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Examination of the Experience of Music in Sport Among NCAA Division I Athletes: An Existential Phenomenological Investigation

Lacey Marie Sorenson
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AN EXAMINATION OF THE EXPERIENCE OF MUSIC IN SPORT AMONG NCAA
DIVISION I ATHLETES - AN EXISTENTIAL PHENOMENOLOGICAL
INVESTIGATION

by

LACEY M. SORENSON

(Under the direction of Daniel R. Czech)

ABSTRACT

Music plays a central role in people’s everyday lives (Rentfrow & Gosling, 2003). Research shows that music can effect arousal regulation (Lukas, n.d.; Nilsson, Unosson, & Rawal, 2005), motivation (Karageorghis & Terry, 1997), and mood levels (Gfeller, 1988). Research has also shown that music can be a facilitator to athletic performance (Dorney & Goh, 1992; Karageorghis & Terry, 1997; & Krumhans, 2002). Although a great amount of research exists that examines music in sport, little research has been found that examines this phenomenon from an existential phenomenological perspective.

The purpose of the current study is to investigate the Division I athlete’s experience of music in sport from an existential phenomenological perspective. The participants were 7 (four males and three females) NCAA Division I collegiate athletes from a southeastern university. Utilizing a phenomenological approach to analyze the data, the current research attempted to examine the experience of music in sport. The results suggest, athletes utilize music for arousal regulation, concentration, mood enhancement, and team cohesion.

INDEX WORDS: Music, Arousal, Focus, Mood, and Team.
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by

LACEY M. SORENSON

B.A., Belmont Abbey College, 2005

A Thesis Submitted to the Graduate Faculty of Georgia Southern University in Partial
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2007
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LACEY M. SORENSON

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>5</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>8</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>9</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>10</td>
</tr>
<tr>
<td>Purpose of Study</td>
<td>14</td>
</tr>
<tr>
<td>METHOD</td>
<td>15</td>
</tr>
<tr>
<td>The Researcher as an Instrument</td>
<td>15</td>
</tr>
<tr>
<td>Bias Exploration and Bracketing</td>
<td>16</td>
</tr>
<tr>
<td>Pilot Study</td>
<td>17</td>
</tr>
<tr>
<td>Participants</td>
<td>17</td>
</tr>
<tr>
<td>Procedure</td>
<td>18</td>
</tr>
<tr>
<td>Interview Protocol</td>
<td>19</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>20</td>
</tr>
<tr>
<td>Approaching the Interviews</td>
<td>20</td>
</tr>
<tr>
<td>Focusing the Data</td>
<td>21</td>
</tr>
<tr>
<td>Phenomenological Reduction</td>
<td>21</td>
</tr>
<tr>
<td>Releasing Meanings</td>
<td>22</td>
</tr>
<tr>
<td>Reliability</td>
<td>23</td>
</tr>
<tr>
<td>Validity</td>
<td>23</td>
</tr>
<tr>
<td>RESULTS</td>
<td>24</td>
</tr>
<tr>
<td>Theme #1: Arousal</td>
<td>28</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1: Description of participants</td>
<td>24</td>
</tr>
<tr>
<td>Table 2: Description of themes and subthemes</td>
<td>27</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Page

Figure 1: Themes describing athlete’s experience of utilizing music in sport ..................26
INTRODUCTION

Music plays a central role in people’s everyday lives (Rentfrow & Gosling, 2003). Research shows that music can effect arousal regulation (Lukas, n.d.; Nilsson, Unosson, & Rawal, 2005), motivation (Karageorghis & Terry, 1997), and mood levels (Gfeller, 1988). Research has also shown that music can be a facilitator to athletic performance (Dorney & Goh, 1992; Karageorghis & Terry, 1997; & Krumhans, 2002). For instance, music affects mood states by eliciting a certain emotional response while listening to a song (Dorney & Goh, 1992; Karageorghis & Terry, 1997). Moreover, research has shown that music allows athletes to disassociate from feelings of fatigue and perceived exertion rates (Karageorghis & Terry, 1997).

Music and the various aspects it has in people’s everyday life has been a topic of interest in recent years. For instance research has shown that people listen to music consistently throughout the day (Rentfrow & Gosling, 2003). They listen to it when they wake up, before, during and after work, and when they are ready for the end of the day (Rentfrow & Gosling, 2003). Rentfrow and Gosling (2003) also found that people enjoy listening to music while taking part in physical activity such as exercise or a sport. Society listens to music which can influence us in many ways.

Suki (2002) reported that people listen to music that is part of their culture and find music of their youth to be enjoyable. People also tend to listen to music that other people of the same race find enjoyable (Suki, 2002). However, pop music seems to be the type of music that can transcend racial and cultural lines. From hip hop to country to alternative, the “pop” genre of music in today’s society contains a wide variety of musical types. People tend to listen to the music they have grown up with, the type of
music that they have been around and immersed in by their family and surrounding culture.

Little research has been found which has examined the differences between male and female perceptions of music. Anshel and Marisi (1978) found the male participants were able to endure significantly longer on a cycle ergometer than females when listening to music. It is possible that male’s endurance levels were significantly higher than females while listening to music because male’s endurance level may be higher in general.

Music also influences mood states, which in turn could possibly enhance performance (Karageorghis & Terry, 1997). While listening to music, a performer’s attention is narrowed which can divert attention away from the sensations of fatigue during a physical activity (Karageorghis & Terry, 1997). This process can be compared to the cognitive strategy of dissociation, which tends to encourage a positive mood state (Karageorghis & Terry, 1997). For instance, Wales (1986) also supported the relationship between music and affect; he found that music that was upbeat in tempo and stimulative enhanced exercise performance because it lowered anger, depression, and fatigue significantly.

In addition, previous research has shown that the tempo of the music can have an effect on our movement (Karageorghis & Terry, 1997). We tend to synchronize our movements with the type of music we listen to (Karageorghis & Terry, 1997). Consequently, if an athlete listens to a fast tempo song they may be more likely to increase movements to a faster pace which could possibly enhance performance. The same could be a possibility for an athlete who needs slower movements in order to reach
optimal performance, which in turn slower tempo music could possibly enhance their performance. Regardless, this research supports Smoll and Schultz (1982) view that rhythm is an important component in motor skill and performance. Athletes apply the force of rhythm and tempo to many aspects of their athletic experience.

Moreover, music has also been shown to reduce perceived exertion rates during exercise (Boutcher & Trenske, 1990). Researchers have revealed that when exercising and listen to music, the perceived exertion rate is much less because so much attention and focus is placed on the music. Johnson and Siegel (1987) found that fatigue was reduced significantly while participants listened to music. Boutcher and Trenske (1990) also found that participants who listened to music during a moderate workout had a reduced perceived exertion rate during exercise. This supports the hypothesis that music narrows the performer’s attention and, as a consequence, diverts attention away from sensations of fatigue during exercise (Karageorghis & Terry, 1997).

Therefore, if music can affect our moods states and our perceived exertion rates, music may also affect our arousal rate. Researchers have shown that music can reduce anxiety in pre and post surgery patients (Lukas, n.d.; Nilsson, Unosson, & Rawal, 2005). Before a person goes into surgery listening to relaxing music can help reduce anxiety about the surgery. Research also shows that post surgery patients can reduce their anxiety about going to rehabilitation if they listen to music before and/or during their rehabilitation session (Lukas, (n.d.); Nilsson, Unosson, & Rawal, 2005).

“Sport psychologists often recommend music as part of psyching-up strategy in preparation for competition, or to calm overanxious athletes” (Karageorghis & Terry, 1997, p.57). Gfeller (1988) suggests that music will influence arousal if it promotes
thoughts that encourage physical activity or relaxation. In other words, the association between certain type of music and a physical activity may act as a stimulus. If an athlete needs to increase their arousal level before a game they may listen to music that encourages them to go out and compete at an intense level. Or if an athlete needs to lower their arousal level before a game they may listen to a song that would allow them to relax and clam down.

Although a great amount of research exists that examines music in sport, little research has been found that examines this phenomenon from an existential phenomenological perspective. The framework for phenomenology is provided by the humanistic model. The humanistic theoretical model is concerned with understanding the perspective of the lived experience of an individual within their environment and social contexts (Hill, 2001). This model requires the researcher to understand and examine the person from a holistic perspective (Hill, 2001). The human and the world in which it lives cannot be examined separately, if we wish to obtain the entire experience. A phenomenological methodology can be used in order to achieve this holistic view and examination of a lived experience. The phenomenological approach is concerned with gathering a thick rich description of information either through interviews, discussions, or observations, and representing it from the perspective of the participant (Patton, 2002). Essentially, phenomenology is concerned with the study of an experience or phenomenon from the perspective of an individual.

Existential phenomenology seeks to understand the “lived experience” of an individual within a certain phenomenon. “The existential phenomenological researcher, then, is concerned with description, experience, and intentionality; and these must be
considered as the researcher seeks the structural essence of some event as experienced by some person” (Czech, Wrisberg, Fisher, Thompson, and Hayes, 2004, p.53). Therefore, in order to truly understand what it is like to experience music in sport, the current study will be conducted using an existential phenomenological approach. Karageorghis & Terry (1997) point out that music is known to have an effect on people while they are working out. Music enables people to disassociate from feelings of fatigue, influence their mood states, and run to the beat or tempo of music which could in turn enhance one’s performance.

**Purpose of the Study**

What seems to be missing in the current sport psychology literature is an examination of elite athletes “lived” experiences of music in sport. Consequently, the present study examined this phenomenon by acquiring it from the perspective of the Division I athlete themselves.

The purpose of the current study was to investigate the Division I athlete’s experience of music in sport from a phenomenological perspective. This goal was accomplished in two ways: (a) by allowing the athlete to speak in his/her language and (b) by making an attempt to understand the experience of music in sport free of judgment and preconceived notions.
METHOD

The purpose of this section will be to explain in detail the specific procedures that were used throughout this research project. In addition, this section includes a description of existential phenomenology from a procedural and philosophical perspective (Czech et al., 2004).

The Researcher as an Instrument

When conducting existential phenomenological research, the researcher is a key factor in the study. Therefore, it is crucial to acquire an understanding of my experience as it relates to the phenomenon of music in sport (Czech et al, 2004). A description of my personal experience and long time interest regarding this topic is provided below.

At the present time I am a second year graduate student at Georgia Southern University. As long as I can remember I have always been involved in sports and my love for sport continues to grow. Moreover, I have always had a love and interest in music. I love the way music can make you feel, the way it can move you, and the profound effects it can have on an individual’s life. Consequently, I have always incorporated music with sport. Music integrated with sport during my athletic career was most influential and effective throughout my experience as a collegiate athlete. For example, I would use music before a game to get motivated and focused, during a game (have a song in my head) to reduce stress and re-focus, and after a game to clam down and reflect on my performance.

This relationship has been a useful tool for me as an athlete. It has also been my experience in speaking with other athletes, that music plays a role throughout their athletic career. Therefore because of my experience and the experience of other athletes,
this phenomenon of music in sport is a topic that I would like to investigate in a systematic manner.

