughts, deliberate self-harm, risk taking, drug and alcohol abuse, and family psychopathology.

### Music-Listening Habits and Characteristic Moods

The theory of mood management explains that people choose sensory materials in order to regulate their affective experiences and mood states in desirable ways (Zillmann, 1988). Considering the theory of mood management, musical mood management can be frequently observed in daily life. Schwartz and Fouts (1999, in Woody & Burns, 2001, p.57) reported that among adolescents, the most common motives for listening to music were to relieve boredom and to entertain themselves. According to them, "to feel better," "to keep me in the mood I am in," and "to help me get into a particular mood" were the frequently mentioned motives for listening to music among adolescents. How then are most commonly listened to types of music related to characteristic moods? There has been little research exploring the relationship between music-listening habits and characteristic moods. Stratton and Zalanowski (1997) conducted a survey to determine people's characteristic moods and the types of music they typically listened to. College students, college faculty and staff, and noncollege adults participated in this survey. Stratton and Zalanowski reported the following: Among the college students, listening to rock was positively correlated with anxiety, depression, and sensation seeking, and negatively correlated with positive affect. Among the faculty-staff, classical music-

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listening was positively correlated with depression, anxiety, and hostility, while total music listening was positively correlated with depression and negatively correlated with positive affect. Among the noncollege adults, only a small correlation between classical music and positive affect was found. Stratton and Zalanowski suggested that younger and more educated individuals use music more for mood management.

# Chapter 3

### **METHOD**

I employed two different survey forms to examine participants' general characteristic moods and their music preference and music-listening habits. For the survey on general characteristic moods, the Multiple Affect Adjective Check List-Revised (MAACL-R) trait form (Zuckerman & Lubin, 1985) was used. MAACL-R was a versatile instrument for the measurement of affect traits. It presented the participants with sixty-six scorable adjectives which measured five categories of affect: anxiety, depression, hostility, positive affect, and sensation seeking. The individual MAACL-R scale scores were obtained by summing the number of adjectives checked on each of the five respective scales. Please, refer to information appearing in Appendix A. Because the publisher's standard permission for graduate research allowed me to use up to five sample items from the MAACL-R, I chose five adjectives, and reproduced them in Appendix A. Each adjective represents one of the five respective characteristic mood scales. If you are interested in MAACL-R, please, contact the publisher directly referring to the contact information shown in Appendix A. In addition, to examine music preferences and music-listening habits, I designed my own survey (See Appendix B). The responses from the surveys served as the data in this study, and I developed a coding system and utilized the Statistical Package for the Social Science (SPSS) to analyze the responses.

# **Participants**

Two hundred seventy-one people with a wide range of ages voluntarily participated in this study. However, 23 of them did not complete their surveys, and 17 of them made errors while they were responding to their surveys. Therefore, a total of 231 people actually completed all aspects of data collection. Ages ranged from 18 to 93, with an average age of 32.7. Most of the participants were college students. Table 1 shows the distribution of the participants' ages.

Table 1

Distribution of the Participants' Ages

Age	Frequency (people)	Rate (%)
18 ~ 20s	150	64.9
30s	20	8.7
40s	22	9.5
50s	17	7.4
60s	3	1.3
70s	5	2.1
80s	12	5.2
90s	2	0.9
Total	231	100

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Among the participants, 94 were males and 137 were females, and the majority of them were Caucasians. Table 2 shows the distribution of the participants' ethnicities. 'Other' included Eastern Indian, Afghan, and Arabic. 'Asian, not American' included Koreans, Japanese, and Chinese. Plus, the participants whose parents were interracial couples reported their ethnicity as 'Mixed'.

Table 2

Distribution of the Participants' Ethnicities

Ethnicity	Frequency (people)	Rate (%)
Caucasian	168	72.7
African-American	10	4.3
Latino(a)/ Chicano(a)	7	3.0
Asian/ Pacific American	12	5.2
Native American	2	.9
Other	3	1.3
Mixed	9	3.9
Asian, not American	20	8.7
Total	231	100

The participants reported their highest levels of education completed. The lowest level of education was12th grade and the highest one was doctor's degree or in a doctoral

program. The majority of the participants were college students. Table 3 shows the participants' levels of education.

Table 3

Participants' Levels of Education

Education	Frequency (people)	Rate (%)
Less than 12 <sup>th</sup> grade	0	0
12 <sup>th</sup> grade	13	5.6
College student	122	52.8
College graduate	41	17.7
Master's degree or In master's program	33	14.3
Doctor's degree or In doctor's program	22	9.5
Total	231	100

Among 231 participants, 88 people reported that they were trained musicians or music major students. Table 4 shows the participants' musical training.

Table 4

Participants' Musical Training

Musical Training	Frequency (people)	Rate (%)
Yes	88	38.1
No	143	69.9
Total	231	100

### Survey Development

Two survey questionnaires were used. One was for measuring general characteristic moods, and the other was for checking music preference and music-listening habits. For the mood questionnaire, the Multiple Affect Adjective Check List-Revised (MAACL-R) trait form (Zuckerman and Lubin, 1985; see Appendix A) was used. MAACL-R consists of 132 adjectives and assesses people's general feeling in their everyday life in terms of five different mood categories: anxiety (A), depression (D), hostility (H), positive affect (PA), and sensation seeking (SS). The reliability of the Trait Form of the MAACL-R has been reported in terms of internal consistency, alpha coefficients and test-retest reliability. All Trait MAACL-R scales show adequate internal reliability. The alpha coefficients range from .69 to .95. Table 5 shows the internal consistency reliabilities (alpha) of the Trait Form of the MAACL-R for the general population, college students, and the elderly.

