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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

USING LABAN'S EFFORTS TO DEFINE MOVEMENT
IN FIVE MUSIC GENRES

A Thesis Submitted in Partial Fulfillment
Of the Requirements for the Degree
Of Master of Arts

Ashley Elaine Ames

College of Performing and Visual Arts
School of Theatre and Dance
Dance Education

December 2019

This Thesis by: Ashley Elaine Ames

Entitled: *Using Laban's Efforts to Define Movement in Five Music Genres*

has been approved as meeting the requirements for the Degree of Master of Arts in the College of Performing and Visual Arts, School of Theatre Arts and Dance, Program of Dance Education

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ABSTRACT

Ames, Ashley. *Using Laban's Efforts To Define Movement in Five Music Genres*.
Unpublished Master of Arts thesis, University of Northern Colorado, 2019.

The purpose of this study was to assist in understanding the impact music has on movement. This researcher evaluated music's impact on movement by looking at the movement performed by nine female dancers in grades six through eight. This movement was performed to five different genres of music commonly found in five different types of dance classes and was measured in Laban's eight efforts. There were two research instruments used in this study: A researcher survey yielding quantitative data and a participant survey producing qualitative data. The data suggested that there is a difference in how the body responds in movement to different music but only to a certain extent. Many songs shared common dominant Laban elements, but saw differences in how many times those common elements were used within each different song.

ACKNOWLEDGEMENTS

Throughout this process and the writing of this thesis there are many people who deserve a huge thank you.

Christy O'Connell-Black (Advisor) for her support, encouragement, and constant editing and Dr. Sandra Minton for her guidance and expertise.

My dance students for being willing participants and taking this time to be part of this project; I couldn't have done it without them.

For my wonderful friend, Taylor Smith, who lived and loved every part of dance. I will always be grateful for her words of encouragement and love she showed to every child that wanted to dance. #SunflowersforTaylor

Lori Head for introducing me to this program, encouraging me to apply, and showing me even though it might be scary to follow my dreams, it will always be worth it.

Scott, for the patience, understanding, and love he has shown throughout these last few years.

My family, especially, grandparents, Gene and Sally, for their never ending love, support, meals and time. I wouldn't be where I am without them.

Lastly, to my #Cohort4ForLife. I am forever indebted to the group of women I will always call my friends. I would have never made it through this program without their laughter, encouragement and help.

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CHAPTER I

INTRODUCTION

Goal of Thesis

Music is a powerful tool when connected with movement. The combination of music and movement together is often a gateway in determining how the body naturally moves. The ways in which music affects movement has been pondered for centuries resulting in more questions than answers. Working together simultaneously, each component can give insight into the connection between the two and its many unanswered questions.

Movement in response to music represents one of the natural social environments in which physical activity occurs. The study of music and movement, including dance, requires a careful, holistic consideration of many features, which may include music, physical activity, motor learning, social engagement, emotion, and creativity. (Lakes, et al. p. 1377)

While this topic remains somewhat untapped, this study is designed to unlock answers about the connection between music and movement and give insight into that connection. The goal of the study is to determine the ways in which different types of music affect a person's movement. Dancers train for years to move differently, yet harmoniously, with certain types of music. Ballet dancers move fluidly, while jazz dancers often incorporate stronger movements to music. While there are always exceptions, each movement style has a set of music that it typically uses. Most often, audiences see ballet danced to classical music, hip hop to rap music, jazz to jazz music, modern to alternative music and lyrical or contemporary danced to pop music. As a dance

scholar, one might ask: did I choose a certain type of music because my body wanted to move fluidly to classical music? Or is there a different motivation behind it? Through this study, the researcher will provide insight as to whether the music that was chosen affects the movement that was created by the participants.

Music and movement have had a lifelong connection. *The Science News*, reported from the University of Jyväskylä, strives to discern music's power over our brain: "Music is known to evoke emotions through a range of mechanisms." (University of Jyväskylä) Music is an emotional and physical outlet for many people which can be seen in numerous ways. Some people choose to sing, some choose to cry and some choose to create movement or dance. This study looks at how the brain receives music and then transfers it to the body in different or varying forms of movement. Daniel Levitin, Ph.D., a neuroscientist and author, is well respected in his area of study for his research on music and the brain. According to one article titled "Why Does Music Move Us?" written by Levitin in the *Observer*, a magazine for the Association for Psychological Science, "Researchers have shown that music stimulates the cerebellum, a region of the brain crucial to motor control." (Levitin) The goal of the thesis was to determine whether or not the stimulation of the cerebellum with a chosen genre of music affects a person's movement patterns measured in Laban efforts.

There are many different genres of music with their own unique styles. The musical component of this study was designed to focus on five different music styles including: classical (ballet), rap (hip-hop), jazz (jazz), alternative (modern) and pop (lyrical/contemporary). The music is commonly associated with certain dance styles noted beside them. These music genres are most commonly used in dance classes across

the United States. The researcher selected each piece of music to represent what a student would hear in the music genre when taking a class in a particular style of dance. Each of the genres was utilized to measure movement, using Rudolf Laban's Eight Efforts to characterize specific types and styles.

Rudolf Laban, a movement theorist, choreographer, and dancer, developed a system of measuring movement, called Labanotation, after observing factory workers in 1947. Labanotation, identifies four motion factors—time, weight, space and flow (Curtis-Jones 22).

Within the motion factors are the opposite pairs of sudden/sustained, light/strong, direct/flexible, free/bound, known as efforts which were the basis for how this study was measured. Each song was measured separately using the same eight efforts developed by Laban. The researcher analyzed the movements based upon Laban's efforts as they correspond to emotional and intellectual responses within the human body. By measuring the movements through this system, the data can be quantifiable and equitable across all participants.

The study aimed to look at the basic movements of the human body and determine what can be identified through Laban's system. This is an improvement on analyzing the data using vocabulary or trained movements from a dance class, which could skew the study results. Dancers already know the basic movements of ballet, especially dancers who practice everyday, but ballet is not a natural form of movement. The effort at which ballet is performed is also skewed because it has been taught and in turn practiced over time, giving specific looks and qualities demanded by the training. Training doesn't come from a natural connection of what the body feels when it hears the

music. Measuring with the Laban efforts in mind helped to determine what actions naturally occurred with movement rather than what would be taught in a structured dance class. Measuring the movement with the five different types of music helped to further the goal and answer these essential questions:

Q1 What movement, measured in Laban's efforts, can be seen in different types of music?

Q2 Can music affect a person's movement, measured in Laban's efforts?