Bias Exploration and Bracketing

Patton (2002) explains that epoche should be used when getting ready to conduct and analyze the interviews. “Epoche means to refrain from judgment, or abstain from or stay away from the everyday, ordinary way of perceiving things” (Patton, 2002, p. 484). The researcher must look inside to become aware of personal bias and gain clarity about the preconceptions that may exist. “The epoche allows the researcher to investigate the phenomenon from a fresh open view point without prejudgment and imposing meaning to soon” (Patton, 2002, p. 484). This is an ongoing process throughout this current study.

The next step is to “bracket out” the presuppositions in order to identify the data in an untainted form (Patton, 2002). During this phase, the preconceptions are put aside and the subject matter is confronted on its own terms. Therefore, before the start of the present study both a bracketing interview and a pilot interview were conducted. The bracketing interview consisted of a fellow graduate student who is knowledgeable in the area of qualitative research, who interviewed me (in a similar fashion that the participants will be interviewed) about my experience of music in sport. This interview allowed me to see and clarify the preconceptions that I had regarding, music in sport because of my personal experience as an athlete.

Several themes emerged from the interview. The first theme was music helped to motivate me before a game. I found music in my pre-game warm-up to be a key factor in my motivation before the start of a game. As a soccer player I would often listen to my
I-pod before a game in the locker room and then the pre-game tape while warming up on the field.

The second theme that emerged was the fact that music focused my attention. I can remember that music before a game would allow me to concentrate on what I have to do to perform well. During a game I would have a song in my head and this would allow me to re-focus in stressful situations.

A third theme was the notion that music was a relaxation tool. I would listen to music before a game to calm my anxieties and after a game to simply calm down, relax, and self-reflect on my performance. The bracketing interview allowed me to become aware of the biases that were remembered during the interview process with the participants so they will not be influenced.

Pilot Study

Since no qualitative research has been found examining music in sport, I conducted a pilot study to test the research question and gain a deeper understanding of qualitative methodology. I interviewed two NCAA Division I varsity athletes on their experience of music in sport. The same method that was used for the current study was also used for the pilot study. The interviews were audio taped and transcribed. After the interview was conducted the pilot study participants were asked for suggestions on how the interview process could be enhanced.

Participants

The participants within this study consisted of 7 NCAA Division I varsity athletes from a University in the Southeast. The athletes came from various racial backgrounds and varsity teams. A purposeful sample was used because the participants were able to
provide the researcher with a rich thick description of the experience of music in sport (Patton, 2002).

All of the participants experienced music in sport within their recent collegiate athletic career and listened to music at least once a day either before, during, or after a performance. They were asked to participate based on the fact that they stated that they listened to music before, during, or after a game. Each participant was asked to participate through their coach, e-mail, personal contact, or by telephone. No compensation or academic extra credit was given for their participation.

As cited in Czech et al (2004), Goodrich points out that while the number of participants is small; this is not a statistical issue in a phenomenological research study. The most important thing is to acquire a thick rich description of the phenomena. As cited in Czech et al (2004) when deciding on how many participants are needed for qualitative research, experts agree on two criteria: sufficiency and saturation of information (McCracken, 1988; Paton, 1990; Seidman, 1991).

Procedure

The participants in the study remained anonymous and their participation was completely voluntary throughout the entire study. In addition, the interviews were held in a private setting to ensure confidentiality. Participants were told: a) they can withdraw from the study at any time, b) the interview will be digitally recorded, c) they will remain anonymous throughout the entire study, d) they could ask about the procedures at any time, e) the interviews will be transcribed and they will be sent a copy of the transcription to review, f) they will not receive any academic extra credit or compensation for their
participation, g) the transcriptions will be reviewed by me, a computer program (NVivo), and the research team in order to identify themes (Czech et al., 2004).

The research team consisted of fellow graduate students who all have knowledge in the area of phenomenological research. The team assisted me in identifying themes after reading and analyzing the transcriptions and they signed a release from in which they guarantee confidentiality. Additionally, the transcripts were analyzed by a computer program called NVivo. This program was used to identify the themes that were contained in the transcripts. The participants were assigned a number their birth name to ensure confidentiality. A code sheet was kept for the purpose of presenting the transcripts to the participants (Czech et al, 2004).

Interview Protocol

This study consisted of a single open-ended statement which allowed the participants to explore their experience of music related to sport. The following statement was offered to all of the participants:

“Tell me about a time when you listened to music before, during, and after an athletic competition.”

Other probing interview questions were utilized for further elaborations and clarifications of their experience as it relates to music and sport (Patton, 2002). Examples of these questions consisted of but not limited to:

“Can you describe another time when you utilized music before during or after sports participation?”

“You mentioned __________, could you tell me more about that?”
The interview for the present study concentrated on the experiences of the participants. The quality and depth of the interview provided the research with power and meaning. The interviews also presented a thick rich source of information for the next phase of the research (Czech et al., 2004).

**Data Analysis**

Phenomenological analysis seeks to grasp and elucidate the meaning, structure, and essence of a lived experience for a person or group of people (Patton, 2002). In this present study, various phenomenological approaches were used for analyzing the data and are adapted from as cited in Czech et al (2004), Barrell (1988), Goodrich (1988), Hawthorne (1989), Henderson (1992), Paton (2002), and Ross (1987) as outlined below.

A. Approaching the interviews
   - Transcribing the interview
   - Obtaining a grasp of the interview

B. Focusing the data
   - Bracketing the data

C. Phenomenological reduction
   - Eliminating irrelevant, repetitive, or overlapping data
   - Verifying the elimination of the data

D. Releasing meanings
   - Forming categories
   - Identifying the themes
   - Describing the themes

*Approaching the Interviews*

**Transcribing.** All interviews were audio taped and then transcribed verbatim. The transcripts were typed by a professional transcriptionist. The participants were able to
view and obtain a copy of the transcripts at the completion of the transcript. No one had access to the audio tapes but the professional transcriptionist, me, and the participant. Once transcription of the audio tape was complete it was erased. The consent form, audio tapes, transcriptions, and code sheet with the numbers that correspond to the names were kept in a locked box.

Patton (2002) points out that it is very important to obtain a verbatim transcript otherwise, the data may be distorted. Therefore, the transcripts were checked for errors by listening to the audio tape version of the interview and reading the transcript.

**Obtaining a Grasp of the Interview**. Checking for errors also allowed me to obtain what Kruger (1979) calls a holistic grasp of the data. As cited in Czech et al. (2004), this allows the researcher to obtain a sense of wholeness of the data even though in later phases parts of the data will be eliminated. Checking for errors also allowed me to disentangle the structure of the participant’s experience.

**Focusing the Data**

**Bracketing the data**. Patton (2002) states that “the researcher “brackets out” the world and presuppositions to identify the data in pure form, uncontaminated by extraneous intrusions.” In other words the researcher puts aside any preconceptions and the data was analyzed directly to the phenomenon in question. Once this was completed the data was then treated with equal value and spread out for examination with all elements and perspectives having equal weight (Patton, 2002).

**Phenomenological Reduction**

**Eliminating irrelevant, repetitive, or overlapping data**. During the interviews the conversation involved information that is not relevant to the experience of the
phenomenon being studied (Patton, 2002). Consequently, in the current study irrelevant, repetitive, and overlapping data were eliminated from the transcripts. Punctuation and enhancing readability was also added or taken out if needed.

**Verifying the elimination of the data.** The goal of this step is to have the participants verify that the edited version of the interview is correct and still has the thoughts and words that they wanted to express. Once the editing was completed the transcripts still remained a rich source of information and were easily read and placed into meaningful groups.

*Releasing Meanings*

**Forming categories.** The data was placed into meaningful clusters based on the similar themes that emerge (Patton, 2002). The NVivo computer software, along with the research team and I placed the phrases that were similar into clusters. We then compared the clusters and categories were formed.

**Identifying the themes.** Once the categories were formed themes were created. These themes were analyzed over and over again until a consistent and concise representation of each category was present and there were distinct differences between each category.

**Describing the themes.** Patton (2002) recommends that when presenting the results of qualitative data there must be: a) focusing and balancing and b) description and interpretation. Due to the large amount of information contained within the interview the data must be focused and balanced, meaning that some of it must be omitted in order to focus on the experience of music in sport. Patton (2002) also points out that when dealing with qualitative inquiry a thick, rich description of the experience is essential.
Therefore, the data in the current study was presented in a clear and descriptive manner that captured the essence of the participants’ mutual aspects of their experience of music in sport.

Reliability

If the results of a study are repeatable and consistent across time and people then they are assumed to be reliable (Patton, 2002). In qualitative research a main criterion for reliability is trustworthiness (Patton, 2002). Therefore, if the description of the experience can be shown to be true it is considered to be reliable.

Validity

As cited in Czech et al (2004) the conclusions should be accepted as valid if the reader is able to follow the process of the study that has led to the conclusions. It should also be noted that throughout the entire research process triangulation (capturing and respecting multiple perspectives) were used (Patton, 2002). Triangulation checks for validity because it offers the perspectives of others on the data and conclusions that are drawn from the data. Triangulation acts as a system of checks and balances between the researcher and research team. Triangulation was achieved through obtaining the data and performing member checks, which was allowing the participants to look over their transcribed interview and make sure everything is correct. In addition, a computer analysis software (NVivo) and a research team was utilized to provide multiple perspectives on the analysis of the data. Moreover, it should also be noted that the subjectivity of the research was acknowledged, meaning the biases were discussed and taken into account before analyzing the data.
RESULTS

Using the methodology described in the previous chapter, the interviews of Division I athletes were conducted, transcribed, and placed into themes, and the structure of the experience of music in sport for these seven athletes could be determined. In addition, this chapter contains quotes from the participants that are used to illustrate the structure of music in sport as it surfaced from their descriptions.

Table 1 provides a brief description of the participants. The participants in this study were seven NCAA Division I collegiate athletes. Five of the participants were of Caucasian descent, while two of the participants were of African American descent. The participants participated in the following sports: 1) soccer, 2) football, and 3) tennis. The soccer participants were on teams that made it to the final four within the past year. The sample came from varsity athletes of Georgia Southern University.

Table 1. Description of participants

<table>
<thead>
<tr>
<th>#</th>
<th>Gender</th>
<th>Sport</th>
<th>Race</th>
<th>Athletic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>Soccer</td>
<td>African American</td>
<td>Division I</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>Soccer</td>
<td>Caucasian</td>
<td>Division I</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>Football</td>
<td>Caucasian</td>
<td>Division I</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>Soccer</td>
<td>Caucasian</td>
<td>Division I</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>Tennis</td>
<td>Caucasian</td>
<td>Division I</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>Football</td>
<td>African American</td>
<td>Division I</td>
</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>Soccer</td>
<td>Caucasian</td>
<td>Division I</td>
</tr>
</tbody>
</table>
The intention of this study was to describe the thematic structure of the experience of music in sport among Division I collegiate athletes from a phenomenological perspective. The analysis of the participant’s interview exposed four major themes: (1) arousal - music was used to control arousal levels before and after a competition, (2) focus - utilized music to prepare mentally before competition, (3) mood - utilized music to control mood before competition, and (4) team - utilized music to create a sense of camaraderie. These four themes create the structure of the experience of music in sport for these collegiate athletes.