Table 5

Internal Consistency (Alphas) of the MAACL-R Trait Form

General Population	College	Elderly
1543	1259	858
.79	.82	.69
.81	.82	.81
.84	.87	.80
.74	.92	.89
.69	.78	.72
	.79 .81 .84 .74	.79 .82 .81 .82 .84 .87 .74 .92

The Trait Form of the MAACL-R has also been evaluated in terms of test-retest reliability. The authors believe that most reliabilities of the Trait Form of the MAACL-R are satisfactory even after an 8 week retest interval. Table 6 shows retest reliabilities for the Trait version of the MAACL-R for intervals of 2 and 8 weeks. These are all college samples.

Table 6

Retest Reliabilities of MAACL-R Trait Form

2 wks.	8 wks.
23	52
89**	64**
77**	61**
84**	53**
41**	39**
45**	60**
	23 89** 77** 84** 41**

<sup>\*</sup>p < .05, \*\*p < .01.

In addition to MAACL-R, I created a music related questionnaire (see Appendix B) that measured participants' music preferences and their listening-habits on a daily basis. This music related questionnaire included six styles of music and this categorization of music styles was carefully defined by me with the consultation of an experienced professional in this area, Dr. Albert LeBlanc, Professor of Music Education at Michigan State University. Thus, these six styles of music not only represented the most commonly recognized categories, but also were unlikely to cause any confusion or misunderstandings among participants in responding. The six styles of music were: hard rock/ heavy metal, soft rock/ pop, country music, jazz, rap/ hip hop, and classical music. The participants were asked to rank the types of music in order according to how well

they liked each one of them. Participants responded with #1 being used to indicate the most liked music and #6 being used to indicate the least liked music. The participants were also asked to estimate the number of minutes per week they listened to each type of music, and the total amount of minutes per week they listened to any kind of music. Participants were also asked to report the number of minutes per week they listened to any kind of music on each of the given media. The listening media suggested in the survey included radio, CDs, DVDs, cassette tapes, LPs, TV, internet, and live.

According to LeBlanc's (1982, p.29) interactive theory of music preference, 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 regarded the listener's sex, ethnic group membership, and the maturation variable as a part of the characteristics of the listener that played an important role in music preference decisions; therefore, I asked the participants to report their gender, ethnicity, and age on the music related questionnaire to explore how different music preferences were associated with people's gender, ethnicity, and age. In addition, I asked the participants to check their educational levels in consideration of not only LeBlanc's (1982) theory but also the results of Stratton and Zalanowski's study (1997). Musical training and maturation mentioned by LeBlanc were directly connected to the concept of educational level. In addition, Stratton and Zalanowski (1997) suggested that music-listening should be more related to mood among more educated individuals. Considering these suggestions, I also asked the participants

to report their highest levels of education completed to examine how educational levels affected people's music preferences and music-listening habits on a daily basis.

A panel of three experts in survey design and psychology of music served as judges to determine clarity of the instruction and how well the survey addressed the topic (music preference and music-listening habits). The panel members consisted of Dr. Albert LeBlanc, Professor of Music Education at Michigan State University, Dr. Frederick Tims, Professor and Chair of Music Therapy at Michigan State University, and Mr. Roger Smeltekop, Associate Professor of Music Therapy at Michigan State University.

### **Procedure**

This study proceeded according to the following steps.

- 1) I obtained copies of the MAACL-R and its manual by ordering them from Educational and Industrial Testing Service (EdITS) after my qualifications had been verified in March, 2002.
- 2) I created and pilot tested a survey to examine music preferences and music-listening habits with twenty Michigan State University students being the subjects of this pilot study in March, 2002.
- 3) After examining the completed pilot test results to check for clarity, I made changes in the categorization of the types of music and the types of media to improve the music-related survey questionnaire.

- 4) I received permission and approval to conduct this current study from the Michigan State University Committee on Research Involving Human Subjects (UCRIHS) on February 2, 2003.
- 5) The survey was conducted from February 6, 2003 through February 24, 2003. I initially intended to recruit a total of one hundred twenty people, with an approximately equal number of males and females with a wide range of ages as volunteers for the study. But, actually, a total of 271 people participated in this study in a voluntary way, and of that number, 231 surveys proved usable as the data. Only those who were defined as adults by UCRIHS were surveyed for this study. A person whose age was over eighteen, or who was a college student, was approved as an adult by UCRIHS. Even though I asked the participants to report if they were musically trained or not on the survey, I randomly recruited volunteers regardless of their majors, without considering their musical training, on the logical basis of LeBlanc's (1984) suggestion that those who lack musical training often have difficulty naming the physical properties of music they hear, but their reaction to properties that please or displease them seems to be as strong as that of the trained musician.
- 6) I used several different ways to recruit participants. First, I advertised for volunteers to participate this study by speaking to junior and senior MSU music therapy students in their class with the instructor's permission. While advertising, I explained the purpose of this study and the approximate amount of time needed to complete the survey, and indicated the time and the place the survey would be conducted. The volunteers were

surveyed at the place announced on a prearranged day, as scheduled.

Second, I requested participation in this study in the Jazz History class at Michigan State University.

Third, I put the survey questionnaires in every Michigan State University music therapy student's mailbox in the music therapy clinic with a brief announcement about this survey, asking both undergraduate and graduate music therapy students to respond to this survey.

Fourth, I was allowed to survey 36 college students enrolled in one of American History courses at Michigan State University by the professor who was in charge of that class.

Fifth, I directly contacted individuals I would like to survey at various places on the Michigan State University campus, such as the Union building, dormitories, cafeterias, libraries, and classrooms.

