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Abstract

This survey investigates if music prior to a scene can be used to enhance an actor's performance. Music has the power to alter and connect deeply with our emotions but is it possible to manipulate one's emotions with music to cause them to feel or think a certain way for a film shoot? Also, if a piece demands an actor to display a certain emotion does music that expresses that same emotion have better effects on enhancing that particular emotion in an actor?

The approach taken by this study is to record sets of monologues with certain emotions attached and play music to the actors prior to their performances which also has particular emotions attached. Surveys will be done by the actors to get their opinion on the process and then further surveys will be done by reviewers of the footage to see if their unbiased opinions on which recording displays the main emotions best, the hypothesis is that the reviewers and actors will both choose the music that correlates with the same emotional content as the piece being performed.

The understanding that music has emotionally affecting powers is widely known but this research will showcase whether it is possible to use music as a tool to push actors beyond

what they believe they can do.

<u>Introduction</u>

The project at hand is an investigation into the world of film and more importantly the effect of music on actor's performance and if music can influence a better performance. Understanding music and how it has become "the language of emotions" is still a new area of study but what is

already known is that music has an extreme effect on our emotional responses and can alter how we feel and think. The real question is then why are we not using this knowledge to help alter and promote particular emotions from actors based on a given scene? High level, world

famous actors may be able to jump straight into a scene but for most upcoming stars they are always looking for new and exciting ways to get into character. Some work out, some listen to music and an assortment of other tasks. Perhaps there is a way to formulate a system in which

you can subject actors to particular music prior to a scene and get instant, positive results

of better performances, more emotion, correct amount of intensity and superb timing.

The area of music and film is worth studying for a multitude of reasons. Firstly, the study could lead to a vital, practical understanding of emotions and their correlation to music and how we perceive emotions in others. It will also be beneficial to understanding how emotions are perceived and displayed through music. Other parts of the study have interesting importance's is the effect of filming techniques such as set design and lighting on emotional response. The study could be the beginning for understanding the importance of music and how much positive influence it can have on an actor's performance, perhaps opening up new employment opportunities for musicians and producers on film sets working in the area of "Music Choreography". Working through music to help upcoming actors use music as a form of emotional expression prior to filming scenes.

The approach taken by the current study is to film actors performing four different monologues based on four different emotional states (happy, sad, chaotic and calm). The monologues were recorded five times. Once with no musical influence and solely based on the actor's interpretation of the piece and four other times where a piece of music written with one of the previously mentioned emotions in mind. The music would be played to the actors before they were filmed delivering the monologue.

The footage was then watched by an assortment of viewers and the theory that the better performance would be given after being exposed to music that had a similar emotional response as the monologue would be tested.

Questionnaires would be given out to the viewers and actors to gauge their reaction to the pieces and to understand their emotional state prior to study so that little to no interference from outside sources would have an effect on the results. The questionnaire also allowed for the data to be collected and analyzed easier

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The Literature Reviews is a vital part of the thesis. Here is where one discusses the four different monologues and why these particular pieces were chosen. There is also an important research resource which discusses areas such as understanding emotions which will help analyze data from this study and how to understand what the emotional responses mean. Another research discusses the expression of emotions through music and how to write music based on particular wanted emotional responses. Two resources discuss the area of set design and lighting and its emotional effect on the viewer. They can be used to alter the set to help gain a desired

emotional response or the knowledge can be used to create a neutral set so that the only element that affects emotion is the music. Lastly there is a research study about the writing and creation of questionnaires. A questionnaire is one of the most vital parts of this study as it will be used to collect all the data needed and help filter and analyze that data. A poor understanding of data collection and questionnaires could lead the study with insufficient answers or worst not ask the correct questions.

The next section is the methodology. In this section the full Analyzation of the results, a discussion of what was done throughout the project and a closing conclusion wrapping up the project.

Lastly there is a bibliography alphabetical naming all the resources used during the course of this study.