Moreover, each of these themes contained subthemes. For the theme of arousal, the subthemes included (a) upbeat or fast tempo music, and (b) slow tempo music. For the theme of focus, music was utilized to (a) block out distractions, (b) concentrate on what they have to accomplish during the game, and (c) mental imagery or picturing what they have to do while performing certain tasks during a competition. Incorporating music to enhance the overall mood of the team as well as to decrease tension and stress within an environment defined the subthemes for mood. The final theme of team consisted of (a) creating a sense of team unity, (b) listening to the same music to get pumped up together, and (c) creating and singing along to team music compilations’ (CD’s).

A representation illustrating these themes, subthemes, and their interrelationships is provided in Figure 1 and Table 2. The four part interrelated experience of music illustration of performance associated to arousal, focus, mood, and team demonstrates the importance of music in sport. The athletes in this investigation found the aspects of the experience of music illustration to be imperative to performance on the same level as
physical preparation. The illustration provides the themes in a more uniform and distinct manner than the interviews, where the conversation moved back and forth between the four themes. From utilizing music to achieve an optimal arousal level, to employing music to block out all distractions and

**Figure 1.** Themes describing athlete’s experience of utilizing music in sport.
concentrate on one’s performance, to using music to enhancing one’s mood prior to and after a competition, to unifying a team through the creation of CD’s, all parts of the illustration affected the performances of the athlete in this investigation.

**Table 2.** Description of themes and subthemes.

<table>
<thead>
<tr>
<th>THEMES</th>
<th>SUBTHEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arousal -</td>
<td>Upbeat or fast tempo music</td>
</tr>
<tr>
<td></td>
<td>Slow tempo music</td>
</tr>
<tr>
<td>Focus -</td>
<td>Block out distractions</td>
</tr>
<tr>
<td></td>
<td>Concentrate</td>
</tr>
<tr>
<td></td>
<td>Mental imagery</td>
</tr>
<tr>
<td>Mood -</td>
<td>Enhance mood</td>
</tr>
<tr>
<td></td>
<td>Decrease tension and stress</td>
</tr>
<tr>
<td>Team -</td>
<td>Team unity</td>
</tr>
<tr>
<td></td>
<td>Create team compilation (CD’s)</td>
</tr>
</tbody>
</table>
Theme #1: Arousal

The first theme that emerged from the analysis of the transcripts describes attaining certain arousal levels to achieve optimal arousal before and after a competition. The participants expressed music as a way to “get pumped up”, “move around”, “to get the heart rate going”, “adrenaline pumping”, “their blood flowing”, as well as “to relax and calm down”. The participants often mentioned that music played a central role in mental preparation before and after each competition. The majority of the athletes described utilizing music to achieve optimal arousal thus making it a consistent theme throughout the interviews.

Upbeat or fast tempo music. In regards to upbeat or fast tempo music, most of the athletes described that they utilize this type of music to significantly increase their arousal level before a competition. The following quotes offer a description of the positive effect that upbeat music has on an athlete’s arousal level. An increase in movement and adrenalin was experienced by some participants during pre-game in the locker room as well as warm-up on the field:

“It’s just the beat. It’s just something that makes you want to move faster. Maybe just like the adrenalin, it makes you move faster, especially if there’s a song you like. You know, you start getting your players hyped up, guys we can do this.” (Participant #1)

“And it’s usually hip-hop, anything that’s upbeat and gets you going. For me it gets me wound up, I want to do something. It puts more energy into me.” (Participant #4)

“And then the ones that pump you up are upbeat and fast. But sometimes if you go to another field or if we have a good selection, that gets you pumped up while you’re out there warming up because it’s before all the crowds of people get there, and you just get time to just really get pumped up yourself.” (Participant #6).

“If it’s my own use, I usually mix a little rap with alternative punk, stuff like that will get me pumped up or get the adrenalin going, get my heart rate up, get me
moving, listen to the rhyme, the beat of the song. That’s what gets me going.”
(Participant #7)

In addition, under this theme other participants discussed how they utilized upbeat or fast tempo music to get motivated and gets their blood flowing:

“So in the weight room listening to music will kind of get me motivated to do stuff, not country music but more rap and upbeat kind of stuff, some rock or hard rock, stuff like that. I guess it naturally gets my blood flowing.” (Participant #3)

“I’ll start to get going, get warmed up. And it kind of facilitates that, just gets me going and I guess it gives me that little bit of extra motivation just to get warmed up, instead of just having nothing going on. It’s something I have to do, but now with music it’s like I’m already moving. Like it facilitates it a little bit more.”
(Participant #7)

One participant had the experience of utilizing music during a game in an 8 v 8 soccer tournament and added that it made her want to run, play harder and be more aggressive:

“It was just a radio station, but it was cool, because you know when you listen to fast music it makes you want to run and stuff. If its fast music I’m just excited to move around and do something, like play or hurt people in a game.” (Participant #2)

In synopsis, the participants in this investigation used music to help them to achieve an increase in their arousal level before a game or competition, get their body moving and the blood flowing, as well as to become energized and more aggressive in certain instances.

**Slow tempo music.** This subtheme emerged from many athletes descriptions on the importance of listening to music the morning of a game and after a game or competition. Some of the participants added that listening to slow music hours before game time helped them to think about what they had to do during the game:

“There’s a couple of country songs that take my mind off everything else, it’s a lot easier to sit there and think about what you need to do.” (Participant #3)
“Hours before the game I’ll listen to music to calm me down, like R&B, so I don’t get too pumped early on, because we are usually sitting there watching other football games, and sometimes that will get you riled up. And so it’s a good buildup to start off slow and then steadily pick it up as you go on.” (Participant #6)

One participant discussed the importance of utilizing slow music after a game to calm down:

“I do listen to music after a game. It’s usually to bring me back down, I guess, calm me down a little bit. So maybe I’ll listen to something slower like some country or something. I don’t listen to one particular genre, but, usually something to bring me down or just to calm me down after running for an hour and a half.” (Participant #7)

In addition, some of the athletes stated that they use music to relax them. The following quotes suggest that a sense of comfort and relaxation took place within the athletes mind and body:

“We usually use it to relax. I mean we’re getting ready for the game, but to make sure that you’re not just sitting there for an hour nervous about the game.” (Participant #1)

“If we are on the road it helps me block out distraction and actually having to focus in on trying to get relaxed and clam.” (Participant #3)

Therefore, some athletes used slow tempo music to calm and relax them both before and after a game or competition.

Theme #2: Focus

This theme emerged from the athlete’s descriptions of how they prepared for a competition. The participant’s described the use of music before a competition or performance. Moreover, the athlete’s felt strongly about the use of music in order to achieve mental focus. Both fast and slow tempo music were utilized by the athlete’s in
order to achieve mental focus. Other subthemes that surfaced were: utilizing music to block out distractions, dissociation, concentration, and for mental imagery.

**The utilization of music as for achieving focus before competition.** The majority of the athletes used music in order to achieve a mental focus before a competition. Regardless of whether the game was at home or away, the athletes utilized music to accomplish a mental focus. The following quotes offer descriptions of how music enabled them to achieve an appropriate mental focus.

“I usually listen to this one band sometimes, but it’ll vary, but it’s my favorite band so I listen to them and an amazing focus.” (Participant #2)

“I find it a lot easier to focus in more and go through stuff in my head, like what I need to do, and for my whole routine and everything.” (Participant #3)

“Music keeps me focused and I feel like I can focus on how things are going during warm-ups before a match. I can focus on things when I listen to music.” (Participant #4)

One participant described his experience of music in the locker room before a game when the entire team listens to a certain song right before they leave the locker room to go to the field:

“I don’t know where it came from. I don’t know why it gets me as pumped up as it does, I guess because it’s calming at first. It gives you time to like think about the game. The lights are off so you can’t focus on what’s going on. You can’t even see your hand in front of you. So it makes you start thinking. And then when it breaks down and everybody goes from zero to 60 like that. I think that’s probably what makes that so special.” (Participant #6)

In summary, music allowed the athletes to accomplish a mental focus before going out and playing in a competition. Music enabled the participants to think about the game and what they have to do during it.

**Music used to block out distractions.** Most of the athletes expressed using music to block out other distractions in order to accomplish a level of concentration and focus
on what they must achieve during a game or competition. The following quote offers a
description of this:

“Music keeps me focused. I block out everything else that goes on, and I feel that
I can focus on how things are going during warm-ups.” (Participant #4)

**Mental imagery.** Some of the participants described utilizing music to aid with
their mental imagery routine. The following quotes illustrate how the music aids the
athletes during mental imagery:

“I do my imagery. But while I might be doing my imagery I might be listening to
music to calm and relax me to another level, beyond just, sitting in my room by
myself or with a roommate. If we’re on the road, music helps me block out
distractions, too, beyond just actually having to focus in on trying to get relaxed
and calm. Music blocks it out, and then also there’s an agent to it.” (Participant
#3)

“Really just internalizing, kind of seeing what I have to do on the field position-
wise, and what certain situations present themselves and what I have to perform,
and where to go, where to put the ball, where to run. I think of different
situations, trying to get myself ready for the game, so it’s not a moment decision.
I’m prepared for it.” (Participant #5)

In summary, athletes used music in numerous ways in order to achieve a certain
level of focus and concentration before the game. The music enables them to put aside
all other outside distractions and concentrate and envision what they want to accomplish
during the game. The music allows them to clear their mind and strictly focus in on their
visualization routine and the goals they want to accomplish during a game or
competition.

**Theme #3: Mood Enhancing Music**

The third theme that emerged from the examination of the transcripts was music
was used by most participants and in some instances by coaches, to lighten up the mood
and loosen up the atmosphere both in the locker room as well as in the training room.
Mood enhancing music. Many of the athletes discussed the use of music to enhance the overall mood of the team. Some participants described utilizing music as a means to get into a good mood before going to practice or a competition:

“Pretty much, I mean everyday going to practice, listening to something to get you going after a long day at school or something like that. But for me it’s usually rap or hip-hop, upbeat, it’s got stuff going on. Then game day pretty much starts when you wake up. Get yourself in the mood to know what you’re doing that day. And it’s usually hip-hop, anything that’s upbeat and gets you going. For the team I think I’d say the same thing, you want everybody to be in a good mood going into the game. You’d don’t want everybody to be walking around and whatever.” (Participant #3)

“When we were at tournaments in the fall, I’d usually put them (headphones) on if I’m mad to get into a better mood.” (Participant #4)

One participant illustrated the use of music in the weight room as an aid to enjoying working out:

“We were not even more than two minutes into our workout and everyone said “Ah, sweet, we’re listening to music today.” So I think it puts a different kind of atmosphere in the weight room and that everybody’s going to work hard, but I actually enjoy working out.” (Participant #3)

Athletes in this study explained that they used music not only to enhance their personal mood but also to enhance the entire mood of the team. Even more interesting was the fact that the participants used music in all three of these instances: before practice, before a game, and during training, to ensure that they and their teammates were in a good mood. This suggests the possibility of an enhanced performance due to an enhanced mood.