Sixth, I visited a large retirement community in the Lansing area, Michigan State to recruit senior subjects, after receiving the permission of the recreation manager. She allowed me to make a direct contact with the residents at any place in the building. Once a resident showed his or her agreement to participating in the survey, I individually helped him or her complete the survey, staying with him or her because their age ranges were in the 70s, 80s, or 90s.

Seventh, I visited the Community Music School at Michigan State University after getting permission of the responsible authorities to ask if parents who brought their

children to music lessons were interested in participating in the survey while they were waiting for their children to finish their lessons.

Eighth, I also had a chance to make a direct contact with parents of high school seniors who applied to Michigan State University School of Music on their audition day, February 14, 2003.

Last, I went to a large shopping mall in the Lansing area, Michigan State to recruit participants. I was able to approach individuals who were taking a break, sitting on a bench during their shopping, and those who took a rest in the food court area after having a snack. Table 7 summarizes the survey process.

Table 7

The Process of Survey

Case	Withdrawal	Completion	Usable	N
		Errors	responses	
Music Therapy class	0	0	4	4
Jazz History class	10	0	6	16
Music Therapy Clinic	7	0	8	15
American History class	0	2	34	36
MSU campus	0	8	102	110
Retirement Home	3	2	20	25
Community Music School	0	1	4	5
Audition Day	0	2	32	34
Mall	3	2	21	26
Total	23	17	231	271
Rate (%)	8.5	6.3	85.2	100

7) Testing was conducted in the following manner: I first explained the purpose of the study and what the survey was about, and asked individuals if they were interested in participating in the survey. Once they decided to participate in the survey, I presented two copies of the informed consent form, allowing time for reading them and asking any questions. I asked participants to sign both copies of the informed consent form and to

turn in one of them to me, but they could keep the other for themselves. After collecting the signed consent forms, I provided participants with the mood questionnaire along with the music questionnaire concerning music preferences and music-listening habits, and asked them to complete each questionnaire. I did not play recorded music examples for participants. Not playing music examples made the survey easier and quicker to administer; therefore, I not only could get more participants, but also could get a wider sampling of people. All participants were surveyed anonymously, and they were not supposed to write their name on the survey questionnaires; instead, I put a unique number on each participant's data in order to guarantee anonymity to all of the participants surveyed. All data were kept in a secure area, accessed only by me.

#### Data Analysis

In this study I intended to explore how general characteristic moods were related to music preferences and music-listening habits. The responses from the surveys served as the data in this study, and a coding system was used to prepare the data for computerized statistical analysis. I used the Statistical Package for the Social Science (SPSS) to analyze the data.

I did a frequency analysis on the demographic data, including gender, ethnicity, age, and educational level, using charts as well as tables to report this, if appropriate. I also computed basic descriptive statistics, including the mean, standard deviation, and minimum and maximum score, for each mood scale and for the appropriate items of the music listening questionnaire.

I scored each characteristic mood scale following the manual for the MAACL-R:

Every time an adjective on a scale was checked by the participant, that added one point to
the participant's score on that scale. A larger score meant that that mood was more
prominent for that participant.

Each participant automatically generated a rank order for the six styles of music listed on the music questionnaire, with a smaller number indicating a greater preference for a style. However, when I was analyzing the rank order data using SPSS, I transformed the direction of the number to make a larger number indicate a greater preference for a style, because a bigger number usually represents a higher degree of something. Some participants did not choose to rank every type of music, saying that they did not know certain types of music, or they did not listen to such types of music at all. In this case, I gave the unranked types of music an average rank score for the remaining the types of music.

I used this rank order data and the raw scores on the mood scales to compute Spearman correlation coefficients between each characteristic mood and the ranked preference for each style of music. SPSS automatically converted the raw scores for mood into rank order data when the Spearman procedure was carried out. For example, if a result showed that hard rock/ heavy metal was positively correlated to sensation seeking, this meant that people who reported more sensation seeking also reported that they liked hard rock/ heavy metal more. If a result showed that soft rock/ pop was negatively correlated to depression, this meant that people who were more depressed

reported that they liked soft rock/ pop less. Also, if a result showed that there was a zero correlation between classical music and hostility, this meant that there was no relationship between classical music and hostility.

I also calculated Pearson correlations between each score of characteristic mood and the amounts of listening to each type of music and between each score of characteristic mood and total listening time per week. I did this to explore the relationship between characteristic mood, music style preference, and music-listening habits. If a result showed, for example, that there was a positive correlation between hard rock/ heavy metal listening and reported anxiety, this meant that people spending more time listening to hard rock/ heavy metal were more likely to be high in anxiety. If a result showed that soft rock/ pop listening was negatively correlated to depression, this meant that people who spent more time listening to soft rock/ pop reported less depression. And, in terms of correlation between each score of characteristic mood and total listening time per week, if a positive correlation was found between total amount of music listening and positive affect, this meant that people who spent more time listening to music in their everyday life were more likely to report positive affect. This also meant that the more time people spent listening to music, the more positive mood they might feel. Meanwhile, if a negative correlation was found between total amount of music listening and anxiety, this meant people who had more anxiety were less likely to spend time listening to music in their everyday life. In addition, zero correlation always meant that there was no positive or negative relationship between the two variables.

I calculated Spearman correlation coefficients between the total amount of music listening per week and the rank order of music preference to see how people's music preferences were related to general music-listening habits in their everyday life. For example, if a positive correlation was found between soft rock/ pop and the total amount of music listening per week, this meant that generally people who preferred soft rock/ pop were likely to spend more time listening to music in their everyday life. Meanwhile, if a negative correlation was found between rap and the total amount of music listening per week, this meant that generally people who spend more time listening to music in their everyday life did not like rap music.