Purpose of Study

When dancing, people are often drawn to different types of movements. This has been seen in dancing styles for decades. Some of the earliest music was done on drums discovered in China. The surviving drum artifacts were made of both alligator skin and pottery and these drums played a large role in ritual ceremonies across China (Liu 122). As music developed with different drums and drum beats all over the world, the movement to these drums with the human body also developed. This continues to trickle down through history and can be seen in the different regions and historical periods. We can still see it today through the established genres of dance. Each genre has a different musical style and beat. While we can see this in a structured environment, how the body moves to music freely when it has no boundaries, such as the structure of a dance class or choreographer, poses many questions. One purpose of this study was to see how the body inherently responds to different types of music.

Along with investigating the body's response to music, those responses were taken to discover the similarities and differences between the genres with the movements performed. The participants' movements were measured using Laban's eight efforts making it easy to compare and contrast the movements discovered in the five genres. By

comparing and contrasting the eight Laban efforts, the differences and similarities were easily identified and highlighted to determine which efforts are prevalent in the five music genres. In this way, the researcher was able to see if the body naturally moved the same way to all types of music or if there was a difference in movements within the genres played.

Another purpose of this study was to find out if the body moves differently than how it has been trained for professional styles of dance. Ballet class, for example, is established with a set of the Laban efforts it uses and has been for many years. Ballet classes are codified with a strict structure in vocabulary, positions, and exercises that are used. The Laban efforts seen in a typical ballet class include light when addressing weight and direct when addressing space. Due to this, the expectation of movement including Laban's efforts that will be used in a ballet class is rarely a surprise. This is the same for the other dance classes included in the study. Dancers have trained all over the world and performed the movement in the genres of dance included in this study many times. This study was designed to determine how the body naturally responds to music and, in turn, if that matches how dancers have been trained to move to music in different dance genres.

Significance of Study

Dance, at its core, desires musical accompaniment. The music gives energy, life and interest to dance both in performance and in recreation. Music has been accompanying movement through ceremonies, rituals and celebrations since prehistoric paintings were discovered depicting dancing figures in the Bhimbetka rock shelters. (Jāvīd & Javeed 23) As time progressed, music and movement have grown into many

different genres and styles. The need to determine what our natural movement vocabulary does when put to music is under researched and requires more scholarly focus.

When evaluating how the body naturally moves, it is important to note the different types of movement generated from each genre of music. These differences may be important to choreography as a body's natural response to music can be pleasing to audiences and helpful in creating more natural based choreography. Dancers and choreographers rarely stop to create natural movement and often choose to utilize a set vocabulary for most creation of dance. Oftentimes, each dance is created with this set vocabulary and then presented to an audience. Only recently, and mostly through modern dance, choreographers begun to base their choreography off of natural movement. This is done through improvisation or unregulated movements which can be based on natural movement. Due to the lack of research in this area, this study is important.

This study is valuable because it determined if the movements in the dance styles of today have shifted from instinctive movement. Dance styles have grown and changed over time with famous dancers influencing the craft and new music affecting the movement. Hip Hop is a relatively new dance style in comparison to other more codified genres and was developed through the natural movement of the body and what the dancers thought felt right.

As mentioned, hip-hop dance originated in Black and Latino communities — much like voguing did with the drag queen community in the ballroom scene of the 1960s — in both New York City and California in the 1970s. These individuals created styles such as uprock, break dancing (with those doing this style known as b-boys), robbing, boogaloo, and popping and locking. Each of these styles, which consisted of unique dance steps often made up on the fly, giving these talented street dancers an opportunity to improvise as the music would change over time. (Blackwelder)

By determining which Laban efforts are innately linked to certain types of music and comparing those results, the movement types can be evaluated to show whether they remain true to natural body or if they have shifted through the years.

CHAPTER II

LITERATURE REVIEW

Introduction

Music and movement each have a rich history beginning thousands of years ago. Diving into those histories, it is evident that they intertwine while also establishing their own paths:

Music moves us, literally. All human cultures dance to music and music's kinetic faculty is exploited in everything from military marches and political rallies to social gatherings and romance. This cross-modal relationship is so fundamental that in many languages the words for music and dance are often interchangeable, if not the same. (Sievers et al. 70-75)

While music and movement are undeniably linked together, the definitions of each have changed throughout time, but need to be established for the basis of this study. Each definition is taken from established literature giving a reliable and structured foundation for this study.

After finding definitions of music and movement established in this chapter respectively, we must connect the two together as is the purpose of the study. The music and movement paired together for the study are commonly used together in dance classes and complement each other in their respective styles.

The last part of this chapter discusses Rudolf Laban and his Laban analysis. Laban tapped into his rich history and knowledge of movement to develop his system of analysis. The result of his hard work gave the keystone to looking and analyzing movement as it has no language barriers and is free from all influences outside the human

body. Laban's efforts are therefore used to provide accurate measurement for the study itself. The questions that must be answered are, what are Laban's efforts, and why are they so important?

What is Music?

According to the book *The Origins of Music*, the answer is not straightforward.

The question what is music? is one that has no agreed-upon answer. For every structural feature that can be claimed as being a defining feature of music, one can always find (or dream up) a musical style that lacks this property. John Cage's composition "4'33", composed in 1952, is probably only the most extreme and postmodern example of this. (For those who do not know this piece, it consists of four minutes and thirty-three seconds of uninterrupted silence, to be performed by "any instrument or combination of instruments.") Because of these problems in defining music in purely structural terms, ethnomusicologists have usually preferred to focus on functional contexts and roles: music as an organized cultural activity. However, this easily leads to the conclusion that music is simply whatever people consider it to be. (Wallin et al. 6).

This quote defines music as whatever the person would like it to be in the chosen context.

In terms of this study the definition of music, taken from the *Oxford Dictionary of Current English* characterizes music as "vocal or instrumental sounds (or both) combined in such a way as to produce beauty of form, harmony, and expression of emotion" (Allen et al. 781). This study included five different songs from five genres of music taken from the definition above.

What is Movement?

There are many different perceptions of movement depending on a person's background and exposure. People can think of movement as walking, sports or dance. In terms of dance, with connection to this study, it is often associated with a certain style of trained movement. Each of the styles chosen by the researcher have been studied and observed by people all over the world. One example is ballet being set to classical music

in classical productions such as the *Nutcracker* or *Swan Lake*. The *Oxford English Dictionary* defines movement as “an act of moving” (Oxford). Any act of moving that was created by the participants was considered movement and the Laban efforts within it were tallied on the researchers survey.

The Relationship Between Music and Movement

Music and movement are intertwined dating back to prehistoric times. *The Origins of Music* discusses the first sign of music found in a society.

Although songs do not fossilize, and no musical notations exists before the Sumerian system of 3,500 years ago, large numbers of musical artifacts have been discovered throughout the world. In 1995, what is perhaps the oldest one so far- a fragment of a putative bone flute- was found at a Mousterian site in Slovenia and determined to be about 44,000 years old. (Wallin et al. 10).

While the discovery of music may be more than 44,000 years old, we also recognize that dance has prehistoric origins.