Implement of music to lighten up the mood. Another subtheme that emerged from the analysis of the transcriptions was the use of music to loosen or lighten up the mood of the athletes. Some of the participants described the use of music by their coaches, trainers, and fellow teammates to ease the mood of the situation:
“But if we’re goofing off and messing around together, while the music’s on and everything, and even sometimes when it’s time for coach to come in and talk, they’ve done a couple things with us to loosen up the mood. And it makes me feel more prepared when I step out of the locker room, ‘cause I don’t like that uneasy feeling.” (Participant #1)

“Also it makes it an atmosphere that’s not strictly hardcore lift weights. You can cut up a little bit. Some kids will dance a little. It puts more fun into it. It relaxes the atmosphere more, because people work out and they’ll dance from whatever they had to do, to the water fountain. It’s the little stuff that is beyond the hardcore lifting that reminds you that it is fun, and that people do enjoy it, and it’s not hardcore military lift weights. Get huge; don’t have any fun and all that crap. It’s beyond that.” (Participant #3)

Hence, the participants described the use of music to ease the environment that they were experiencing. Whether, the environment was right after a long day of class and then going to practice, or training, or even before a game in the locker room, the athletes found the utilization of music to be of importance.

**Theme #4: Team**

The last theme within this study was team. The athletes described team as a group of people with whom they played the same sport. They are all considered their teammates. Most of the athletes in this investigation stated that the team made a music compilation for their warm-up which contained songs that each team member picked. Moreover, some of the participants expressed that they liked the fact that the majority of the team was listening to the same music, as it created a sense of team unity. The following quotes illustrate some athletes’ use of this notion.

These athletes discussed the experience of creating and using a music compilation developed by the team for pre-game:

“Each person okays the music because each person gets to come up with their own song. It’s cool because you get to hear your favorite song along with everyone else’s. So you’re getting pumped up at the same time everyone else is getting pumped up, and we’re all listening to the same thing. So we’re all on the
same page and we all know what we need to do. So I like listening to the same music because it makes sure we’re all ready to go.” (Participant #2)

“We have a sound system in our locker room, so we’ll use that and somebody on the team will bring in CDs or we’ll have a team CD. Then you get the warm-up music that we all agree on before. Everybody gets into pretty much.” (Participant #5)

This athlete described his experience of using a team music compilation that a teammate made; it was not a collaborative team effort:

“In the locker room we have a stereo up with usually rap or something along those lines. Since one person made the CD, we all agree on some songs more than others. The last CD was pretty good, no one really had any objections to it.” (Participant #7)

In summary, the athletes in this investigation found the use of a team music compilation to be very important for their pre-game warm-up.

Team unity. The final subtheme within the team theme was utilizing music or a team song to create a sense of team unity. One particular athlete described the use of a team song as well as the team singing their own song on the way to the field:

“Well I guess the biggest thing here before the games, we listen to a Phil Collins song, *I Can Feel It In The Air Tonight*, and we turn off all the lights and even though it’s a slow song, it has that one part where it breaks down, and at that time everybody starts screaming and banging on the lockers and then we go get on the buses and go to the game. And then we have a chain of events that go on and then when we’re riding the bus to the field there’s a team song that we sing as a team. It’s almost kind of a chain gang type deal, because you have one leader that’s singing, and then after they would say that everybody else follows, and so you have that one person leading and then a whole bus in unison afterwards.” (Participant #6)

**Summary**

The participants in this investigation were interested in discussing their experience of music in sport before and after a competition. Some participants spoke of specific instances of when they or their team utilized music, while others explained how
music helps them prepare for a game. All of the participants stated that they listen to music before a game and provided details about their experience. One participant actually relived his experience of utilizing music in the locker room and on the way to the game with the researcher by taking the researcher through the step-by-step process that occurs a few hours prior to a home game.

In addition, the majority of the participants spoke of many other instances, outside of their sport, in which they used music. Most of the participants stated numerous situations in which they use music in their everyday life. One stated: “I listen to music walking between classes.” While another explained, “I listen to music while doing my homework.” Many of the participant’s spoke of listening to many genres of music depending on what mood they were in, however, most of them spoke of listening to rap or rock if they had to get pumped up. Moreover, the majority of the participants expressed a delighted attitude for participating in the study and most of them were more than willing to ask their fellow teammates and athletes (from other teams) to also participate in the study. This shows that the participants enjoyed being able to discuss their experience of music in sport and should be seen as an advantage for phenomenological research.
DISCUSSION

The purpose of this chapter is to explain the results of this investigation by examining previous research in the field of music in sport as well as in everyday life. Each section begins with a description of the current theme and then continues to an examination of associated research. The end of these sections contains conclusions and suggestions for further research.

Arousal

The theme of obtaining an optimal arousal level was an important part of the performance experience. Moreover, all of the participants involved in this study expressed experiences in which they utilized music in order to achieve an optimal arousal level, both before and after a competition.

Upbeat or fast tempo music. Gfeller (1988) stated that music and the rhythm or beat of the music automatically gets the human body moving. Therefore, it is not surprising that many athletes would listen to music in order to achieve a higher or lower level of arousal and get their bodies moving. Elliot, Carr, and Savage (2004) suggested that athletes who listen to upbeat or fast tempo music perform better during exercise. Consistent with this suggestion, athletes in the current research expressed the notion that music was helpful as an arousal mechanism for their particular sport. The participants described how music “pumped them up,” “got them excited,” and “moving around” before they were about to perform. To further support this notion, Karageorghis and Terry (1997) suggest that sport psychologists often recommend for athletes to use music as part of psyching-up strategy in preparation for competition, or to calm down.
Moreover, Gfeller (1988) suggests that music influences arousal if it promotes thoughts that encourage physical activity or relaxation.

Consequently, the association between certain types of music and physical activity may act as a stimulus. If an athlete needs to increase their arousal level before a game, they may listen to the music that encourages them to go out and compete at an intense level. All of the participants in this study stated “they listened to music that was upbeat because it got their blood flowing by moving to the beat.” The athletes mentioned that even during weightlifting workouts they would dance from station to station because the music was on and it made them want to move with the beat. Furthermore, the athletes expressed that they would not know what would happen to their performance if they did not have music before a competition. Many of them discussed not liking the rules that are in place for regulating which songs they can and can not play during their pre-game warm-up on the field. This uneasy feeling experienced by the athletes regarding not being able to have the music they prefer or any music at all may be a deterrent to optimal performance. Future research may want to examine this issue more.

Similarly, Karageorghis (1999) suggests that music aids in the process of rhythm and synchronization with movement, which in turn, can lead to increased levels of exercise output. In addition, Elliott, Carr, and Savage (2004) suggest that those who listen to motivational music perform significantly better than those who did not listen to music. Consistent with this notion, participant one explained, “if the music was being played during a weightlifting workout they were able to work more diligently because they were more motivated to do so with the music on.” The music was stimuli for the athletes, thus making their workout seem easier. Clearly, music plays an important role
in the motivational and arousal levels of the athletes in this study before a game and during training.

**Slow tempo music.** Some of the participants in this study discussed utilizing music to calm down either before or after a game. Research suggests that music can be used to reduce anxiety in individuals (Seaward, 2002 & Stoudenmire, 1975). By listening to calming music an individual can reduce their anxiety level. Karageorghis (1999) also suggests that slow tempo music in most cases calms a person down, however, it should be noted that it is a personal preference as to which music intrinsically motivates an individual. The research has shown music can be utilized to pump an individual up, however, the opposite effect can be utilized. This was the case with one athlete involved in this study in which he mentioned that he “listens to R&B while watching game tapes of the opposing team” (Participant #6). He explained “that he had to listen to this slow tempo music in order to stay calm and not become so “fired up” to where he would have expended all of his energy before the game had even started” (Participant #6).

Moreover, many of the athletes discussed that they listened to music after a game to bring them back down to a calm and relaxed level. Most of the music that they listened to after a game was music that had a slower tempo. In addition to using slow tempo music after a game, the participants also mentioned they would use this type of music to achieve an optimal pre-game focus. They would then shift from a slow tempo to an upbeat tempo right before the game to remain focused.
Focus

The utilization of music for achieving focus before competition. The athletes utilized music in a way that would suggest music enables them to achieve an enhanced focus and concentration before competition. Karageorghis and Terry (1997) suggest that by listening to music during aerobic activity, an individual’s focus is narrowed and is on the music instead of the actual output. Similarly, the participants in Lukas’ (n.d.) study felt music helped bring about a peacefulness which took their mind off of the pain. The patients commented that the music allowed them to focus on the music and not on their surroundings as well as enabling a feeling of peacefulness and take their mind off of the pain. Moreover, Karageorhgis (1999) suggests that music can narrow an individual’s attention in repetitive exercise and divert attention away from feelings of fatigue.

Consistent with the research, one athlete discussed how he “enjoyed listening to music during weightlifting and conditioning because it made the workout go by quicker” (Participant #3). Another athlete explained that she “enjoyed listening to music while playing because it increased her work ethic” (Participant #2). These two athletes seemed to really enjoy working out and playing while having music on in the background. The enjoyment of listening to music while exercising could be due to factors such as music helping with the dissociation of fatigue as well as being a synchronization agent for movement.

On the contrary, the remaining participants in the study did not mention the use of music during competition or practice. Instead the interviews revealed that the athletes used music to help them focus before a competition and get into the mind set of performing. The athletes described that by listening to music they were able to internally
focus on what they had to accomplish during their performance or competition. As mentioned early, the athletes spoke of using slow tempo music hours before and upbeat music an hour before they had to perform. Consequently, the themes arousal and focus are interrelated.

**Music used to block out distractions and in return concentrate.** As research has shown, music can be used by athletes as well as ordinary individuals to block out sensations of fatigue or other distractions because the music narrows the individual’s attention (Karageorghis, 1999; Karageorghis & Terry, 1997; Lukas, n.d.). Therefore, by listening to music an individual is able to concentrate on the music rather than how far he/she has ran, walked, etc. Interestingly, the athletes in this study seemed to utilize music in order to block out other distractions, such as their teammates, in order to concentrate on what they want to accomplish during a game. All of the athletes spoke of listening to music before a game to block out the outside distractions that they were experiencing within their environment. This may enable the athlete to remain calm and focused on their upcoming performance. Hence, it seems that the majority of the athletes utilized music before a game or competition to narrow their attention away from outside distractions and concentrate on the game itself and have the music as a background focus noise.

**Mental Imagery.** Dorney and Goh (1992) suggest that music does not enhance the effectiveness of imagery. Conversely, the interviews of this study revealed the opposite. In fact, music in essence became part of their imagery routine as they would first put on their headphones before engaging in imagery. The athletes described that the music enabled them to help focus on their imagery routine as well as blocking out any other
distractions that were occurring around them. These are important factors because in order to perform an imagery routine correctly a person must experience somatic and cognitive calm in order to clearly focus on the specific routine. This supports Karageorghis’ (1999) suggestion that music can narrow an individual’s attention. In essence, the music enabled the athletes to clear their mind of everything else and strictly narrow their focus and concentrate on their visualization routine. Moreover, research has shown that audio imagery, recreating the sounds of a song(s) in your mind, can be utilized as a relaxation tool (Seaward, 2002). Therefore, it may be possible for an over anxious athlete to recall a desired song that promotes relaxation, which in turn would reduce his anxiety and allow him to return to an optimal anxiety level. Further research needs to be conducted to investigate the possible affects audio imagery may have on athletes.