# Chapter 4

### RESULTS

Two hundred seventy-one people who indicated interest in voluntarily participating in this study as the participants were initially surveyed. Of the total number, 17 surveys were unusable due to gross completion errors, and 23 surveys were returned not completed, or the participants withdrew in the middle of being surveyed. Therefore, two hundred thirty-one surveys (85%) were used as the data for this study.

### Descriptive Statistics

Table 8 shows the mean score of the rank order for each type of music reported by the participants. During the survey, the participants were supposed to generate a rank order for the six styles of music with a smaller number indicating a greater preference for a style. However, during analysis every number reported was converted in its direction to make a larger number indicate a greater preference for a style. Therefore, in Table 8, a larger number in rank orders indicates more preference. *Soft Rock/ Pop Music* was ranked as the most liked music among the participants; meanwhile, *Country Music* was the least liked music. According to Kendall's *W*, which was .167, the participants' agreement in their rank order of music preference was statistically significant beyond the .01 level.

Table 8

Means and Standard Deviations of Preference Rankings given to Each Type of Music

Type of Music	M	SD
Soft Rock/ Pop	4.706	1.309
Classical Music	4.030	1.614
Jazz	3.591	1.448
Rap/ Hip Hop	3.006	1.728
Hard Rock/ Heavy Metal	2.840	1.688
Country Music	2.814	1.509

Note. Kendall's W = .167, Chi-Square = 192.867, df = 5, Asymp. Sig. = .000. The rank order of music preference (1 = least liked, 6 = most liked) N = 231

Table 9 shows the average number of minutes spent listening to each type of music per week, as reported by the participants. The results indicated that the participants listened to *Soft Rock/ Pop Music* most in their everyday life; meanwhile, they listened to *Country Music* least. The standard deviations are rather large, indicating that the participants differed widely in the amount of time they spent listening to music. It is interesting to note that *Soft Rock/ Pop Music* was ranked as the most liked music among the participants (See Table 8), and *Soft Rock/ Pop Music* also proved to be the type of music that the participants listened to most in their everyday life. The participants ranked *Country Music* as the least liked music, and *Country Music* also proved to be the least

listened to music in their everyday life. I considered this to be an indication of the validity of their preference responses.

Table 9

Average Number of Minutes of Listening Per Week

Type of Music	Min.	Max.	M	SD
Soft Rock/ Pop	0	2100	158.50	265.14
Classical Music	0	2500	141.61	288.00
Hard Rock/ Heavy Metal	0	2000	74.11	203.81
Jazz	0	1440	67.40	178.46
Rap/ Hip Hop	0	1000	67.18	144.32
Country Music	0	1200	39.60	129.57

*Note*. N = 231

### Correlations between Characteristic Moods and Music Preferences

Each characteristic mood scale was scored following the manual for the MAACL-R. I used Pearson correlation when both variables were measured at interval level and Spearman correlation when at least one variable was measured at ordinal level. Correlations were computed between each characteristic mood and the ranked preference for each type of music. Table 10 shows Spearman correlation coefficients between the scores on each mood subscale and the rank orders of the types of music reported by the participants.

Table 10

Spearman Correlations between Characteristic Moods and the Rank Orders of the Types of Music

Spearman	Type of Music	Anxiety	Depression	Hostility	Positive	Sensation
Correlation					Affect	Seeking
	Hard Rock/ Heavy Metal	.028	058	.117	111	.072
	Soft Rock/ Pop	022	034	055	024	167*
	Country	134*	128	190*	.002	.042
	Jazz	.043	.058	.041	.014	046
	Rap/ Hip Hop	.060	.070	.100	011	.136*
	Classical	015	.043	062	.139*	100

Anxiety and a preference for Country Music were negatively correlated with each other. Their relationship was statistically significant at the .05 level. Hostility and a preference for Country Music were also negatively correlated with each other, also the .05 level. A positive correlation was found between Positive Affect and a preference for Classical Music. They were significantly correlated with each other at the .05 level. Sensation Seeking and a preference for Soft Rock/ Pop Music were negatively correlated with each other, significant at the .05 level. Meanwhile, Sensation Seeking

<sup>\*</sup> Correlation is significant at the .05 level (2-tailed).

was positively related with a preference for *Rap/ Hip Hop Music*, and this positive correlation was statistically significant at the .05 level.

### Correlations between Characteristic Moods and Music-Listening Habits

Correlations were computed between each characteristic mood and the number of minutes of listening to each type of music, and between each characteristic mood and the total amount of minutes of listening to any type of music per week reported by the participants. Table 11 shows Pearson correlation between the scores on each mood subscale and minutes of listening to each type of music per week. Table 12 shows Pearson correlation between the scores on each mood subscale and the total amount of minutes of listening to any type of music per week.

Table 11

Pearson Correlations between Characteristic Moods and Minutes of Listening to Each

Type of Music Per Week

Pearson	Type of	Characteristic Moods				
Correlatio	Music Anxie	Anxiety	nxiety Depression Hos		Positive	Sensation
n					Affect	Seeking
	Hard Rock/ Heavy Metal	.055	.035	.096	008	.008
	Soft Rock/ Pop	.021	.023	021	021	040
	Country	048	023	071	.007	.070
	Jazz	.073	.128	.072	.091	.039
	Rap/ Hip Hop	.015	.029	.035	.045	.154*
	Classical	.194**	.086	.015	.056	.010

A positive correlation was found between *Rap/Hip Hop* listening and reported *Sensation Seeking*. This correlation was statistically significant at the .05 level.