Dance, like music, is also considered hard to track as it often leaves no trace after it has been performed. Unless dance is documented, the way music can be, there is no proof it happened. While musical instruments can leave behind physical evidence, dance cannot. While we have no definite date of the origin of dance, we do have a suspicion as to where dance and music connected together. The earliest known connection of dance and music is the Bhimbetka Rock Shelter paintings in India depicting figures dancing to drums, both solo and in groups. (Jāvīd & Javeed 23) This connection between music and movement has continued to develop and change with society and history.

Overall, most dances have developed and gone away from their original movement origins for various different reasons. (Mackrell) Many of those reasons have to do with music changing, society growing, and people demanding more. This study was

designed to find out how our body naturally moves to the music used in these common dance styles, rather than what has been designed and in turn changed through time.

Rudolf Laban and Laban Movement Analysis

Rudolf Laban was a dancer and choreographer who created a form of dance notation based on emotional and intellectual responses of the human body translated into movement. Today this system is known as Labanotation. Curtis-Jones describes Laban in the book *Transmissions in Dance* as “thinker, artist, innovator and fundamental in the rise of Central European Modern Dance, is well known for his dance notation system but less so for his dance theatre works” (11). While Laban’s work as a choreographer saw little success, he did publish a book titled *The Mastery of Movement* documenting his work and research on human movement. This book was first published in 1950 and was in its second revision when Laban passed away. It was, however, republished under Laban’s trusted colleague, Lisa Ullmann. While the system was developed many years ago, it is still widely used and accepted.

Spoken language has barriers across the world; however, Laban’s notation can be understood by dancers from all languages, cultures and backgrounds. Due to its universality, the system is widely used and accepted all over the world. Laban Movement Analysis (LMA) is a method for describing and interpreting all varieties of human movements. It provides a rich overview of movement possibilities, and it is considered as ‘a formal language for movement description’” (Kikhia et al. 5725–5741). This makes the system important for research and documentation as the research can be shared and discussed easily without barriers. The system is also important as it has been used to establish schools, write books and teach classes. Overall, the system is one of the most

widely used for movement notation across the world, and it can be valuable for all aspects of dance, especially research documentation.

Laban's system is primarily based upon the idea of body movement by itself and separate from outside influences. While many other researchers of the time were focused on creating movement systems by what the body does to react to outside sources, Laban's system was different. Laban conducted many experiments when developing the system to find out what occurs naturally from the human body, including improvisation, or natural dance movement, rather than a specific set of steps.

The counterpoint of movement and sound proved interesting for Laban and he moved away from set codified steps to reveal its potential, exploring how rhythm and patterns of the mind and spirit manifest in movement. Laban used the term 'Free Dance' (*der Freie Tanz*), meaning free from musical constraints, from dramatic narrative and set steps, therefore the dance material was made up of freely juxtaposed rhythms and forms. (Curtis-Jones 20)

Laban worked throughout his career to take away any outside influences in an attempt to accurately measure human movement. "Dance has things to say and express that cannot be said through music or acting, and in a deep way. It is the music of the limbs" (Laban, "Choreographie" 4)

Laban's system was greatly influenced by his work as a former architect. Within the eight efforts, the harmony of space, as well as his use of opposites, are seen in architecture. Laban used many architectural shapes to establish his system including cubes, spatial planes, and icosahedrons to establish spatial scales. He used them to help dancers establish their relationship with time, space and intention. When looking at architecture, the laws of nature, as well as geometric form, it helps us decide what is harmonic, and the same goes for our body. Laban refers to architecture of the dynamic

body and discusses “space as the hidden feature of movement and movement a visible aspect of space” (Laban & Ullmann, “Choreutics” 4).

With many different influences and points of view Laban used one other source to help develop his effort system as well:

Together with F. C. Lawrence, Laban’s observation of factory workers in 1947 led to the development of his ‘Effort’ system, which identifies four motion factors—time, weight, space and flow—with polar opposites of sudden/sustained, light/strong, direct/flexible, free/bound. The embodiment of these extremes and their variations challenges dancers to broaden their dynamic range and understand the efficiency of movement according to natural affinities. Dancers become aware of their habitual preferences dynamically and can choose to adhere to or go against their affinities to extend qualitative nuance. (Curtis-Jones 22)

Within this discovery it is important to note that Laban did not include the weight of the worker themselves but rather the idea of weight as an outside influence. This is the muscular tension required to do the standard work in a factory including lifting boxes.

The eight efforts are grouped into four categories and then broken down further. The first category is space and includes the efforts direct and indirect. The second category is weight and is broken down into the efforts of strong and light. The third category is time, broken down into the efforts of sudden and sustained, and the last category is flow which is broken down into the efforts free and bound. The eight efforts themselves are used to determine movement classification. While each category may seem cut and dry, the classification of movements is much more complicated.

Movements are not as cut and dry as we see in a textbook. When measuring movement in terms of dance, movements flow and form together to create the choreography that is seen. While some forms of dance choreography are broken down categorically, such as certain ballet and modern movements, they can still contain many efforts in one simple movement. Having many different efforts in one singular movement

can occur in all genres of dance and improvisation. When looking at the different styles of dance and movement, the efforts can be analyzed in two ways. The first looks at the body as a whole movement, while the second looks at specific parts or sections of the body such as the arm, leg, or torso. One could observe the upper and lower half of the body or the right and left side of the body.

While looking at combining efforts, Laban created a graph grouping the efforts. He determined that Free Flow, Light Weight, Indirect Space, and Sustained Time all share the qualities of “going with,” and he labeled these efforts as the “indulging efforts.” Bound Flow, Strong Weight, Direct Space and Quick Time, on the other hand, all share the qualities of “fighting against,” therefore he labeled these efforts as the fighting efforts (Laban & Lawrence, “Effort” pp 66-67).

Summary

Music and movement have a rich history. They have come together from separate paths and yet have intertwined since prehistoric ages. Although the elements of music and movement take on their own definitions, for the purpose of this study, they influence each other. Within movement, Rudolf Laban was a pioneer in the field where he created a system, Labanotation, that has shaped how movement is viewed and analyzed. The system is used and understood all over the world. It breaks a language barrier, meaning Labanotation can be used for research and movement creation globally.

CHAPTER III

METHODOLOGY

Preparation for the Study

As stated previously, the purpose of this study was to see how the body inherently responds to different types of music. After looking at the body's responses, the researcher saw if the body naturally moved the same way to all types of music or if there was a difference in movements within the genres played. Prior to conducting this study, the researcher requested approval from the Institutional Review Board (IRB). To receive project approval, the researcher submitted a narrative, which included the purpose of the study, procedures for collecting, analyzing and handling the data, possible risks and benefits, and any costs or compensations. IRB approved the research instruments and the student and parent consent forms that were required to conduct the research. No revisions were required from the IRB before approval was received. The researcher received written approval from the IRB as well as approval from the private studio where the research study was conducted, which can both be found in Appendix A.