*Mood Enhancing Music*

Mood enhancing music. Music elicits an emotional response in each person who listens to any kind of music. As Krumhans (2002) explains, we have expectations when we hear music and those expectations determine our emotions toward that music. Krumhans found that when people heard slow tempo music their basic emotion was sadness, when people heard rapid and large variations in tempo their basic emotion was fear, and when people heard rapid tempos with a dance-like rhythm their basic emotion was happiness (Krumhans, 2002). In addition, Blood, Zatorre, Bermudez, and Evans (1999) point out that our emotions linked to music are elicited through memory and association. “Thus the expressiveness of music has to do with its power to evoke certain imaginative emotional experiences” (Robinson, 2001, p.14).
Similarly, the participants in this investigation revealed that they listened to music that was going to get them “pumped up” and in a “good mood.” One athlete stated “the music I listen to before a competition or practice is rapid in tempo because I want to be in a good mood before both practice and competition” (Participant #4). One of the athletes also expressed that the music he listened to put him in a good mood, which increased his enjoyment of lifting weights. These statements possibly suggest that when they choose music they are expecting to be in a better mood after they hear it. The participants in this study may expect a particular genre of music to have an effect on their emotional state before and even after a game. Their expectations while listening to music elicits a certain emotional response, which in turn affects their mood, which in turn can ultimately have an affect on performance.

**Music utilized to decrease tension and stress in an environment.** Research has shown that fast tempo music can elicit happiness (Seaward, 2002). Thus, the athletes may have used music in the locker room, during pre-game warm-ups and training to loosen up the atmosphere within those environments. One of the athletes mentioned that “their coaches used the music to ease everyone’s mind, to lighten the nervous atmosphere up in the locker room before a game” (Participant #1). Another athlete mentioned his “strength and conditioning coach utilizing music to loosen up the environment and make it more relaxed” (Participant #3). The quotes suggest music may allow them to ease any tensions or stress they might be feeling towards their performance. Music may provide athletes with a mentality that everything will be fine and to remember that it is a game and games are meant to be fun. In essence, the music could allow the athletes to prepare
for a competition in a relaxed environment, which in turn may allow athletes to focus on the game, but also remain at ease with their fellow teammates.

**Team**

**Team Music.** Many of the athletes in this investigation discussed creating two musical compilations, one of which was for the locker room and the other for the pre-game warm-up on the field. Rentfrow and Gosling (2003) point out that athletes tend to prefer music that is intense and rebellious. Most of the athletes described the compilations contained music that was fast in tempo, such as rap, hip-hop, or rock music. Once they listen to the intense music it is as if a switch is flipped and they begin to get “pumped up.” The intense music is what seemed to put that “fire” and positive energy into the athletes mind. In addition, Elliot, Carr, and Savage (2004) also suggest that listening to music can have a positive affect on in-exercise affective mood states. By allowing an athlete to choose his/her own music they are more likely to complete an exercise program and remain motivated to do so (Dwyer, 1995).

The creation of a team compilation could possibly foster team cohesion because each member of the team must communicate and express which song or songs they want on the compilation. Additionally, when the team listens to the compilation together, it could possibly foster team unity because they are getting “fired up” together. Therefore, choosing the right music should be completely up to the athlete and dependent on what they want to achieve from listening to the music. Most of the participants expressed “they enjoyed listening to the team CD because each person on the team helped to create the CD.” Thus, this could possibly create an atmosphere that generates a sense of team unity.
**Team Unity.** The more cohesive a team is, the more likely they are going to achieve peak performance (Sugarman, 2007). The athletes enjoyed listening to the team compilation because it may have provided them with a sense of team unity. When everyone is involved with the creation of the compilation, it may help develop a team identity. The identity may strengthen as each member’s song is being played. Moreover, the music may allow the athletes to prepare for the game as a unit, thus preparing them to compete as a team. In essence, the compilation may create an avenue that enables the team to form a positive identity. Developing a positive team identity is one of the many characteristics of team cohesion (Sugarman, 2007).

However, while the athletes did discuss the use of team compilations, they did not provide a detailed description of the experience. Therefore, further research needs to be conducted in order to fully grasp the concept of team music and how it may foster team cohesion. Additionally, the current study contained possible limitations such as all of the athletes were from the same university. There was not a wide variety of different sports and racial backgrounds represented in the study. Although the current study provides a rich description of the experience of music in sport among collegiate athletes, it is only the beginning of truly understanding the experience of music in sport. Future research needs to be conducted that examines each theme separately, as this would provide more depth of the experience. Semi-structured, mixed methodological and phenomenological approaches could all be beneficial methods for further research regarding the experience of music in sport.
Conclusions

Based on the results of this investigation the following conclusions that can be drawn are that:

- Collegiate athletes in this investigation utilized music to either increase or decrease their arousal levels.

- Collegiate athletes in this investigation preferred upbeat or fast tempo music to increase their arousal level pre-game in the locker room and during their pre-game warm-up on the field or court.

- Collegiate athletes in this investigation listened to music that was slow in tempo to stay relaxed before a game and to become relaxed after a game.

- Collegiate athletes in this investigation used music to block out distractions.

- Collegiate athletes in this investigation utilized music to become focused and ready to play.

- Collegiate athletes in this investigation used music as an aid to their mental imagery routine.

- Collegiate athletes in this investigation listened to music to enhance the overall mood of him or herself as well as the team.

- Collegiate athletes in this investigation used music to reduce tension and stress in the environment of either practice and/or while in the locker room.

- Collegiate athletes in this investigation listened to music to create a sense of team unity.
Recommendations for Coaches, Sport Psychology Consultants, and Sport Researchers

Based on the results of this study, the following are recommendations for coaches, sport psychology consultants, and sport researchers.

1) Coaches and strength and conditioning trainers should allow athletes to listen to music they prefer during practice and/or workouts because it may aid with the athletes’ intrinsic motivation, thus having them work harder and perform better.

2) Sport psychology consultants may help athletes enhance their performance by utilizing music during imagery training, arousal regulation training, and concentration training.

3) Sport psychology consultants can encourage athletes to listen to music as an aid to enhance their overall mental preparation before, during, and after a game or practice.

4) Sport psychology consultants can encourage coaches and trainers to use music as a device to enhance performance during practice or certain aspects of training.

5) Sport psychology consultants can encourage athletic trainers to allow their athletes to listen to music during their rehabilitation process, which would allow the athletes to narrow their focus on the music and disassociate from the pain as well as act as an intrinsic motivator.

6) Future researchers need to examine the experience of athletes from other divisions of sport (e.g., Professional, Amateur, Division II, Division III, NAIA, Club sports, etc.) to determine their experience of music in sport.
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APPENDIX A

RESEARCH QUESTIONS, LIMITATIONS, DELIMITATIONS, ASSUMPTIONS AND DEFINITIONS
Research Question

1. The purpose of the present research project is to explore elite athlete's experience of music in sport from an existential phenomenological perspective. This objective was accomplished in two ways: (a) by allowing the elite athlete to speak in his/her own language, and (b) by attempting to understand the music experience as free of judgment, socially constructed labels and preconceived notions as possible. The primary research question for this study was: What is the lived experience of elite athletes when they listen to music before, during, or after an athletic event?
Limitations

As with every study, this investigation had some potential limitations.

1. The athletes that were interviewed were seven NCAA Division I collegiate athletes. While the sample size was small and is a limitation in quantitative research, it is not considered a limitation when conducting phenomenological research, since the nature of this research is to identify the phenomenological structure of experience and not to make generalizations from a sample to a population.

2. All of the athletes in this study were affiliated with NCAA Division I. As a result, their descriptions may have been related to or influenced by the philosophy of this level of athletics.

3. While the interviews were continued until the athletes felt they had presented the figural elements of their experience of music, participants may have been able to recall more of their experience if additional interviews had been conducted. However, all of the athletes were interviewed until a repetition of structural themes emerged.

4. The primary investigator is a former competitive athlete. Although a bracketing interview was performed and the investigator utilized an open minded approach to the investigation, the possibility of a Musical bias did exist in the interpretation of results.

5. The researcher could not control the motivation and interest level of the participants and therefore, the participants may not have taken the interview seriously.
6. The participants may also have answered the questions with what they thought the
socially desired responses, not personally accurate responses.

7. The participants were athletes from only Georgia Southern University.

**Delimitations**

1. The participants were from the same university.

2. A narrow age range of participants (18-24) was utilized.

3. Not getting a wide variety of participants from different sports due to the coach’s
unwillingness of their athletes to participate in the study or the athletes
unwillingness to participate.

**Assumptions**

The following assumptions were made in reference to this study:

1. The personal experiences of an athletes music experiences in sport are important
   in understanding the meaningfulness of music in sport.

2. The participants in this study were able to effectively articulate their experiences
   of using music in sport and communicate their perceptions, thoughts, feelings, and
   actions as openly and honestly as possible.

3. The qualitative interview was a valid and reliable method for gathering an in-
   depth description of athletes’ personal experiences of music in sport.
Definitions

1. Music- Vocal or instrumental sounds possessing a degree of melody, harmony, or rhythm.

2. NCAA Division I athlete- A male or female that participates in a varsity sport in which the schools athletic department is recognized as NCAA Division I.

3. Qualitative Interview- yield direct quotations from people about their experiences, opinions, feelings, and knowledge (Patton, 2002).

4. Research Team- Persons who are knowledgeable in qualitative research, that help the researcher analyze the transcripts and form appropriate themes (Patton 2002).

5. Phenomenological Analysis- seeks to grasp and elucidate the meaning, structure, and essence of the lived experience of phenomenon for a person or group of people (Patton, 2002).

6. Humanistic Framework- Cannot explain or describe a human experience without examining the world in which they live. The experience and the world cannot be separated (Hill, 2002).

7. Demographic questionnaire- This state the age, gender, sport played, and race of the participant(s). See appendix C for questionnaire.
APPENDIX B

EXTENDED REVIEW OF LITERATURE
Music and the various aspects it has in people’s everyday lives has been a topic of interest in recent years. Rentfrow and Gosling (2003) found that music is very important to people and that it does play a key role in their everyday activities whether it be at the office, at home, or during physical exercise. In addition, there have been several studies that have been conducted to see if and how music affects an athlete.