<sup>\*</sup> Correlation is significant at the .05 level (2-tailed).

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).

Table 12

Pearson Correlations between Characteristic Moods and the Total Number of Minutes of

Listening to Any Type of Music Per Week

Characteristic Mood	Pearson Correlation
Anxiety	.100
Depression	.129
Hostility	.008
Positive Affect	.040
Sensation Seeking	.005

No statistically significant correlation was found between each characteristic mood and the total amount of minutes of listening to any type of music. However, even though it was not a statistically significant correlation, *the total listening time* was fairly closely related with reported *Anxiety* and *Depression* in a positive way in comparison to the other mood subscales.

### Listening Media

Table 13 shows the average minutes of listening to music through each of the mediums named in this study. The results showed that CDs, DVDs, Cassette tapes, or LPs were the most commonly used mediums when the participants listened to music. However, the standard deviations are extremely large. The subjects differed widely in terms of listening mediums they used.

Table 13

Average Number of Minutes of Listening Through Each Medium Per Week

Type of Medium	Min.	Max.	M	SD
CDs, DVDs, Cassette tapes, or LPs	0	3600	206.79	360.36
Radio	0	2430	174.70	310.64
Internet	0	2450	121.36	341.18
Live	0	2450	57.67	233.83
TV	0	1200	43.22	115.60

### Correlations between Music Preferences and Music-Listening Habits

Correlations were computed between the total amounts of music listening and the rank order of music preference to see how people's music preferences are related to general music-listening habits in their everyday life. Table 14 shows Spearman correlation coefficients between the total number of minutes of listening to any type of music per week and the rank orders of the types of music reported by the participants.

Table 14

Spearman Correlations between the Total Number of Minutes of Listening to Any Type of

Music Per Week and the Rank Order of Preferences for the Types of Music

The Rank Order of Each Type of Music	Spearman Correlation	
Soft Rock/ Pop	055	
Classical Music	071	
Jazz	.077	
Rap/ Hip Hop	.063	
Hard Rock/ Heavy Metal	.216**	
Country Music	288**	

The total amount of music listening was positively related to a preference for Hard Rock/ Heavy Metal Music. This correlation was statistically significant at the .01 level. Meanwhile, the total amount of music listening and a preference for Country Music were negatively correlated with each other, statistically significant at .01 level.

### Correlations between Ages and Music Preferences

Correlations were computed between the participants' ages and the rank order of music preference to see how people's music preferences are related to their ages. Table 15 shows Spearman correlation coefficients between the age of the participants and the rank order of the types of music reported by the participants.

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).

Table 15
Spearman Correlations between the Participants' Ages and Music Preference

Rank Order of Each Type of Music	Spearman Correlation
Soft Rock/ Pop	106
Classical Music	.426**
Jazz	.115
Rap/ Hip Hop	552**
Hard Rock/ Heavy Metal	253**
Country Music	.455**

*Note.* N = 231

Positive correlations were found between *Age* and a preference for *Country Music* and for *Classical Music*. Both correlations were statistically significant at the .01 level. Meanwhile, *Age* was negatively related to a preference for *Hard Rock/ Heavy Metal Music* and for *Rap/ Hip Hop Music* as well. These negative correlations also had statistical significance at the .01 level.

#### Correlations between Ages and Music-Listening Habits

Correlations were also computed between the participants' ages and the minutes of listening to each type of music per week, and between the participants' ages and the total amount of minutes of listening to any type of music per week to see how different music-listening habits in everyday life might be for people of different ages. Table 16 shows

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).

Pearson correlations between the participants' ages and the minutes of listening to each type of music per week.

Table 16

Pearson Correlations between Participants' Ages and Minutes of Listening to Each Type of Music Per Week

Minutes of Listening to Each Type of Music	Pearson Correlation	
Soft Rock/ Pop	231**	
Classical Music	043	
Hard Rock/ Heavy Metal	181**	
Jazz	040	
Rap/ Hip Hop	289**	
Country	088	

*Note.* N = 231

Negative correlations were found between *Age* and *Hard Rock/ Heavy Metal Music* listening, *Soft Rock/ Pop Music listening*, and *Rap/ Hip Hop Music* listening. These correlations were statistically significant at the .01 level.

The participants' *Ages* and *Total minutes of music listening* were negatively correlated with each other, yielding a Pearson correlation of -.282. This correlation was statistically significant at the .01 level.

Correlations were also computed between the participants' ages and the number of minutes of listening to music through each type of medium named in this study to see

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).

how the listener's age might be related to different music-listening mediums. Table 17 shows Pearson correlations between the participants' ages and estimated listening time to each listening medium.

Table 17

Pearson Correlation between Participants' Ages and the Number of Minutes of Listening to Each Type of Medium

Listening Time to Each Type of Medium	Pearson Correlation
Radio	.007
CDs, DVDs, Cassette tapes, or LPs	190**
TV	117
Internet	240**
Live	079

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).

CDs, DVDs, Cassette tapes, or LPs and Internet were negatively related to the listener's Age, significant at the .01 level.

#### Music Preference and Education

Correlations were computed between the participants' levels of education and the rank order for each type of music to see how different the participants' music preferences were according to their levels of education. Table 18 shows Spearman correlation coefficients between the levels of education and the rank orders for each type of music reported by the participants.

Table 18

Spearman Correlations between Level of Education and Rank Orders for Each Type of

Music

The Rank Order of Each Type of Music	Spearman Correlation	
Soft Rock/ Pop	171**	
Classical Music	.370**	
Jazz	.171**	
Rap/ Hip Hop	307**	
Hard Rock/ Heavy Metal	167*	
Country Music	.125	

*Note.* N = 231

Negative correlations were found between the *level of education* and a preference for *Hard Rock/ Heavy Metal Music*, *Soft Rock/ Pop Music*, and *Rap/ Hip Hop Music*.