Instrumentation

The researcher collected data using two research instruments. One instrument measured the Laban efforts within the participants' movement, and the other was a post survey the participants filled out. The research was completed in person, in a private dance studio. The research instruments gathered data used to answer the two essential research questions: What movement, measured in Laban's efforts, can be seen in

different types of music? Can music affect a person's movement, measured in Laban's efforts?

The research survey included a code number for each participant to maintain confidentiality and remain unbiased. Each survey also received a code number for the song that was being used. This method was used to eliminate the bias based on the genre of music that the participants were listening to while creating their movement. Within the research survey, Laban's eight efforts were broken into separate boxes. Each effort category allowed the researcher to tally every time the effort was used within the participants' movements. The marks were then counted at the bottom of each box and recorded, along with a space for comments at the bottom of the page for the researcher to free-write any additional data that could have been important to the study. A copy of the research survey can be found in Appendix B.

Within the survey, the researcher chose established definitions of the eight movements to further eliminate bias for the research. The definitions were taken from another study that used Laban's efforts, titled *Analyzing Body Movements within the Laban Effort Framework Using a Single Accelerometer*. The definitions were clear, concise and used throughout each participant's experience:

Strong: A movement is considered to be Strong when a person needs to make a considerable effort to perform an activity.

Light: A Light movement is such that a person could perform the activity effortlessly.

Free: A movement is considered to be Free when it is characterized by open postures where the extremities of the body, mainly upper body limbs, are kept mostly away from the body.

Bound: A Bound movement is a controlled movement performed with the extremities close to the body.

Sudden: A Sudden movement is a swift movement that does not follow any particular pattern. It generates a change in velocity, that is, a spontaneous acceleration.

Sustained: A Sustained movement is a continuous movement that follows a specific pattern where the velocity is maintained.

Direct: A movement is considered to be Direct when the route a person follows over a certain period of time is on average a straight path.

Indirect: A movement is considered to be Indirect when a person follows, over a certain period of time, an oblique route. (Kikhia et al., 5725–5741)

Within the survey, each song listed on the top right corner of the survey was played for thirty seconds for each participant. The songs were from five different genres, each associated with various dance classes: for classical music, associated with a ballet class, the song was “Adagio for Strings,” by Samuel Barber.; for rap, associated with a hip hop class, the song was “Lose Yourself,” by Eminem; for jazz, associated with a jazz class, the song was “Rolling in the Deep,” by Adele; for alternative, associated with modern class, the song was “Gooney (Gilligan Moss Remix),” by Glass Animals; and lastly, the song used for pop, associated with contemporary/lyrical dance was “Rescue,” by Lauren Diagle. Each song was carefully chosen by the researcher according to their song classification along with its validity in a dance class.

The second instrument used in this study was a participant survey to determine bias or other motives for movement by participants. Each question on the participant survey was broken into four parts asking the participant about the different songs used within the study. By gaining participant insight, the researcher was able to establish biases that could have skewed or changed the outcome of the data. This participant survey can also be found in Appendix B.

Research Participants

The participants included in the study were children in sixth through eighth grade. The participants were recruited within the private dance studio American Falls Studio and American Falls School District 381. Both the private studio and the school district are located in Idaho. Students within these two programs who met the grade requirements were given a parent and participant consent form and those who returned both completed forms were allowed to participate. A copy of the minor assent form and parent consent form can be found in Appendix C. Participation in the study was voluntary and did not include compensation for those involved. Ultimately, nine participants completed the study and were analyzed.

Survey Demographics

The sample participants were all females in grades six through eight, with three participants in sixth grade, three participants in seventh grade, and three participants in eighth grade.

Setting

The study took place in American Falls Studio, a private studio located in American Falls, Idaho. Multiple studios or rooms for dancing are located in the building, however, Studio A was used for this study and each participant used this studio only. Each participant was brought into Studio A one at a time, and the study was conducted. After the movement part of the study was completed, the participants were placed in the waiting room to fill out the participant survey. Only one participant was allowed in the waiting room at a time to complete the participant survey. This was done to protect the

integrity of the study so each student could not talk to one another or share answers from the study.

Data Collection and Analysis

For this study, both qualitative and quantitative methods were used to organize the data. The participants moved to five different songs that each represented a different genre of dance. After they finished moving to the music, the participants answered the questions using the post survey about their movement and the music they heard.

Quantitative data was analyzed through reading the results, tallying them and exporting them into tables. Qualitative data was analyzed by reading through the answers to all of the questions and identifying common themes.

Quantitative Data

The quantitative data came from the researcher's survey. The document was designed to enumerate the observations and report those in tables, which can be found in the discussion chapter. The eight different boxes within the researcher's survey represented the eight Laban efforts. Each box was tallied and then exported into graphs by the researcher. After all the graphs were created, the researcher then exported all data in tables to give an overall impression of the outcomes of the researchers survey. These tables were then compared and contrasted to find outcomes relevant to the purposes of the study.

Qualitative Data

The qualitative data came from the participant's survey only, which included free response questions with multiple parts to each question. These questions focused on the songs that were played during the study and the movement that was performed. The

researcher designed the questions without bias in hopes of gathering honest answers from the participants regarding the songs they listened to and the movement they performed within the study. The researcher wanted to know if the participants had heard of the songs before and if they were aware of the movement they performed. Themes of the answers were then pulled from the results of the data which are reported in the discussion chapter of this thesis.

CHAPTER IV

DISCUSSION

As stated in the introductory chapter, this study examined the effects that hearing five different types of music has on the movement choices of sixth through eighth grade students. This chapter discusses detailed responses from the two surveys, the researcher survey and the participant survey, used by the researcher which resulted in both qualitative and quantitative data, the research and participant survey can again be found in Appendix B.

Research Survey Data

The research survey contained eight different boxes, each representing one of the eight Laban efforts. The boxes were used to record how many times the efforts were used in the thirty seconds of movement developed by the participants. Each time an effort was used, a tally mark was placed in the respective box by the researcher. Through the recording of the efforts the discovery of how the body inherently responds to music through movement was witnessed. Within the nine participants, the quantitative data was broken down first by song number, and the data was represented in both tables and percentages. The percentages were calculated by adding the number of times an effort was performed with its opposing effort in the categories of space, weight, time and flow. Once the two efforts were added together, the individual effort was then divided by the overall number giving the percentage of times the effort was used within its category of

space, weight, time or flow. This shows both the number of times elements were used and the gaps and percentages between them.

*How a Body Inherently
Responds to Music*

One of the purposes of this study was to determine how the body inherently responds to music by using Laban's eight efforts, and the findings were broken down by song choice. The results will be discussed in the same order they were played during the study.

Song One

The first song used within the study was classical music based upon what a dancer would hear in a traditional ballet class. The researcher played the first thirty seconds of the song, "Adagio for Strings," by Samuel Barber. The following table depicts the amount of times the Laban efforts were used between the nine participants.