Music preference and personality

Rentfrow and Gosling (2003) conducted a series of studies to see if music correlates with personality. The results of the various studies show that in fact music is correlated with personality on certain dimensions. Rentfrow and Gosling (2003, p. 1237), point out that “preference for highly arousing music appears to be positively related to resting arousal, sensation seeking, and antisocial personality.” Meaning, people who listen to heavy metal tend to have higher resting arousal level than people who listen to country or jazz. Rentfrow and Gosling (2003) conducted a study in which they found that personality has an impact on the type of music we choose. The results showed that extraversion was positively related to cheerful music with vocals whereas, openness and new experiences was positively related to artistic music (Rentfrow & Gosling, 2003). Therefore, people tend to prefer music that allows them to send a message to others about who they are or how they would like to be seen. People can communicate their personality through music. Consequently, knowing what type of music people prefer can provide clues to their personality and self-views. An individual’s preferences for music varies from person to person however, as Rentfrow and Gosling (2003) point out, athletes tend to prefer music that is intense and rebellious. People’s
preferences for music not only may say things about their personality and self-views but also music can and does have various other effects on people and their daily activities.

Effects of music

Music and the assorted aspects it has in people’s everyday lives has been a topic of interest in recent years. Cognition and emotion are closely linked in music. Music elicits an emotional response in each person who listens to any kind of music. As Krumhans (2002) explains, we have expectations when we hear music and those expectations determine our emotions toward that music. He found that when people heard slow tempo music their basic emotion was sadness, when people heard rapid and large variations in tempo their basic emotion was fear, and when people heard rapid tempos with a dance-like rhythm their basic emotion was happiness (Krumhans, 2002). People experienced tension when they listened to all three types of music. Therefore, Krumhans found that “music draws on common psychological principles of expectation, but that musical cultures shape these in unique ways” (2002, p.49). In other words, different cultures experience expectations of music in different ways, which shapes our emotions towards the music we hear.

In addition, Blood, Zatorre, Bermudez, and Evans (1999) point out that our emotions linked to music are elicited through memory and association rather than spontaneously. Music dissonance is associated with pleasant and unpleasant emotional responses to music. This explains why people feel certain emotions towards music because they are associating the music to a past memory or association with someone or something. “Thus the expressiveness of music has to do with its power to evoke certain imaginative emotional experiences” (Robinson, 2001, p.14). Consequently, if we know that music
brings forth an emotional response then music should also be tied with athletes and how they prepare, perform, and their personality.

Previous research that does exist on this topic suggests that music increases people’s physical activity. Research has also shown that music affects heart rate and respirations. Lastly, research suggests that music can enhance vigilance task performance and mental imagery as well.

Impact of music on performance

Music can impact the performance of many individuals. As Choo (1994) found that when surgeons were able to listen to music of their choice their autonomic reactivity (skin conductance, blood pressure, and pulse rate) was least and their speed and accuracy of the surgical procedure was best, when compared to listening to no music at all or music that was assigned to them.

Previous research has shown that music can be used to deter an athlete attention away from sensations of fatigue during exercise, it can also be used as a relaxation tool or as a stimulant prior to or during an activity, and music can also be used as a rhythmic tool and the athlete’s movement can be synchronized with the tempo of the music. (Karageorghis & Terry, 1997). While listening to music during exercise or a physical activity, the individual’s focused is narrowed and is on the music instead of how fast he/she is actually running or biking, etc (Karageorghis & Terry, 1997). Therefore, this can lower the athletes perceived exertion rate during physical activity by drawing their attention and focus to the music. Moreover music can be used as an arousal regulation tool for not only athletes but others as well.
Stoudenmire (1975) points out that music can be used to reduce anxiety in individuals. By listening to calming music an individual can reduce their anxiety level. More recent research has also shown that music when given to intraoperative and postoperative patients significantly reduced pain, anxiety, and morphine consumption (Nilsson; Unosson; & Rawal, 2005). The results indicate that those patients who listened to music intraoperative can have decreased postoperative pain and therefore have a decrease in the amount of morphine consumption (Nilsson; Unosson; & Rawal, 2005). Similarly, those patients who listened to music postoperatively only can have a reduced level of anxiety about the rehab process and feelings of post surgery pain (Nilsson; Unosson; & Rawal, 2005). Similarly, Lukas (n.d.) found that music therapy used during their stay in the outpatient surgical facility helped to decrease anxiety and control pain. The patients commented that the music allowed them to focus on the music and not on their surroundings as well as enabling a feeling of peacefulness and take their mind off of the pain. Consequently, if music therapy can be used to control arousal regulation in patients then it should also be an effective tool for athletes as well.

Gfeller (1988), point out that music can stimulate an athlete before, during or after a competition. When athletes need to get “psyched-up” they will listen to music that produces an aroused response or motivational response to go compete. Opposite of that if an athlete needs to calm down calming music can be used to reduce arousal and bring the athlete back to optimal performance. While music has been found to control for perceived exertion rate and arousal, music has not been found to reduce heart rate or enhance mental imagery while performing a task.
Yamamoto et al (2003) conducted a study to examine the effects of listening to slow and fast rhythm music prior to doing supramaximal exercise, on performance, heart rate, the concentration of lactate and ammonia in blood, and concentration of catecholamines in plasma. The results showed that there was no significant difference in output during exercise after listening to slow or fast rhythm music. Also the slow and fast rhythm music did not affect the heart rate resting, during or after exercise. There was no significant difference between slow and fast rhythm was found in blood lactate and ammonia concentrations. The main finding of the study was that listening to music helps decrease the plasma norepinephrine concentration and listening to fast rhythm music increases the plasma epinephrine.

Dorney and Goh (1992) also wanted to see how music affects performance, heart rate, and imagery. They examined the effects of two types of music on heart rate and performance in a dart-throwing task, to see if in fact music did have an effect on heart rate. The second study examined the effects that task specific imagery (with and without music) had on a performance of doing sit-ups for 30 seconds. They wanted to see if the task specific imagery with music would enhance performance. The results of study I show that listening to music does not enhance performance for dart-throwing. It also showed no relationship between heart rate and performance. The results of study II suggest that music did not enhance the effectiveness of imagery when given the same instructions and positive expectancies. Therefore, the use of music with imagery did not enhance performance any differently than the imagery did without music. Therefore, this suggests that music does not necessarily enhance or facilitate ones performance. However, Elliott, Carr, and Savage (2004) suggest that music does enhance performance.
They conducted a study in which they wanted to determine the effects of motivational music on individuals exercising at a standard perceived intensity (Elliot, Carr, & Savage, 2004). The results of the study show that when the participants listened to motivational music that cycled significantly further than they did with no music (Elliot, Carr, & Savage, 2004). In addition, the results also suggest that while listening to music the increase in work out put had a positive affect on in-exercise affective mood states (Elliot, Carr, & Savage, 2004). Therefore, music can enhance and affect an athlete’s performance not only in daily exercise but also in sport.

Music in sport

Karageorghis (1999) suggests that there are four main ways in which music can aid performance in sport. First, music can narrow attention in repetitive exercise and divert attention away from feelings of fatigue (Karageorghis, 1999). This is a great tool that is used by many marathon runners and triathletes. Secondly, music as mentioned above can also affect arousal levels and can act as a sedative or a stimulant before a competition (Karageorghis, 1999). Third, music aids in the process of rhythm and synchronization of music with movement, which in turn, can lead to increased levels of exercise output (Karageorghis, 1999). Lastly, music can enhance the acquisition of motor skills and create a better learning environment (Karageorghis, 1999). Moreover, there are motivational qualities of music that should be considered when selecting music with a sport activity.

The music must have a rhythmic response because people will react to rhythmical stimuli (Karageorghis, 1999). Secondly, the music melody and harmony shape the athletes interpretation which in turn influences mood states (Karageorghis, 1999).
Karageorghis (1999) also suggests that cultural impact of music will influence the athlete’s response through their socio-cultural upbringing. Fourth, music can promote sounds that inspire physical activity (Karageorghis, 1999). However, it should be noted that the rhythmic response and harmonic and melody factors are the most important factors according to Karageorghis (1999). In addition, three other factors should be considered when selecting music. There should be variety; this will allow athletes to maintain interest. Secondly, the volume of the music should not exceed the noise of the practice environment and lastly, the tempo of the music should concur with the preferred work rate (Karageorghis, 1999). Therefore, music has the ability to motivate, inspire, and even relax the competitive athlete. An individual’s perceived choice of music can increase their intrinsic motivation (Dwyer, 1995). By allowing an athlete to choose his/her own music they are more likely to complete an exercise program and remain motivated to do so (Dwyer, 1995). Choosing the right music is completely up to the athlete and dependent on what they want to achieve from listening to the music.

Qualitative approach to research

Qualitative researchers are interested in gathering a thick rich description of an entire phenomenon that is geared towards a specific population. Consequently, qualitative research is only generalizable to that specific population that is being examined. There are various approaches and methods to performing qualitative research; the approach of this current study is existential phenomenology. The framework of this type of approach is built out of the humanistic model. “The humanistic tenet reflected in qualitative studies is a concern with individual human experience in specific contexts” (Hill, 2001, p.118). “There is a recognition that each athlete gives meaning to his/her
experience and that those meanings are shaped by individual perceptions and social constructions” (Hill, 2001, p.118). Therefore, in order to acquire a true understanding of an athlete we must examine the athlete as being linked to his/her world (Hill, 2001). This is what existential phenomenology seeks to accomplish.

Phenomenology is concerned with seeking to examine and understand a phenomenon from the perspective of an individual within that particular phenomenon. In order to accomplish this goal, the researcher seeks to acquire a rich description of the lived experience from the perspective of individuals themselves (Czech et al, 2004). This current study will examine the phenomenon of music in sport by using the existential phenomenological approach.

“Existential phenomenology initially emerged as a philosophy that sought to understand human existence in a manner as free as possible from cultural presuppositions” (Czech et al., 2004, p.52). When this approach is applied to psychology and the study of humans, it seeks to explicate the form or structure of human behavior through descriptive techniques (Czech et al., 2004). As cited in Czech et al (2004) Inde (1986) states that description is meant to imply both what is to be included and what is to be excluded. “Anything that is not related to the experience will be excluded, while anything related must be included” (Czech et al., 2004, p.52). Furthermore, existential phenomenology considered people to be holistic; it examines people and their world as a whole. Meaning, that both the athlete and the world that the athletes lives in will be examined as a whole, experience and existence are inseparable (Czech et al., 2004).

The ultimate goals of the existential phenomenological researcher are to seek the structural essence of some event as experienced by some individual (Czech et al., 2004).
Therefore, “in phenomenology the description is the means, experience is the matter, and structure is the goal” (Czech at al., 2004, p.53). The methodology in phenomenological research seeks to describe the experience of a phenomenon from an individual’s perspective that is experiencing the phenomenon being examined. To obtain a description of the experience a phenomenological interview is used. Czech at al. (2004) states, “this method encourages realization and clarification of meaning as the individual describes his/her experience.” Therefore, existential phenomenology seeks to describe the lived experience of an individual within a specific phenomenon.

The current study seeks to examine and describe the lived experience of music in sport, by using an existential phenomenological approach. It has been suggested that people listen to music nearly 14% of their walking lives (Rentfrow & Gosling, 2003). Therefore, music is obviously important to people and they listen to it frequently. If music is important to people, we must also assume that music plays a key role in an athletes life as well.