The correlation with *Hard Rock/ Heavy Metal Music* was significant at the .05 level, and the other negative correlations were significant at the .01 level. Meanwhile, the *level of education* was positively correlated with a preference for *Jazz and Classical Music*, significant at the .01 level.

#### Music-Listening Habits and Education

Correlations were computed between the level of education and minutes of listening to each type of music per week to see how different the participants' music-listening

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).

<sup>\*</sup> Correlation is significant at the .05 level (2-tailed).

habits were according to their education levels. Table 19 shows Pearson Correlations between the level of education and minutes of listening to each type of music reported by the participants.

Table 19

Pearson Correlations between Level of Education and Minutes of Listening to Each Type

of Music Per Week

Minutes of Listening to Each Type of Music	Pearson Correlation	
Soft Rock/ Pop	146*	
Classical Music	.155*	
Hard Rock/ Heavy Metal	119	
Jazz	.054	
Rap/ Hip Hop	180**	
Country	103	

*Note.* N = 231

A negative correlation was found between the level of education and listening time for Soft Rock/ Pop Music and Rap/Hip Hop Music. These correlations were significant at the .05 and .01 level, respectively. The level of education was positively correlated with classical music listening, significant at the .05 level.

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).

<sup>\*</sup> Correlation is significant at the .05 level (2-tailed).

#### Chapter 5

#### **DISCUSSION**

The idea that connections exist among characteristic moods, music preference, and music-listening habits was supported by the results of this study. However, it is hard to say that all of the results of this study could be generalized to every situation, because music affects different people in different ways, and music preference and music-listening habits were involved with a variety of elements such as, age, ethnicity, education, and musical training.

#### The Relationship between Characteristic Moods and Music Preference

In terms of the relationship between characteristic moods and music preference, the results showed that a preference for *country music* was negatively related to negative affect such as, *anxiety* and *hostility* (See Table 10). This means people who liked *country music* reported less *anxiety* and less *hostility*. These negative relationships were statistically significant; however, it could not be said that their relationships strongly affect actual performance because of their small shared variances. A percentage of shared variance between two variables, which is also called the coefficient of determination, is shown by the squared correlation. Here, the shared variances between a preference for *country music* and *anxiety*, and between a preference for *country music* and *hostility* were .018 and .036, respectively. This means that there is only a 2% chance

of correctly predicting that people who prefer *country music* are less likely to be in a mood of *anxiety*. In addition, the possibility that people who prefer *country music* are less likely to be in a mood of *hostility* can be correctly predicted with a 3% chance of success in actual practice.

The results showed that a preference for rap/hip hop music was positively correlated with sensation seeking (See Table 10). This means that people who liked rap/ hip hop music were more likely to be in a sensation seeking mood. This result can be understood in the context of age. Correlations were computed between age and sensation seeking, and between age and a preference for rap/ hip hop music. The participants' ages and sensation seeking were negatively correlated with each other, yielding a Pearson correlation of -.136. This correlation was statistically significant at the .05 level. The participants' ages and a preference for rap/ hip hop music were negatively correlated with each other, yielding a Spearman correlation coefficient of -.552. This correlation was statistically significant at the .05 level. This means that the younger the person, the more often a sensation seeking mood was reported, and that the younger the person, the more preference for rap/ hip hop music was reported. Essentially, younger people liked rap/ hip hop music more than older people did, and generally younger people were likely to be in a sensation seeking mood. Therefore, we may consider age to be a mediator for the relationship between sensation seeking and a preference for rap/ hip hop music. It should be noted that rap/ hip hop music was the youngest style of music presented in this study.

# TOTAL STATE OF THE PARTY OF THE

#### The Relationship between Characteristic Moods and Music-Listening Habits

A positive correlation was also found between sensation seeking and minutes of listening to rap/ hip hop music (See Table 11). This means that people who spent more time listening to rap/ hip hop music reported more sensation seeking. Like the relationship between sensation seeking and a preference for rap/ hip hop, this positive relationship between sensation seeking and rap/ hip hop listening can also be understood in the context of age. Correlation between age and minutes of rap/ hip hop listening was computed. The participants' ages and minutes of listening to rap/ hip hop music were negatively correlated with each other, yielding a Pearson correlation of -.289. This correlation was statistically significant at the .01 level. This means that the younger the person, the more rap/ hip hop music listening was reported. Also, as mentioned above, generally younger people were more likely to be in a sensation seeking mood than older people. Therefore, considering the context of age, it can be understood that people spending more time listening to rap/ hip hop music were more likely to be in sensation seeking mood.

In this study, no significant correlation was found between minutes of listening to hard rock/ heavy metal music and any negative affect such as, anxiety, depression, and hostility (See Table 11). This particular result might be attributed to the participants' ages and levels of education. This study surveyed only the adult population with a large range of age; in addition, educational levels of the majority of participants were college and/ or above college education. But, if adolescents and/ or young adults had been the

only population group surveyed, the findings might have been different, and might have supported other studies which pointed out a possible negative impact of hard rock/ heavy metal music on people listening to it in an emotional and a behavioral way. However, the results of this study suggested another possibility of interpreting the influences of hard rock/ heavy metal music on its listeners. These types of music could influence different populations in different ways, rather than producing mainly negative effects on everyone who listens to it.