Table 1 Laban Efforts used in "Adagio for Strings"

Category	Laban Element	Number of times effort was used in thirty seconds	Percent the effort was used in the category
Space	Indirect	26	32
	Direct	56	68
Weight	Strong	14	17
	Light	70	83
Time	Sustained	62	78
	Sudden	18	82
Flow	Free	44	64
	Bound	25	36

Table 1 illustrates that the dominant efforts naturally occurring from the body are direct, light, sustained and free movements. The following results were revealed when the

first song was played: direct movement was used sixty-eight percent of the time, light movement occurred eighty-three percent of the time, sustained movement was observed seventy-eight percent of the time, and free movement occurred sixty-four percent of the time. Each of these movements occurred more than forty times between nine participants in thirty seconds of movement per participant. Within the dominant efforts of song one, free and direct movements were close to double that of their counterparts, bound and indirect movements. The dominant movements of light and sustained were more than three times that of their counterparts, strong and sudden movements, respectively.

It is important to note that the movements of indirect, strong, sudden and bound were also observed in small amounts. While they occurred less than thirty times per movement within the thirty seconds among the participants they still did occur. This is important to note as they are still naturally occurring as a reaction to the music as seen in small quantities.

Song Two

The second song used within the study was categorized as rap music and was chosen based upon what a dancer would hear in a traditional hip hop class. The first thirty seconds of the song, "Lose Yourself," by Eminem, was played and the following effort quantities were recorded.

Table 2 Laban Efforts used in “Lose Yourself”

Category	Laban Element	Number of times effort was used in thirty seconds	Percent the effort was used in the category
Space	Indirect	5	5
	Direct	93	95
Weight	Strong	65	56
	Light	46	44
Time	Sustained	51	42
	Sudden	69	58
Flow	Free	29	31
	Bound	64	69

Table 2 illustrates that the dominant elements found from the second genre were direct, strong, sudden and bound movements. The following results were revealed for the second musical accompaniment in relation to participants’ movements: direct movement was used ninety-five percent of the time, strong movement used fifty-six percent of the time, sudden movement fifty-eight percent of the time and bound movement used sixty-nine percent of the time. A strong use of direct movement was seen as it was used eighteen times more than that of its counterpart of indirect movement. While not as drastic, bound movement occurred twice as often as free movement within the song. Direct/indirect as well as bound/free movements were separated by large margins, while the elements of sudden and light were dominant by a small number of movements.

Song Three

The third song used within this study was from the jazz genre of music and coordinated with a jazz dance class. The researcher played the first thirty seconds of the song, “Rolling in the Deep,” by Adele, and the following qualities were recorded:

Table 3 Laban Efforts used in “Rolling in the Deep”

Category	Laban Element	Number of times effort was used in thirty seconds	Percent the effort was used in the category
Space	Indirect	12	10
	Direct	113	90
Weight	Strong	103	75
	Light	35	25
Time	Sustained	64	45
	Sudden	77	55
Flow	Free	48	45
	Bound	59	55

The dominant movements represented by the participants’ movements when listening to jazz music were direct, strong, sudden and bound movements. Table 3 illustrates the following results: direct movement was used ninety percent of the time, strong movement used seventy-five percent of the time, sudden movement fifty-five percent of the time and bound movement used fifty-five percent of the time. Direct movement was eleven times more present than indirect movement within this song. While not as drastic, strong movement was utilized more than twice as much as light movement. Within this song, two categories of elements had rather small gaps between them: bound/free and sudden/sustained. There was a small difference of thirteen movements between the elements of sustained and sudden. Bound and free movement were also separated by a short gap of only eleven movements. Table 3 reveals these elements were used closely in relation to their counterpart. The movements used least were indirect, light, sustained and free movements.

Song Four

The fourth song played was an alternative song and coordinated with a modern dance class. The song was titled, “Gooney,” by Glass Animals. The first thirty seconds of the song was played and the following quantities were recorded:

Table 4 Laban Efforts used in “Gooney”

Category	Laban Element	Number of times effort was used in thirty seconds	Percent the effort was used in the category
Space	Indirect	39	33
	Direct	80	67
Weight	Strong	65	56
	Light	51	44
Time	Sustained	59	47
	Sudden	66	53
Flow	Free	44	44
	Bound	57	56

Table 4 illustrates that the dominant efforts naturally occurring from the body, were direct, strong, sudden and bound movements. The following results were revealed when the fourth song was played: direct movement was used sixty-seven percent of the time, strong movement used fifty-six percent of the time, sudden movement fifty-three percent of the time, and bound movement was used fifty-six percent of the time. The dominant effort of direct movement was performed twice as many times as indirect movement within the study. This revealed a large gap in the number of movements performed. The other dominant efforts of strong, sudden and bound, were performed almost equally to their element counterparts of light, sustained and free. Each of these six

elements were separated by a short gap of only fourteen movements, or less, compared to their counterparts as seen by the researcher.

Song Five

The last song used was a pop song commonly used in a lyrical or contemporary dance class. The first thirty seconds of the song, “Rescue,” by Lauren Daigle was played for the participants, and the following results were recorded:

Table 5 Laban Efforts used in “Rescue”

Category	Laban Element	Number of times effort was used in thirty seconds	Percent the effort was used in the category
Space	Indirect	31	30
	Direct	74	70
Weight	Strong	20	18
	Light	89	82
Time	Sustained	81	72
	Sudden	32	28
Flow	Free	57	56
	Bound	45	44

Table 5 illustrates the dominant movements used most within the song were direct, light, sustained, and free movement. The following results were revealed when the fifth song was played: direct movement was used seventy percent of the time, light movement was used eighty-two percent of the time, sustained movement was used seventy-two percent of the time and free movement was used fifty-six percent of the time. Direct movement was used twice as many times as indirect movement within the first thirty seconds of the song. Light movement was used four times as often as strong movement. Sustained movement was also used twice as many times as sudden

movement. Free and bound movement were only separated by twelve movements within the song.

Results Comparison

All of the eight efforts appeared as natural movement at some point, within each of the five songs, by all nine participants. Each of the songs, however, had different efforts that stood out as the most used efforts between the categories created by Laban. The first song, from classical music representing the ballet genre, generated mostly direct, light, sustained and free movements. Song two was a rap song representing the hip hop dance class, which produced mostly direct, strong, sudden and bound movements. Jazz music, commonly found in a jazz dance class, was played in song three, which caused direct, strong, sudden and bound movements. Song four was an alternative song representing the genre of modern dance, which generated direct, strong, sudden and bound movements. The genre of pop music found within a lyrical/contemporary class was played for song five and exhibited direct, light, sustained, and free movement. Songs one and five had the same dominant elements while songs two, three and four had the same dominant elements.