Literature review

"Understanding Another Person's Emotions—An Interdisciplinary Research Approach" written by Georg Juckel, Christine Heinisch, Anna Welpinghus, and Martin Brüne is an excellent insight into the idea of understanding emotions. There are different elements of a person and situations that can alter and affect their emotions. The journal's investigation into emotions and seeing patterns in people as well as the importance of context and knowledge of prior experience is priceless. It shows that for this project to be successfully accomplished we must formulate a questionnaire for all participants involved in a correct way to successfully gauge their emotions at the given time of the project.

The authors of this research resource are trying to convey the importance of understanding other elements of the participants such as prior experience that affected their emotions, patterns in behavior, and context and location and their effects. Understanding vocal commutation for the participants is not enough. Understanding how their faces can convey

their emotions and the deeper understanding of them as emotional beings.

The relevancy of this research to my project is the discussion of emotions and how there are multiple layers to judge when trying to understand one's emotions. This will help construct an effective questionnaire for everyone involved so when the filming is taking place the emotions expressed is contained within the confines of the study and is a byproduct of the music being heard or other outside sources in the participants life.

This research is extremely successful in elaborating on the importance of looking into different parts of people's lives and emotions to gauge a full understanding. The study discusses a topic called "emotion in content" and talks about how "emotions are not observed in isolation". A test conducted during this research was to crop a person's face out of a picture and place them into different situations which caused their face to seem to be producing a particular emotion. To try to understand the participants' background and previous emotion history could strengthen the emotional understanding of this study. The research will be a cornerstone to any emotion-based study or questionnaire I do throughout this project.

In conclusion, this resource can be used as a basis to understand and break down emotions within the actors and footage reviewers involved in this study. There is a need to understand how the context and location of the recording, along with previous experiences that could alter the emotional response of the actors. The study needs to have little to know outside interference on the actor's emotions and their reactions should be solely based on how the music makes them feel/act. This understanding of context and outside and previous experiences effects on emotions will be fundamental for the construction of a useful and fair questionnaire that will help guide the study.

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The journal entitled "Lights, Camera, Emotion!: An Examination on Film Lighting and Its Impact on Audiences' Emotional Response" by Jennifer Lee Poland discusses the relationship between the lighting of a scene and its effects on the viewer's emotions. During the filming of the study at hand a combination of correct lighting, location, camera angles and prior musician preparation could lead to a desired reaction from the viewer. Also understanding how to manipulate emotions in these areas could help with creating a neutral recording location where the only factor affecting emotions is the actor and they are solely affected by the music

presented to them before the study. Lighting and understanding how to manipulate it is important when discussing emotional reactions from viewers after watching particular recorded scenes.

They are doing a deep investigation into the impact of different forms of lighting in the film scene and its effects on the audience's emotional response. The research is extremely detailed stating "162 participants viewed the film; 54 people watched each stimulus piece". They discuss the three main lighting techniques of film High Key, Low Key, and Available Light and note that each lighting technique has a particular reaction amongst the participants. Their discussion of a number of different hypotheses gives great insight into different areas needed to be investigated in the study at hand including personal cognitive approaches, genre of the film and discuss the history of lighting in film and its effects on today.

A lot is relevant to the current project at hand. The understanding of different lighting styles and the outcome of this research, knowing what particular emotions were displayed based on the lighting style of the scene. Other areas such as understanding the history of lighting and outside sources that could affect the expected outcome from the viewers such as genres, previous emotional experience, media's effects etc. Lighting is just as important as the camera work, music and script writing "Every action of light has, in its influence, physical as well as psychic components" (Birren, 1969, p. 400)

The journal is extremely successful in conveying information useful to the current project at hand. The research has a lot of participants involved and also has a lot of hypotheses discussing many different areas of effect for the study. The journal is laid out in a very easy to read and understand way and will be the cornerstone to understanding lighting and how to use it correctly throughout the current project at hand.