It is interesting to speculate on the relationship between total music-listening time and negative affects including anxiety and depression. Even though in this study the correlations between total music-listening time and both anxiety and depression were not statistically significant, total music-listening time was more closely correlated with these negative affects in a positive way in comparison to its relationship with the other mood subscales (See Table 12). Especially, in the case of depression, their relationship was almost significant at the .05 level. This result suggested that people who were in more anxiety or more depression spent more time listening to music in their everyday life. Actually, it is hard to conclude the causality of such relationships; however, it could be assumed that it is not music listening itself that leads to negative affect or increases the degree of such negative affect; rather, people may listen to music more frequently when they have negative affects, including anxiety and depression, to change their mood toward a more positive state. Of course, people select their music listening for a variety of different reasons; for example, to express their emotions, to identify their emotions, to

clarify their emotion, or sometimes, to experience empathy from music according to their mood state, as opposed to music's making people feel in a negative or a positive way by itself. Therefore, it may not be argued with confidence that certain types of music, for example, hard rock/ heavy metal music, provoke negative and aggressive moods like hostility or anxiety. Instead, it may be reasonably assumed that people choose certain types of music that match their moods.

#### The Relationship between Music Preference and Music-Listening Habits

The results show that total minutes of listening to music were positively correlated with a preference for hard rock/ heavy metal music, and negatively correlated with a preference for country music (See Table 14). These results can be understood in the context of age. Total music-listening time was negatively correlated with age, and age and a preference for hard rock/ heavy metal music were negatively correlated with each other (See Table 15). This means that the younger the person, the more preference for hard rock/ heavy metal music was reported, and generally younger people spent more time listening to music in their everyday life. In this context, the result that people who liked more hard rock/ heavy metal music spent more time listening to music may be understandable. With the same logic, the result that people who liked more country music spent less time listening to music in their life can be understood. The older the person, the more preference for country music was reported (See Table 15), and generally older people spent less time listening to music in their everyday life.

It is interesting to note that the most frequently used medium for music listening was 'CDs, DVDs, Cassette tapes, or LP.' The popularity of these media was followed by radio, internet, live, and TV in order (See Table 13). However, there was a possibility that the participants may not have had accurate recollection of exactly how long they spent listening to each medium.

#### Age and Music Preference & Music-Listening Habits

The results showed that younger people not only more liked but also actually more listened to hard rock/ heavy metal music and rap/ hip hop music than older people did (See Table 15 and Table 16). Assuming the fact that people would like to listen to music intentionally to change their moods, and would like to choose the types of music which are meaningful for them in their specific mood states, hard rock/ heavy metal music and rap/ hip hop music can be considered meaningful social codes among young people in relation to characteristic moods and music. Meanwhile, for older people, country music and classical music can be considered meaningful in their emotional life (See Table 15).

It suggested that older people were likely to spend less time listening to music in their everyday life, and they were less likely to use internet and CDs, DVDs, Cassette tapes, or LPs for listening (See Table 17).

#### Education and Music Preference & Music-Listening Habits

The more educated the person, the less preference for soft rock/ pop music and rap/ hip hop music was reported (See Table 18). Plus, it suggested that more educated people spent less time for soft rock/ pop music as well as rap/ hip hop music listening in their everyday life than relatively less educated people did (See Table 19). Meanwhile, the more educated the person, the more preference for jazz and classical music was reported (See Table 18). In addition, more educated people also spent more time listening to classical music in their everyday life than less educated people did (See Table 19). Jazz and classical music have their value in school education. Jazz and classical music have been taught through school educational programs for anyone who is interested in them, regardless of his or her major; however, the other genres of music, such as hard rock/ heavy metal music, soft rock/ pop music, and rap/ hip hop music have rarely been taught in school, even though there exist some music schools that have educational curriculums for popular music to teach it in a professional way. It could be assumed that more educated people have more opportunities than less educated people to experience jazz and classical music through schooling, which, in turn, influences their music preference for these genres of music. This interpretation would be more reasonable than making a connection between more educated people's intelligence and their music preference for jazz and classical music.

#### Chapter 6

#### Implications and Recommendations

It is difficult to make decisive conclusions regarding how people's general characteristic moods are related to their music preference and music-listening habits in everyday life. In addition, statistical analysis of correlations among variables does not give clear answers as to their causalities. However, this study showed several meaningful results that could support people's general assumptions or ideas on the role of music in daily emotional life by disclosing actual trends of relationships among characteristic moods, music preference, and music-listening habits. Among those results, some can be reasonably understood, whereas others lead to challenging questions which require further study.

The value of this study may lie not so much in its findings, but in what it left unsolved. It is difficult to find clues for interpreting some of the interesting results of this study. Why did people who were more in anxiety and hostility moods report less preference for country music? Could this be explained by age? Actually, age was negatively related to anxiety and hostility, yielding a Pearson correlation of -.216 and -.211, respectively. These correlations were statistically significant at the .01 level. Because the older the person, the less anxiety and hostility were felt in this study, and the older the person, the more preference for country music were reported, does a preference for country music always become negatively correlated with anxiety and hostility? It can

not be said, on the basis of this study alone, that all people feel less anxious or less hostile as they become older. Also, why are country and classical music preferred by older people rather than younger people? Why do people spend less time listening to music in their everyday life, as they get older? The reason for this might be that older people are simply busier than younger people.

Why do people who prefer soft rock/ pop music feel less sensation seeking in their daily lives, whereas people who prefer and spend more time listening to rap/hip hop music feel more sensation seeking? Could this be true because the lyrics of rap/ hip hop music are more suggestive of sensation seeking? All of these questions are worth further research through future studies. In some perspectives, these unsolved questions could find their answers in the context of every single person's emotional experiences in relation to musical stimuli. Music, as a social phenomenon, is experienced within a listener's personal and social environments, and such individualized musical experiences, in turn, influence the listener's music preference and also contribute to shaping his or her music-listening habits in daily life. Therefore, future studies that approach these questions with phenomenological research methods including interview could be recommended in the hope that a phenomenological approach may be able to give specific answers to such open questions, and/ or it may also be able to provide crucial clues to figure out any causality regarding how people's moods, music preference, and listening habits interact with one another.