Table 6 Percentages of dominant elements in songs one and five

Dominant Element	Song One	Song Five
Light	83	82
Direct	68	70
Sustained	78	72
Free	64	56

While the same dominant elements were found within multiple song genres, the percentages of how many times those elements were used within their respective songs

are different. Songs one and five exhibited the same dominant elements; however, the percentages representing the number of times the dominant elements were being used were not the same. This could be seen in Table 6. Light movement in song one was used eighty-three percent of the time, while in song five, light movement was used one percent less. Direct movements, reported from song one, were used sixty-eight percent of the time compared to the direct movement in song five which was used seventy percent of the time. Sustained movement in song one was present seventy-eight percent of the time, and in song five, sustained movement only occurred seventy-two percent of the time. Free movements were used sixty-four percent of the time within song one; however, song five used free movements only fifty-six percent of the time.

Within songs one and five there was a one percent gap in light movement, two percent gap in direct movement, six percent gap in sustained movement, and six percent in free movement as well. These results pointed to similarities in the number of times the dominant elements were used despite the difference in songs and dance genres being represented.

Table 7 Percentages of dominant elements in songs two, three, and four

Dominant Element Song Four	Song Two	Song Three	
Direct	95	90	67
Strong	56	75	56
Sudden	58	55	53
Bound	69	55	56

The songs two, three, and four, had the same dominant elements of direct, strong, sudden and bound movements. Similar to songs one and five, there are differences in the

percentages representing how many times the dominant elements were used within their respective songs. These differences can be seen in Table 7. Direct movements were used ninety-five percent of the time in song two, ninety percent in song three, and sixty-seven percent in song four. Strong movements were used fifty-six percent in song two, seventy-five percent in song three and fifty-six percent in song four. Sudden movement was used fifty-eight percent of the time in song two, fifty-five percent in song three, and fifty-three percent in song four. The element of bound movements was used sixty-nine percent within song two, fifty-five percent in song three, and fifty-six percent in song four.

Within songs two, three, and four there are both large and small gaps in the percentages between the dominant elements. The small percentage gaps between the dominant elements in the three songs should be noted as the movements were performed close to the same number of times despite the differences in the songs and genres of dance they represented. However, there are large gaps in percentages between certain specific elements that warrant discussion. These gaps in percentages of dominant elements show there was a difference in the amount of movements performed within songs two, three, and four, and the genres of dances they represented.

Does Music Affect Movement

There are many parts to this essential question. While there is evidence that the chosen music has affected movement in measurable ways, there is much to be unpacked from the quantitative data. There is a difference in how the body responds in movement to different music but only to a certain extent. This is evident, as there are different elements that are dominant in songs one and five in comparison to songs two, three and four. To further break down the data collected and look at how music affects movement,

this chapter also looked at the percentage gaps within the songs that had the same dominant movements. When investigating the percentages where there are the same dominant movements between songs, there were varying results between songs one and five in comparison to songs two, three and four. In songs one and five the percentages representing Laban movements were close together despite the difference in songs and dance classes. However, in songs two, three, and four there were both large and small gaps in the percentages. The small gaps showed the Laban elements were performed close to the same amount of times despite the difference in songs. The larger gaps however, show there was a significant difference in the number of times a specific Laban element was seen by the researcher from song to song even though they shared the same dominant elements. This supports the argument that music can affect the type of movement that is performed within the five genres studied in sixth through eighth graders in this study.

Participant Survey Data

The participant survey was given to each of the nine students to be filled out after the movement was performed. The same four questions were asked about each of the five songs. The nine participants completed each question, leaving no blank responses on the survey. This survey was the only portion of the research study that utilized the point of view of the participants. This survey helped show validity between the participant and researcher data.

Song One

The first part of the survey asked: how did the song make you feel? The themes that arose in the first question were sad, mellow, calm, sleepy, and weird. The tone of the

song affected the moods of each of the participants and made them experience one of the themes above.

The second question asked if the students had heard the song before. The answers included seven responses of yes and two responses of no. The first student said, "I have heard this song in the background of Avengers Endgame I think." The other students did not provide an explanation regarding where they had thought they heard the song.

Part three of the survey asked if the students had a personal connection to the song. There were only two explanations given by participants. The first participant stated "Yes becaus I'm tierd." (sic). The second participant said "a littel." (sic).

The fourth part of the survey asked what movement the participants thought they performed. The themes that arose from the responses were lyrical, contemporary, ballet, slow, and battement. These themes were closely related to one another and the responses were fairly close to the music that was actually performed by the participants. The qualities from the researcher survey that were dominant, were direct, light, sustained, and free and while they are not an exact match to the responses made by the participants they are similar in quality and style.

Song Two

The responses for song two included themes of strong, annoyed, calm, good, happy and independent. Responses from the participants included "scared then jamming out," "strong and independent," and "liitle popy" (sic).

In part two of the question for song two, which asked, "Have you ever heard the song before?," no explanations were given as to where they had heard the songs before, if

the answer was yes. Two students answered yes and seven students expressed the answer of no.

Part three of the survey question included one answer of yes and eight answers of no. The one participant who answered yes, emphatically stated, "I hate that song!" This shows a bias that could have affected the participant's movement.

Part four included what movement the participants think they performed. The themes of hip-hop, slow, crazy, lyrical, and contemporary were gathered from the survey results. A few responses from the participants included "a batma idk"(sic), "idk", and "slow then crazy moves." While the themes within song one connected to the actual movements performed, the movements the participants thought they performed in this song were vastly different in terms of music genres and dance styles. The dominant elements found in the researcher survey from this song, included direct, strong, sudden and bound movement. Two of the element categories which included sudden/sustained movement as well as strong/light movement in this song were very close to one another in terms of the number of times the movements were performed by the participants and percentages that were calculated by the researcher. This might be why the themes of slow movements, as well as hip-hop movements, were present in the student survey.

Song Three

Part one of the survey question results for song three included the themes of jazzy, happy, excited, and sassy. These themes were closely connected in terms of feelings similar to those feelings reported for song one. One participant responded by stating that the feeling is "like dancing," which is worth noting. While it doesn't provoke an exact feeling, it did make the participant feel an urge to translate the music into

movement. As in the previous two songs, the students feelings were affected by the music.

Part two of the survey question for this song yielded a “yes,” from all participants. Every participant who created movement knew the song that was chosen. There were no explanations as to where the song was heard, nor how they knew the song within the survey.

Part three of the survey question for this song recorded six participants answering yes and three participants answering no. Two participants responded with explanations stating, “Yes is bringing back memories.” and “Yes when in my mom’s car.” By giving explanation, the participant may have had a bias toward the song, which brought back memories of having heard the song with a family member.