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In conclusion, this research will be the backbone in terms of understanding lighting and how it will be used during the filming of the current study. Perhaps the lighting can also be used prior to the filming in the location where the actor is getting ready to see if a strong link between correlating lighting and musician themes can be found. Other areas of use from this study is the history and perhaps using some sort of "old" lighting style to see its effect. Investigating genres and their previous connection to audiences and trying to lessen any outside or prior emotional responses. Overall, this research is a perfect example of understandable, easy to use and in



"Music: The language of emotion" written by author Kathleen Ann Corrigall from MacEwan University discusses some of the questions that have not yet been understood by researchers when it comes to the area of emotions and its correlation to music. It relates to the research question at hand because it discusses the question of "How is emotion conveyed through musical features?" and "Do listeners actually experience emotions in response to music, or are they simply perceiving emotions?" (Ann Corrigall, 2013, p.299). Understanding the relationship

between music and emotions and how certain musical features can convey particular emotional responses from a listener is vital for this study.

The author of this research is taking a deep look into the link between emotions and music. Looking at questions such as what musician features evoke particular emotional responses, Is the music the cause of the emotional reaction or is it simply perceiving emotions? Which particular emotions does music convey and are there any emotions that music can't convey? Music is called the language of emotion but the author is trying to find out what exactly causes the emotion. The music itself or is the music working in unison with outside forces and experiences and that's why emotions are so individually based. Overall, this piece is trying to understand the deeper link between music and it's feature with emotion.

Much of this research is relevant to the current project at hand. One of the sections titled "DO LISTENERS ACTUALLY EXPERIENCE EMOTIONS IN RESPONSE TO MUSIC?" discusses different theories and ideas on whether music introduces any additional emotions. The journal states "The cognitivist position (e.g., Kivy, 1980, 1990, 2001; Konečni, 2008; Meyer, 1956) maintains that music does not induce emotions because true emotional responding requires cognitive appraisal" (A. Corrigall, 2013, p.302). Theories such as the cognitivist position could shine more light on emotions and their link to music and perhaps help when reviewing the questionnaire of the current project about prior emotional feeling alongside the reactions from the footage recorded for the project. Other ideas relevant to the study are ones of which emotions music actually expresses. As the journal mentions "Some researchers (e.g., Konečni, 2008; Scherer, 2004; Zentner et al 2008) claim that music induces aesthetic emotions, such as feelings of wonder, transcendence, nostalgia, power, and tension, which differ from every day or utilitarian emotions, such as happiness, sadness, anger, and fear. "(A. Corrigall, 2013, p.305). Overall, this journal is full of useful insights and research that can further the emotional and musical understanding of the project at hand.

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The author was extremely successful in the way they were trying to convey. There are still many unanswered questions surrounding music and its correlation to emotion and this research looks at many of the different theories, hypotheses and ideas that different researchers and scientists have on these questions. The journal is laid out in a very concise and easy to follow way. It is

sectioned up into easy to disgust chunks so that all the relevant information needed for

the project at hand can be found and cited.

In conclusion, this research will be the backbone for truly understanding the correlation between music and emotion. Also understanding where exactly music and emotions fit together whether it's truly expressing emotions or perceiving emotions and is the emotion one of aesthetic or everyday emotions and perhaps the truth lies somewhere between them all. Many of the theories and points made in this journal can be linked into different parts of the recording, writing and filming process with the goal to create a recorded piece where the emotion displayed is solely based on what was planned prior to the recording and has not been affected by outside sources or prior emotional experiences.

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"Designing A Questionnaire", a journal written by Ng Chirk Jenn from the, Department of Primary Care Medicine, University of Malaya is an in-depth investigation into the constructing and creation of a "good" questionnaire. As it is important to gauge how all the participants feel prior to the study and their emotional responses to the project, creating an easy to review and easy to answer questionnaire is of utmost importance. "A bad questionnaire renders the results

uninterpretable, or worse, may lead to erroneous conclusions." (Ng Chirk Jenn, 2006, p.32). It is extremely important to have a good, reliable questionnaire that provides all the answers needed to complete the project at hand.