Considering the fact that music is a social phenomenon and an important cultural

code in our society, it would be reasonable to study how music preference and music-listening habits might be different depending on ethnic groups to which people belong. Such research could provide understanding of music preference and music-listening habits with ethnomusicological perspectives by guiding researchers to interpret in the cultural and historical context. For example, it may possibly be assumed that African-Americans would not only show more preference for rap/ hip hop music, but also report more listening time for this type of music than any other ethnic groups. This is in consideration of the fact that rap/ hip hop music finds its origin in an underground cultural movement called Hip Hop, which started in the early 1970s in New York, and represents an African-American urban culture that is also connected to other aspects of African-American music.

It would also be appropriate that future research should deal with a gender issue in relation to music preference and music-listening habits. For example, it could be meaningful to explore whether certain types of music are presented more through the male perspective, and/ or whether certain types of music reflect predominantly female attitudes, such that females identify more with such styles of music. Dealing with gender differences in relation to music preference and music-listening habits would be a worthwhile contribution to the social psychology of music.

Further studies with large samples that divide participants into more specific subgroups, for example, in terms of age, gender, or level of education would be useful. In addition, grouping participants by different characteristics may make it possible to

show how differently music-listening is used as sensory material for mood management by people in various demographic groups.

Even though it was not statistically significant, this study suggested that people who reported more negative moods, such as depression and anxiety, were likely to spend more time listening to music in their everyday life. This result supports an assumption that people choose music in order to regulate their affective experiences and mood states in desirable ways. This assumption has an important implication for music therapy and music education. The use of music as a therapeutic tool for people's mental health and as an educational method for emotional and behavioral modification for emotionally and behaviorally disturbed children could be supported by such a result. Therefore, future research that shows how people use music listening for mood management in their emotional life in a concrete way, introducing their motives for music listening and musical experiences, is recommended. In this study people who felt more positive affect reported more preference for classical music; whereas, people who felt more anxiety reported that they spent more time listening to classical music. Through this result, it could be assumed that people may use classical music with an intention to reduce their anxiety, accessing more positive mood. This shows an interesting dynamic among characteristic moods, music preference, and music listening habits, leading us to speculate on how people use music listening for their mood management in daily emotional life.

It is beyond the scope of this study to make clear conclusions regarding how people's moods influence their music-listening habits, or how music-listening habits affect people's moods, and what kind of role music preference plays in people's music listening in certain moods. However, this study is useful in that it shows many possibly meaningful relationships among characteristic moods, music preference, and music-listening habits. This study is also valuable in that it poses several important open questions that need to be further researched to gain better understanding on the dynamics among characteristic moods, music preference, and music-listening habits. In addition, by providing more expanded understanding of the role of music in people's daily emotional life, this study makes one small contribution to the knowledge building in the field of psychology of music. Music therapists and music educators may refer to the findings of this study in their practical use of music for therapeutic and educational purposes.

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**APPENDICES** 

#### Appendix A

# Multiple Affect Adjective Check List – Revised (MAACL-R) Trait / In general Form

#### By Marvin Zuckerman And Bernard Lubin

DIRECTIONS: On this sheet you will find words which describe different kinds of moods and feelings. Mark an 'x' in the boxes beside the words which describe how you generally feel. Some of the words may sound alike, but we want you to check all the words that describe your feelings. Work rapidly.

Adventurous

Discouraged

**Furious** 

Nervous

Pleasant

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Educational and Industrial Testing Service (EdITS)

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## Appendix B

## A Survey for Music Preference and Everyday Music Listening Habits

1. What is your age? ()			
2. Are you	n male or female? (Please, check one)		
	Male Female		
3. What is	your ethnic background?		
	Caucasian		
	African - American		
	Latino(a)/ Chicano(a)		
	Asian/ Pacific American		
	Native American		
	Other (Please, identify)		
4. Please,	indicate your highest level of education:		
•	Less than 12 <sup>th</sup> grade		
	12 <sup>th</sup> grade (high school diploma)		
College student (In bachelor's program)			
College graduate (Bachelor's degree)			
Master's degree or in Master's program			
	Doctor's degree or in Doctor's program		
5. Are you	a trained musician or a music major student? (Please, check one)		
	· · ·		

6. Please rank the typ	es of music listed below according	ng to how well you like them. (#1 is
most liked, #6 is leas	t liked)	
Hard Rock/ Heavy Metal Soft Rock/ Pop Country Music		Jazz
		Rap/ Hip Hop
		Classical Music
7. Please, estimate th	e number of minutes per week yo	u listen to each type of music.
Minutes	Hard Rock/ Heavy Metal	
<u>Minutes</u>	Soft Rock/ Pop	
Minutes	Country Music	
<u>Minutes</u>	Jazz	
Minutes	Rap/ Hip Hop	
Minutes	Classical Music	
8. Please, estimate th	e number of minutes per week yo	u listen to any kind of music.
ŕ	of minutes	·
9. Please, estimate th	e number of minutes per week yo	u listen to any kind of music on the
following media and	or live performance.	
Minutes	Radio	
Minutes	CDs, DVD, Cassette tapes, or	LP
Minutes	TV	
<u>Minutes</u>	Internet	
Minutes	Live	

Thank you very much for your cooperation!