However, no study has examined the phenomenon of music in sport from a phenomenological approach. Therefore, the purpose of the present research project is to explore elite athlete's experience of music in sport from a qualitative perspective. This objective is accomplished in two ways: (a) by allowing the elite athlete to speak in his/her own language, and (b) by attempting to understand the music experience as free of judgment, socially constructed labels and preconceived notions as possible. The primary research question for this study is: What is the lived experience of elite athletes when they listen to music before, during, or after an athletic event?
ADDITIONAL REVIEW OF LITERATURE REFERENCES


Lukas, L. K. (n.d.) Orthopedic outpatients’ perception of perioperative music listening as therapy. *Journal of Theory Construction and Testing, 8*(1), (7-12).


APPENDIX C

DEMOGRAPHICS QUESTIONNAIRE
Directions: Please answer the following questions below as honestly as possible

1. Gender ____________
2. Age ____________
3. Ethnicity (race) ____________
APPENDIX D

INFORMED CONSENT
CONSENT FORM

COLLEGE OF Health and Human Sciences

DEPARTMENT OF Health and Kinesiology

INFORMED CONSENT

Hello. You are being asked to participate in a study being conducted by Lacey Sorenson from Georgia Southern University. I am a current second year graduate student obtaining my Master’s degree in Kinesiology with an emphasis in Sport Psychology at Georgia Southern University. The researcher is interested in analyzing the lived experience of music in sport from a division I varsity athlete’s perspective.

The purpose of this research is to interview varsity athletes from various sports at Georgia Southern University to investigate the impact of music in sport within the athletic culture. Participation in this research will include completion of an interview with the researcher. Your interview will be audio taped and transcribed verbatim and you will be given the opportunity to review the transcript and make changes to your comments. You will not be asked your names during the interview so responses will remain anonymous. The audio tapes will be stored in a locked file in the researcher’s office. The tapes will be destroyed one year after the completion of the study. The researcher and a professional transcriptionist will be the only people with access to the tapes. The interview will take approximately 20 minutes and will be conducted at a location of your choice. The results of this study may help other athletes and coaches realize and have a better understanding of the impact that music has on sports and those who play them.

There are no anticipated risks. There are no direct benefits to you for participating in this research study.

The information that you give in the study will be handled confidentially. Your information will be assigned an alias name. The list connecting your name to this alias name will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report.

You have the right to withdraw from the study at any time without penalty. You may decline to answer certain questions. If you wish to withdraw from the study then tell
the researcher who will immediately stop the interview. If you decide to withdraw after data has been collected then contact the researcher who will not destroy the data collected. You will receive no payment for participating in the study.

Participants have the right to ask questions and have those questions answered. If you have questions about this study, please contact the researcher named above. To contact the Office of Research Services and Sponsored Programs for answers to questions about the rights of research participants please email oversight@georgiasouthern.edu or call (912) 486-7758.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below. Your participation in the study is completely voluntary. You will be given a copy of this consent form to keep for your records.

Title of Project: An Examination of the Experience of Music in Sport Among NCAA Division I Athletes- A Qualitative Approach.
Principal Investigator: Lacey Sorenson, 1210 Fair Road, Statesboro, GA. 30458, 239-770-6205, Laces624@aol.com
Other Investigator(s): Dr. Dan Czech, P.O. Box 8076, Statesboro, GA. 30458, 912-681-5267, drczech@georgiasouthern.edu

______________________________________  ___________ __________
Participant Signature     Date

I, the undersigned, verify that the above informed consent procedure has been followed.

______________________________________  ___________ __________
Investigator Signature     Date
APPENDIX E

REVIEWER CONFIDENTIALITY AGREEMENT
Reviewer Confidentiality Agreement

I, _____________________ (print name) am taking part in the Experience of Music in Sport Project.

I understand that as a reviewer in the project, I am expected to maintain the confidentiality of the persons I review to the best of my ability. I understand that I may have access to personal and private information in the course of this project. I agree to treat this information in the way that I would want personal information about myself treated.

I will treat all information about the co-participants I review as confidential. I will not discuss the information given by co-participants with anyone other than the project staff. I will keep the identities of co-participants strictly confidential, unless they have consented to have their names used in the report.

This issue of confidentiality has been discussed with me and I agree to the terms of this agreement.

Signed _____________________
Date _____________________

Approved _____________________
Date _____________________
Cover Page

Georgia Southern University
Institutional Review Board

For electronic submission: Your proposal narrative should already be completed and saved. Next complete cover page and “Save As” a word document to your computer or disk named “Coverpage_Year_Month_Date_lastname, First initial.doc”. Then open and complete Informed Consent Checklist.

Application for Research Approval

<table>
<thead>
<tr>
<th>Name of Principal Investigator:</th>
<th>Email:</th>
<th>Phone: (239) 770-6205</th>
<th>Address: 1210 Fair Road Statesboro, GA. 30458</th>
</tr>
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<tbody>
<tr>
<td>Lacey Marie Sorenson</td>
<td><a href="mailto:Laces624@aol.com">Laces624@aol.com</a></td>
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Department: Health and Kinesiology

Project Start Date: 09/1/06
Project End Date: 09/1/07

*Date of IRB education completion: May, 2007  (attach copy of completion certificate)

Check one: □ Student  □ Faculty/Staff

If student project please complete advisor’s information below:

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<th>Advisor’s Name:</th>
<th>Advisor’s email:</th>
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<tr>
<td>Dr. Dan Czech</td>
<td><a href="mailto:drczech@georgiasouthern.edu">drczech@georgiasouthern.edu</a></td>
</tr>
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</table>

Advisor’s phone: (912) 681-5267
P.O. Box: 8076

Department: Health and Kinesiology

All applicants please complete all fields below:

Project Information:

Title: An Examination of the Experience of Music in Sport Among NCAA Division I Athletes- A Qualitative Approach.

Project Duration (in months): 7 months  Number of Participants: 10-12

Brief (less than 50 words) Project Summary:
Music is important not only to society in general but to athletes as well. This study will examine the lived experience of music in sport from a phenomenological perspective. This approach will allow the researcher to obtain a rich thick description of the athlete’s perspective of their experience of music in sport. 10 to 12 varsity athletes will be interviewed. The interviews will be transcribed and the researcher and research team will then analyze the transcripts and develop similar themes and then report the findings of the study.

Please fill in if applicable:

Name of Georgia Southern or External Funding Source: N/A
Personnel and/or Institutions Outside of Georgia Southern University: N/A
## Compliance Information:

*Please indicate if the following are included in the study:*

- [ ] Informed Consent Document
- [ ] Greater than minimal risk
- [ ] Research Involving Minors
- [ ] Deception
- [ ] Generalizable knowledge (results are intended to be published)
- [ ] Survey Research
- [ ] At Risk Populations (prisoners, children, pregnant women, etc)
- [ ] Video or Audio Tapes
- [ ] Medical Procedures, including exercise, administering drugs/dietary supplements, and other procedures

### IRB Use Only

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### Signature of Applicant

X: ____________________  Date: ___________

### Signature of Advisor(if student) / Dept. Chair(if faculty)

X: ____________________  Date: ___________

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**NOTE:** All thesis and dissertation work by definition is to create generalizable knowledge.

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Please submit this protocol electronically to the Georgia Southern University Institutional Review Board, c/o The Office of Research Services & Sponsored Programs, P.O. Box 8005. The application should contain a summary of the project, informed consent form(s), instruments, questionnaires, etc. Questions or Comments can be directed to 486-7758 or oversight@georgiasouthern.edu
Georgia Southern University Institutional Review Board

Proposal Narrative

**Personnel.** The only other individuals that will be involved in this study are the two other people that will be on my board to propose and defend this study as well as a research team that will sign a confidentiality guarantee form before analyzing the interviews. I make seek them out to possibly get another view or opinion on how to do something, but they will not be given any names because the participants will remain anonymous throughout the entire study. They will have access to the transcriptions of the interviews however as mentioned no name will be on any of the transcriptions that is being analyzed or examined.

**Purpose.** The purpose of the current study is to investigate the Division I athlete’s experience of music in sport from a phenomenological perspective. This goal will be accomplished in two ways: (a) by allowing the athlete to speak in his/her language and (b) by making an attempt to understand the experience of music in sport free of judgment and preconceived notions.

The participants and others will benefit from the knowledge gained in this study by allowing them to have a better understanding of the lived experience of music and sport of Division I athletes, the participants will be involved in a scientific study which is enabling further research to be conducted in the area or music and sport, and everyone will gain a better understanding of athletes how athletes utilize music in sport.

The current literature regarding this topic is plentiful in certain aspects such as performance output enhancement, synchronization of movement with tempo of a song, and perceived exertion rate during physical activity and/or exercise (Dorney & Goh,
Research shows that music is important to people and their daily lives as well as being considered an important aspect of a person's personality (Rentfrow & Gosling, 2003). However, what seems to be missing in current sport psychology research is an examination of Division I athletes' “lived” experiences of music in sport. Consequently, the present study will examine this phenomenon by acquiring it from the perspective of the Division I athlete themselves (Czech et al, 2004). This objective is accomplished in two ways: (a) by allowing the elite athlete to speak in their own language, and (b) by attempting to understand the music experience as free of judgment, socially constructed labels and preconceived notions as possible. The primary research question for this study is: What is the lived experience of elite athletes when they listen to music before, during, or after an athletic event?

**Describe your subjects.** The participants of the study are 10 to 12 Georgia Southern University varsity athletes. The athletes will come from various racial backgrounds and varsity teams. The athletes chosen for this research will be a purposeful sample because they are able to provide the researcher with a rich thick description of the experience of music in sport (Patton, 2002). They range in ages from 18-24 and both males and females will be examined in this study. The participants will not be asked to write their name down and therefore, they will remain anonymous throughout the entire study. The sample will be a purposeful sample of athletes from each varsity team. All of the participants will have experienced music in sport within their recent collegiate athletic career. They will be asked to participate based on the fact that I saw them listening to music before, during, and after a game. Each participant will be asked to participate through their coach, e-mail, personal contact, or by telephone. No compensation or
academic extra credit will be given for their participation. I am limiting my population to varsity athletes only because I only want to study the effects that music has on experienced college athletes. I do not believe that this will affect the results in any way besides the fact that the results may not be generalizable to novice athletes.

**Methodology (Procedures).** The participants in the study will remain anonymous and their participation will be completely voluntary throughout the entire study. In addition, the interviews will be held in a private setting to ensure confidentiality. The participants were told that they could: a) withdraw from the study at any time, b) the interview will be digitally recorded, c) they will remain anonymous throughout the entire study, d) they could ask about the procedures at any time, e) the interviews will be transcribed and they will be sent a copy of the transcription to review, f) they will not receive any academic extra credit or compensation for their participation, g) the transcriptions will be reviewed by me and the research team in order to identify themes (Czech et al., 2004).

The research team will consist of fellow graduate students who all have knowledge in the area of phenomenological research. The team will assist me in identifying themes after reading and analyzing the transcriptions and they will sign a release from in which they guarantee confidentiality. Alias names will be given to the participants for both their birth name and team affiliation. A code sheet will be kept for the purpose of presenting the transcripts to the participants (Czech et al., 2004).