The author is trying to dissect what makes a "good" questionnaire and the pitfalls of a "bad" questionnaire. The author says that "A questionnaire is a very convenient way of collecting information from a large number of people within a period of time." (Ng Chirk Jenn, 2006, p.32). so it is important to ensure that it is created correctly or else the information may not be what is needed for the project or worse it will simply be unusable. They discuss that a "good" questionnaire is "valid, reliable, clear, interesting and succinct." (Ng Chirk Jenn, 2006, p.34). The author goes into detail about what each of these mean and how to construct an excellent questionnaire with these traits in mind. Also elaborating on questionnaire topics that are important to writing a usable and reliable questionnaire such as options/choices, close- vs open ended questions and avoiding ambiguous questions.

The overall journal is extremely relevant to the project at hand. As mentioned previously, a questionnaire that is constructed correctly will provide all the necessary answers needed. This will help hypothesize an appropriate conclusion from this study. Discussing this form of questioning and the pitch falls suffered by many other questionnaires which can render the answer useless. Useful scale methods such as the "Likert scale" which is a commonly used method which "provides a measure of strength for a particular attitude or belief. It is possible to calculate mean scores for any given responses to statements" (Ng Chirk Jenn, 2006, p.35). Also, the importance of before even writing the questionnaire, having a framework and understanding that one hopes to gain from it. "The importance of this framework is to ensure the research covers all relevant variables and any irrelevant variables can be excluded. This will answer the commonly asked questions: "Did I miss any important questions in the questionnaire?" (Ng Chirk Jenn, 2006, p.35).

The information put forward by the author is extremely convincing. It is backed by case studies and examples of questionnaires and an assortment of questions. The information is extremely easy to follow and understand and it is laid out in such a way that will make it simple to put into practice in one's own questionnaire. This research will be the backbone of the project at hand when discussing questionnaires and data management of any kind.

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In conclusion, this piece of research could be vital for the project at hand. If the information is not collected properly and worse if the correct information is not collected from the questionnaire a strong and convincing conclusion cannot be made rendering the study useless in its attempts. Using this research and its understanding of forming frameworks for questionnaires, asking the "right" questions and understanding in what ways to collect and



"Evaluating Emotional Responses to the Interior Design of a Hospital Room: A Study Using Virtual Reality", a study conducted by Susana Dinis, Emília Duarte, Paulo Noriega, Luís Teixeira, Elisângela Vilar, and Francisco Rebelo in 2013 investigates the effect of interior design in hospital rooms and its effects on emotions, related to positive and negative recovery. Another important area in the current study at hand is set design and in what way can a set be designed to evoke a

particular emotion. This study looks at this from a hospital/medical approach but the principle and ideas are the same. Is it possible to evoke positive and negative emotions based on the set design of a scene and what elements can be used to do so? This study looks into this idea and has many interesting takeaways from the research.

The authors are trying to understand if it is possible to cause particular emotional responses from participants based on the interior design of a room and if so what elements of the room cause positive and/or negative responses. The hope is that "A clear understanding of the effect of specific features of the environment on the patients' health and well-being may help the design of more effective healthcare environments". (Dinis, 2013, p.475). The understanding that a positive mental outlook is important for the recovery of ill patients. The area of health does not concern the current study at hand but what is important is the concept of design of a space and its emotional effect on participants. Perhaps being about to us there finding from this study in the current research when designing the sets from filming with the hope of evoking particular emotional responses.

Many of the points made throughout this research could be seen as vital information for the current study at hand. The findings from 30 university students viewing 28 different hospital rooms in Virtual reality gave great insight into the world of interior design and its effects on the emotional response of people. The researchers wanted to keep the room itself void of any emotional effect and have just the objects in the room causing emotional responses so a neutral light grey was chosen to lessen any emotional reaction. Researchers found that "the more elements present in the hospital room, the better the evaluation" (Dinis, 2013, p.480). Also, when grading which piece of interior caused the most positive reaction it was determined that "the landscape and painting were responsible for more positive evaluations, followed by the plant and the furniture." (Dinis, 2013, p.481). Another piece of information that could be seen as relevant to the current project of research was their way of data analyzing using the Zippers scales to grade the emotional reaction to the number of elements in the room. Overall, the understanding of how to design a location to evoke particular emotional responses is extremely important and knowing this could help the current project to accommodate a more emotionally neutral set.