Part four of the survey question for this song included the themes jazz, fun movements, contemporary, and hip hop. One student responded to the question with “jazzy sass.” The themes are also different in terms of music genres and dance classes. The participants believed the movement they created to this music was from a wide variety of genres. Looking at the earlier data from the researcher survey, there were close numbers of sudden/sustained movement as well as free/bound movements created by the participants. With the close number of times those elements were used, it can be understood why there was a wide variety of movement the participants thought they performed.

Song Four

Part one of the survey question for song four included the themes: festive, crazy, annoyed, weird, good, and Christmasy from the participants. While each of these

participants felt an emotion from the song, these feelings are quite different from one another.

Part two of the survey question for this song was recorded with seven answers of yes and two answers of no. The one participant who commented with an explanation said, “Yes we did a dance to it I think.” This answer, while admitting to knowing the song, implied she wasn’t sure she knew where she heard the song from. This could have generated a bias in her movement as she knew the song and believed she had created movement to the song before.

Part three of the survey question for this song also had two answers of yes and seven answers of no. No evidence was offered by participants as to what the connection the participant had to the song.

Part four of the survey question for song four asked what movement the participants thought they performed included responses of festive, sharp moves, cultural, hip hop, weird, and lyrical. Two responses from the participants included, “weird dancing,” and “Chinese festive.” The themes within this part of the survey reported a wide range of music genres and dance classes. The movement actually performed, included the dominant movements of direct, strong, sudden and bound. This song had the closest amount of movements in the various elements in comparison to their counterparts. This included the categories of strong/light movement, sudden/sustained movement, and free/bound movement. Each of these categories were all within fourteen movements of each other, as recorded by the researcher. This might explain the wide variety of movements and genres the participants think they performed.

Song Five

For song five, responses to part one of the survey question evoked the emotions of sad, depressed, emotional, sleepy, good, and “ok,” from the participants. These themes are close together in emotional connection as well as music genres.

Part two of the survey question for this song, evoked seven answers of yes and two answers of no; however, no explanations were provided as to where the song had been heard before by the participants.

Part three of the survey question for this song also included the answers of yes four times by the participants and no five times by the participants, in regards to having a personal connection to the song. Two participants who responded yes gave details explaining their connection to the song. The participants responded, “yes i don’t like it,” and “yes because we did a combo” (sic). As discussed previously in the chapter, bias could have established from the responses recorded. A participant not liking a song and having created movement to the song before could create a bias within the movement that was recorded by the researcher.

The reported themes of part four included lyrical, slow, and ballet. Two students responded with, “slow on the floor,” and “a leap,” as movements they thought they had performed. The dominant movements in the researcher survey were direct, light, sustained and free. The movement the students thought they performed are close to the movements recorded in terms of quality and style.

Findings Versus Dance Technique Taught

When dances are taught, they are separated by genres. Each genre has a distinct style to it, and yet there is little to no scholarly research on what elements are

incorporated into the different genres. The data from the researcher survey gave dominant elements within the five genres studied. Part of the lack of research is due to the changing of dance through history. Looking through articles and books, the genre of ballet was classified into different categories such as classical and contemporary ballet. Other genres, such as jazz were classified into musical jazz, classical jazz, and lyrical jazz. None of the articles or books discussed Laban's elements or efforts in any significance. Due to these different genres, more research needs to be conducted on what the elements of the five categories are based on and the training that occurs. After the research is conducted, then the last purpose of the thesis can be fulfilled by comparing and contrasting the differences of natural movement from this study to trained movement of dancers in the five dance classes.

Summary

The results of the study are not clearly defined. The dominant elements of direct, light, sustained and free are found in songs one and five. In turn, the dominant elements of direct, strong, sudden and bound are found in songs two, three and four. While these songs had the same dominant elements, the percentages of the dominant elements used are different, demonstrating that music does, in small ways, affect the way movement is naturally generated. Within the participant survey, each of the participants described a feeling with each song, showing that the music affected the way they felt. It is important to note that a few of the participants had songs to which they had a connection, which could have created a bias and affected the movement generated by the participants. Overall, the results of this study show that to a certain extent music affects the way the participants moved.

CHAPTER V

CONCLUSION

As previously mentioned, this study was conducted to assist readers in understanding the effect music has on movement. The final chapter of the thesis restates the research question, reviews the methodology used, summarizes the findings, discusses limitations to the study, and provides recommendations for further research.

The Research Questions and Methods

As stated previously, the intent of the study was to discover the effects music has on movement through five common dance genres and the music associated with them through the lenses of sixth through eighth grade students. The following research questions were used to guide the study:

- Q1 What movement, measured in Laban's efforts, can be seen in different types of music?
- Q2 Can music affect a person's movement, measured in Laban's efforts?

As explained in chapter three, the instruments used in this study included a researcher survey as well as a participant survey. The researcher survey was used to measure the Laban efforts present in different types of music while the participant survey was used to discover themes and biases from the participants regarding the music that was utilized and the movement that they performed. Participants included nine sixth through eighth grade female students from American Falls, Idaho. The research survey incorporated quantitative data and the participant survey incorporated qualitative data.

The quantitative data in the research study focused on Laban's efforts and which efforts were seen in different songs. The qualitative data in the participant study used primarily open-ended response questions to identify themes in what the students heard in the music and what they believe they performed in movement.

Interpretations of the Findings

The analysis of the quantitative data in the researcher survey showed music does affect the way movement is executed in sixth through eighth grade students. While music affected the types of movement that were performed it was seen in small quantities. Out of the five songs played, songs one and five had the same dominant elements and songs two, three, and four had the same dominant elements. Within these dominant elements different percentages of the elements were recorded in songs one through five. While songs one and five might have had the same dominant elements, the percentage of dominant elements varied. The same was seen in songs two, three and four. Overall, the differences show the music that was played elicited a different number of movements from the participants even if the songs displayed the same dominant elements. This shows overall, that in small ways, music did affect the way movement was created.

The themes pulled from the participant survey were different for each song. Songs one, three and five had themes that related to each other closely in terms of music genres and feelings evoked from the participants. Songs two and four had themes and emotions that covered a wide variety in terms of music genres and dance classes. Each of the participants responded to every question on the survey and provided feedback of feelings evoked from each song that was played. The movement the participants thought they

created while dancing was closely related in terms of style and quality to the results that were recorded by the researcher.

Limitations of the Study

It is important to note that there are a few limitations to the study, including the numbers of participants, the type of headphones used, and the small amounts of songs used.

The first limitation was the sample size of participants. Only nine participants were used in the study, which would be significantly more demanding with a larger sample size. All of the participants were located in American Falls, Idaho, and attended American Falls Studio and the American Falls School District. In addition, all of the participants were also female. This limited base created a survey demographic that lacked diversity.

The second limitation was the type of headphones the researcher chose to use. The headphones were wireless and connected to Bluetooth. They were chosen in hopes that there would be no cords or bulky phones or music devices in the way. However, the headphones fell out of the participants ears multiple times during the study, as movements were being performed. Each of the participants commented about the lack of stability of the headphones during the research. A headband or different headphones would have been better for the study.