**Interview Protocol**

This study will consist of a single open-ended statement which will allow the participants to explore their experience of music related to sport. The following statement will be offered to all of the participants:
“Tell me about a time when listened to music before, during, and after an athletic competition.”

Other probing interview questions will be utilized for further elaborations and clarifications of their experience as it relates to music and sport (Patton, 2002).

**Research involving minors.** Non-applicable

**Deception.** Non-applicable

**Medical procedures.** Non-applicable

**Risk.** There is no chance of greater then minimal risk from any physical, mental, or social discomfort in this study. The subjects should not find any discomfort during the interview process.

**Cover page checklist.** None of the items listed on the cover page checklist apply.
GEORGIA SOUTHERN UNIVERSITY IRB

EXEMPT STATUS QUESTIONNAIRE

P.O. Box 8005912-681-5465 Statesboro, GA 30460
http://academics.georgiasouthern.edu/research/

For electronic submission: Complete Exempt Status Questionnaire and “Save As” a word document to your computer or disk named “exemptapp_yourlastname, First initial.doc”. Then, complete the Cover Page and follow its instructions for saving the document. After both the Exempt Status Questionnaire and Cover Page are completed and saved, return to the Forms webpage to submit them to the IRB.

This questionnaire should be completed if you feel that your research satisfies the federal guidelines that would make it exempt from full or expedited IRB review. Please note that you must also complete the IRB Cover Sheet, and provide a summary of the research protocol. If the IRB decides that the investigation is exempt from full or expedited review, it will not be necessary for you to complete the IRB’s Proposal Narrative and Informed Consent Checklist.

Please attach an IRB Cover Sheet to the top of this form and submit to the IRB Office. Also be sure to write brief summary of the research protocol in one page or less in the space below.

I will be __X__collecting, ____receiving these samples OR, ____sending these samples or data outside of GSU. (Check all that apply)

Title of Study: An Examination of the Experience of Music in Sport Among NCAA Division I Athletes - An Existential Phenomenological Investigation

Does the study meet the following criteria?

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<td>No</td>
<td>Does the research involve the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens? <strong>Existing Data: means that all the data, documents, records, or specimens are in existence prior to IRB Review. Specimens obtained prospectively from future discarded clinical samples do not qualify for exempt review.</strong> <em>(1)</em></td>
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<td>Yes</td>
<td>Data sources are publicly available; if not, the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects (i.e. social security #’s, account #’s, history #’s, pathology accession #’s, initials, date of birth). <em>(2)</em> If both 1&amp;2 checked: 45CFR46.101(b)(4)</td>
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<tr>
<td>Yes</td>
<td>Does the research involve the use of educational tests, survey procedures, interview procedures or observation of public behavior and is the data/information recorded in a manner so that human subjects cannot be identified, directly or through identifiers linked to the subjects such that any disclosure of the human subjects’ responses outside the research could not reasonably place the subjects at risk of criminal or civil liability</td>
</tr>
</tbody>
</table>
or be damaging to the subjects’ financial standing, employability or reputation 45CFR46.101(b)(2)

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<tr>
<td>No</td>
<td>Is the research intended to assess the effectiveness of mandated educational or instructional procedures or otherwise used for program evaluation.</td>
</tr>
<tr>
<td>Yes</td>
<td>Are the samples or data being collected for the sole purposes of this study?</td>
</tr>
<tr>
<td>No</td>
<td>Are the samples or data collected by a third party and stored in a facility that will not break the code, even upon the request of a family member/ or medical emergency?</td>
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Please answer the following two questions to the best of your ability.

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<tr>
<td>No</td>
<td>Is the probability of the harm or discomfort anticipated in the proposed research greater than that encountered ordinarily in daily life or during the performance of routine physical or psychological examinations or tests?</td>
</tr>
<tr>
<td>No</td>
<td>Is the magnitude of the harm or discomfort greater than that encountered ordinarily in daily life, or during the performance of routine physical or psychological examinations or tests?</td>
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Does this study involve any of the following?

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<tr>
<td>No</td>
<td>Non-hereditary genetic research in which samples are linked/coded or identifiable</td>
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<tr>
<td>No</td>
<td>Hereditary genetic research</td>
</tr>
<tr>
<td>No</td>
<td>Prisoners, Fetuses, Pregnant Women, Cognitively/Mentally Impaired, Students/Employees/ Under 18 years of age (Circle all that apply)</td>
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<tr>
<td>No</td>
<td>Human in-vitro fertilization (any fertilization of human ova which occurs outside the body of a female)</td>
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<tr>
<td>No</td>
<td>Surveys or interviews given to minors</td>
</tr>
<tr>
<td>No</td>
<td>Any procedures that may cause a subject either physical or psychological discomfort or is perceived as harassment above and beyond what the person would experience in daily life</td>
</tr>
<tr>
<td>No</td>
<td>Deception</td>
</tr>
<tr>
<td>No</td>
<td>Observation of minors if the investigator participates in the activities being observed unless there is a federal statute covering the activity</td>
</tr>
<tr>
<td>No</td>
<td>The study of a rare trait/disorder such that there is some risk of exposing the identity of sample donors or the research poses risk of community or cultural harm</td>
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1. How do you plan to access the targeted subject population?

The targeted population will be accessed through personal contact with them or their colligate coaches. The purpose of the study and the extent of the athletes’ participation will be explained to each participant. Once the athletes accept to participate, we will set up a time to meet so I can perform the interview.
2. Please provide a brief summary of the study and a description of the research protocol (chronologically progressed).

The purpose of the current study was to investigate Division I athletes’ experiences of music in sport from an existential phenomenological perspective. The participants in the study will remain anonymous and their participation will be completely voluntary throughout the entire study. In addition, the interviews will be held in a private setting to ensure confidentiality. The participants were told that they could: a) withdraw from the study at any time, b) the interview will be digitally recorded, c) they will remain anonymous throughout the entire study, d) they could ask about the procedures at any time, e) the interviews will be transcribed and they will be sent a copy of the transcription to review, f) they will not receive any academic extra credit or compensation for their participation, g) the transcriptions will be reviewed by me and the research team in order to identify themes (Czech et al., 2004).

The research team will consist of fellow graduate students who all have knowledge in the area of phenomenological research. The team will assist me in identifying themes after reading and analyzing the transcriptions and they will sign a release from in which they guarantee confidentiality. Alias names will be given to the participants for both their birth name and team affiliation. A code sheet will be kept for the purpose of presenting the transcripts to the participants (Czech et al, 2004).

Interview Protocol

This study will consist of a single open-ended statement which will allow the participants to explore their experience of music related to sport. The following statement will be offered to all of the participants:

“Tell me about a time when listened to music before, during, and after an athletic competition.”

Other probing interview questions will be utilized for further elaborations and clarifications of their experience as it relates to music and sport (Patton, 2002).

The participants within this study consisted of 7 NCAA Division I varsity athletes from various racial backgrounds and varsity teams. Following the interviews, transcriptions were made and analyzed to draw conclusions. The results will be discussed.

3. What kind of human samples (e.g. tissue, blood) or data will be obtained?

None

4. Informed Consent

Attached

Exempt research is not subject to federal regulations contained in 45 CFR 46, which include requirements for informed consent. Therefore, if the research is eligible for exemption, then “technically” informed consent is not required. It is up to the investigator to decide whether or not consent should be obtained and documented.

Often the investigator will provide a letter of explanation or even a consent form.
Again, this is not required, but may be the appropriate thing to do to ensure the rights and welfare of the subjects.

If you plan to provide a Consent Form or letter, please submit it along with this form.

If a questionnaire or interview will be done, please attach a copy of the questions.

______________________________
Principal Investigator (printed)   Principal Investigator (Signature)
Date

For Use by IRB Office Only
Exempt Status Approved   Yes   No   IRB Chair/Vice Chair_______________________ Date___________
CERTIFICATION OF INVESTIGATOR RESPONSIBILITIES

By signing below I agree/certify that:

1. I have reviewed this protocol submission in its entirety and I state that I am fully cognizant of, and in agreement with, all submitted statements and that all statements are truthful.

2. This application, if funded by an extramural source, accurately reflects all procedures involving human participants described in the proposal to the funding agency previously noted.

3. I will conduct this research study in strict accordance with all submitted statements except where a change may be necessary to eliminate an apparent immediate hazard to a given research subject.
   a. I will notify the IRB promptly of any change in the research procedures necessitated in the interest of the safety of a given research subject.
   b. I will request and obtain IRB approval of any proposed modification to the research protocol or informed consent document(s) prior to implementing such modifications.

4. I will ensure that all co-investigators, and other personnel assisting in the conduct of this research study have been provided a copy of the entire current version of the research protocol and are fully informed of the current (a) study procedures (including procedure modifications); (b) informed consent requirements and process; (c) anonymity and/or confidentiality assurances promised when securing informed consent (d) potential risks associated with the study participation and the steps to be taken to prevent or minimize these potential risks; (e) adverse event reporting requirements; (f) data and record-keeping requirements; and (g) the current IRB approval status of the research study.

5. I will not enroll any individual into this research study: (a) until such time that the conduct of the study has been approved in writing by the IRB; (b) during any period wherein IRB renewal approval of this research study has lapsed; (c) during any period wherein IRB approval of the research study or research study enrollment has been suspended, or wherein the sponsor has suspended research study enrollment; or (d) following termination of IRB approval of the research study or following sponsor/principal investigator termination of research study enrollment.

6. I will respond promptly to all requests for information or materials solicited by the IRB or IRB Office.

7. I will submit the research study in a timely manner for IRB renewal approval.
8. I will not enroll any individual into this research study until such time that I obtain his/her written informed consent, or, if applicable, the written informed consent of his/her authorized representative (i.e., unless the IRB has granted a waiver of the requirement to obtain written informed consent).

9. I will employ and oversee an informed consent process that ensures that potential research subjects understand fully the purpose of the research study, the nature of the research procedures they are being asked to undergo, the potential risks of these research procedures, and their rights as a research study volunteer.

10. I will ensure that research subjects are kept fully informed of any new information that may affect their willingness to continue to participate in the research study.

11. I will maintain adequate, current, and accurate records of research data, outcomes, and adverse events to permit an ongoing assessment of the risks/benefit ratio of research study participation.

12. I am cognizant of, and will comply with, current federal regulations and IRB requirements governing human subject research including adverse event reporting requirements.

13. I will notify the IRB within 24 hours regarding any unexpected study results or adverse events that injure or cause harm to human participants.

14. I will make a reasonable effort to ensure that subjects who have suffered an adverse event associated with research participation receive adequate care to correct or alleviate the consequences of the adverse event to the extent possible.

15. I will notify the IRB prior to any change made to this protocol or consent form (if applicable).

16. I will notify the IRB office within 30 days of a change in the PI or the closure of the study.

Lacey Sorenson_________________          __________ __________________
Principal Investigator Name (typed)  Principal Investigator Signature    Date

Dr. Dan Czech_________________             ________ ____________________
Faculty Advisor Name (typed)    Faculty Advisor Signature*
Date

*Faculty signature indicates that he/she has reviewed the application and attests to its completeness and accuracy