The final limitation was the number of songs that were used within the study. The songs used were a very small sample of songs within the genre of music, and the dance class they represented. Having only one song representing each genre created a lack of consistency and validity in the results.

Recommendations for Further Research

Verification of this study requires additional research. As music continues to evolve and more music becomes available, more research will need to be done to keep up with emerging genres and forms of dance. A larger sample size with diversity in gender, dance training, and location, would provide additional support to the findings of this study.

Other areas that may require more research are the many other genres of music and dance classes available. This additional research would provide more insight into how music affects movement as well as the other questions from the purpose section of this thesis. This study was only done from one perspective of a single researcher, who is also a teacher. It would be insightful to see the study done from multiple perspectives or the perspective of a student. There are so many genres of music, and, as well as researching more, it would also be interesting to see what the study looked like with only two genres and larger quantities of songs per genre used.

Conclusion

In conclusion, the researcher believes that music does affect movement, even if it is in small and subtle ways. Through the use of the participant and researcher survey, the researcher gathered information supporting that music does affect movement and can be seen in both large and subtle ways, the large ways through the dominant Laban efforts displayed, and the subtle ways through the percentages of the efforts used. In response to the initial research questions asked, music can affect movement measured in Laban's efforts and can be seen through the dominant elements of direct, light, sustained and free

in songs one and five as well as the dominant elements of direct, strong, sudden and bound in songs two, three and four.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD FORMS



Institutional Review Board

DATE: November 6, 2018
TO: Ashley Ames
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [1333207-1] Using Laban's Efforts to Define Movements in
Five
Music Genres

SUBMISSION TYPE: New Project

ACTION: APPROVED

APPROVAL DATE: November 6, 2018

EXPIRATION DATE: November 6, 2019

REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB has APPROVED your submission. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participants. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of November 6, 2019.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Nicole Morse at 970-351-1910 or nicole.morse@unco.edu. Please include your project title and reference number in all correspondence with this committee.

Ms. Ames -

Thank you for your extraordinary patience with the UNC IRB process. Both the first reviewer, Dr. Clukey, and I have recommended approval. Therefore, using the proposed materials and protocols, you may proceed with participant recruitment and data collection.

Best wishes with your research and please don't hesitate to contact me with any IRB-related questions or concerns.

Sincerely,

Dr. Megan Stellino, UNC IRB Co-Chair

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

American Falls
Studio
DANCE, AEROBICS & So Much More
208-226-3163



To Whom it May Concern:

I give my consent to use American Falls Studio for the graduate research project Using Laban's Efforts to Define Movements in Five Music Genres. This project is approved to take place after class time in the studio space. All surveys, studies and projects are authorized to be completed in the space. Every student is required to sign a parent permission form, participant assent form, and have a liability release form on file with the studio. Please contact me with any questions.

Ashley Ames

Handwritten signature of Ashley Ames in black ink.

Owner, American Falls Studio

(208) 406-3421

amesashl@isu.edu

APPENDIX B
RESEARCH INSTRUMENTATION

Researcher Survey

Song Number:

Student Code

number:

	Space		Weight	
Effort	Indirect	Direct	Strong	Light
Number of times used marked with a line (I)				
	Time		Flow	
Effort	Sustained	Sudden	Free	Bound
Number of times used marked with a line (I)				

Comments:

Participant Survey

Student code number:

1. Song 1
 - a. How did it make you feel?
 - b. Have you ever heard the song before?
 - c. Do you have a personal connection to the song?
 - d. What movement do you think you performed?

2. Song 2
 - a. How did it make you feel?
 - b. Have you ever heard the song before?
 - c. Do you have a personal connection to the song?
 - d. What movement do you think you performed?

3. Song 3
 - a. How did it make you feel?
 - b. Have you ever heard the song before?
 - c. Do you have a personal connection to the song?
 - d. What movement do you think you performed?

4. Song 4
 - a. How did it make you feel?
 - b. Have you ever heard the song before?
 - c. Do you have a personal connection to the song?
 - d. What movement do you think you performed?

APPENDIX C
CONSENT AND ASSENT FORMS



ASSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Hi!

My name is Ashley Ames and I'm a graduate student at the University of Northern Colorado. I do research on dance. If you want, you can be one of the kids in my dance project.

If you want to talk with me, I'll ask you to put in a pair of headphones and dance to different types of music. I will also ask you to fill out a four question survey at the end of the songs. This will give me more information about the songs you listened to and how you felt when you danced. But, this isn't a test or anything like that. There are no right or wrong answers and there won't be any score or grade for your answers. I will write down what you say, but I won't even write down your name. It will take about 10 minutes for you to answer my questions about dance and music.

Talking with me probably won't help you or hurt you. Your parents have said it's okay for you to talk with me, but you don't have to. It's up to you. Also, if you say "yes" but then change your mind, you can stop any time you want to. Do you have any questions for me about my research?

If you want to be in my research and talk with me about dance and music, sign your name below and write today's date next to it. Thanks!

Student

Date

Researcher

Date



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Using Laban's Efforts to Define Movements in Five Music Genres
 Researcher: Ashley Ames, Master's Degree Student
 Phone Number: (208) 406-3421 E-mail: ames4489@unco.edu

I am researching the effect that music has on movement. If you grant permission and if your child indicates to us a willingness to participate we will use the dance studio downstairs for one day. The time period will be between twenty to thirty minutes. There will be four songs the student will dance to. The student will wear a pair of headphones and dance to each song. While the student is dancing, the researcher will watch the movement. When watching the student, the researcher will document the movement taking place with a chart. The chart will consist of laban movements eight efforts. The activity is a one time event.

The student will take a post survey. This survey will consist of four questions and should be answered honestly. The questions only relate to the music they listened to and the movement they performed. Each survey will be kept in a locked cabinet in American Falls Dance Studio. They will then be shipped via FedEx to University of Northern Colorado. They will be stored in Crabbe Hall, room 308, the office of Christy O'Connell-Black, Dance Education MA co-coordinator. The surveys will be destroyed after three years. The names on the surveys will be replaced with codes to keep the privacy of the student.

I foresee no risks to subjects beyond those that are normally encountered dancing in the studio. Your child's participation will not be solicited during regular dance class time. The directions are fairly simple and the only feedback to your child will be positive. This study is not designed to improve your child's dancing or understanding of dance but your child will likely enjoy the activity. Please feel free to phone me if you have any questions or concerns about this research and please retain one copy of this letter for your records.

Thank you for assisting me with my research.
Sincerely,

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected. Having read the above and having had an opportunity to ask any

questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Child's Full Name (please print)
(month/day/year)

Child's Birth Date

Parent/Guardian's Signature

Date

Researcher's Signature

Date