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The study is extremely convincing in its way of investigating the importance of interior design on one's mind. The study had a simple to follow question and was laid out very in-depth and easy to understand. The research is backed with diagrams of data collected and though it is impossible to fully understand the effects of objects on emotions or whether it is perceived emotions as discussed previously in a prior literature review one can understand that the

emptiness of the spaces with less objects is quite unsettling. Also noting that positive emotions are felt more with natural objects such as painting, landscapes and plants and less with man-made objects such as furniture. Taking all this into account one could see the importance of such a study on the current research project and how fundamental this information will be for set design during the filming stage.

In conclusion, this research will be extremely vital in understanding the effects of set and interior design on one's emotional responses. Following some of the findings and guidelines that were set out in this research could be crucial to the success of the current study at hand. The use of objects and lack thereof, what objects will be used and what color the set will be can be used from this study to manipulate the emotional response from the viewer. Depending on the set design could remove any outside ser design effects on the viewers emotional response or create a set in such a way that an expected emotional response will be found.

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Sally's Monologue from Season 2 Episode 7 of Barry is an excellent example of a chaotic breakdown monologue. Sally, played by the incredibly talented Sarah Goldberg is envious of Barry for getting a role in a movie called "Swim Instructors" that she was dreaming of and worked hard for simply because he was the right height. She is happy for him but is extremely jealous and also struggles with discussing other areas of her life and all of this pent-up anger

accumulates into the chaotic release of this monologue. It is important for the study to have an assortment of different emotionally based monologues. The plan is to have a sad, happy, calm and chaotic monologue. This monologue embodies anger, chaos and frustration and will be an excellent example to use for this study.

The writers of this monologue are trying to convey all the pent-up anger and chaos within Sally. There is also a touch of comedic genus in the writing as she drifts on without stopping to process what she is saying. Almost as if the words are falling out of her. She discusses a multitude of different topics in the short monologue such as the film role, toxic relationships, womanhood, being an artist, Jealousy and seamlessly glides through all the topics perfectly. The explosion of all this inner turmoil in this short monologue is a perfect display of personal chaos.

The monologue is one of the most chaotic pieces of writing of the last few years. It is exactly the right amount of chaos needed for the project at hand. Aligning this piece with other recordings of happy, sad and calm monologues and exposing the actor(s) involved to an assortment of different emotionally fueled musical pieces could strengthen the project at hand. Discussing such a serious and emotional topic for an actor or viewer along with the sporadic delivery of the monologue showing a lot of confusion from the actors makes this piece perfect for the current study. The random comedic releases in the piece as well could be interesting to see when the actors are delivering them after each different emotionally driven musical piece. "Raw, Unapologetic, Truth with a capital T, all caps actually, I'm thinking like a writer now" (BARRY, 2x07, 0.26)

This piece is extremely successful in its attempts to display what is going on in Sally's mind and her breakdown trying to express it all out. Bill Hader, Writer, producer and lead actor of Barry was quoted when discussing the writing of the monologue, in an interview with SiriusXM saying "What do you think is going through Sally's head? It would be great to know what's going on with Sally. We had all these things and then we asked Sarah (Goldberg) what do you think is going on with her?", "It was a ton of different things no one said the same thing" (SiriusXM, Bill Hader Explains Sally's Incredible 'Barry' Monologue, YouTube, 1:23). The chaos of not knowing exactly what was going on in Sally's head, leading to a collection of different ideas being combined into this short monologue is a prime example of how to write a monologue deserving of an award.

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In conclusion, This Monologue is exactly the type of writing needed for the project at hand. Combining the knowledge previously learned about expressing emotions through music, set up and lighting and other monologues with different emotional feels will straighten the conclusion

of this project. Leading to data collected being easy to understand and seeing if the expected outcome from the viewers is given or perhaps understanding why a different outcome was seen based on their responses to the recordings. It will be interesting to see the difference between recordings of this monologue when there is chaotic music, happy music, sad music and calm music being played prior to the performances.

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The "Get busy livin' or get busy dyin' monologue given by Ellis Boyd 'Red' Redding portrayed by the extremely talented Morgan Freeman at the end of "The Shawshank Redemption is a prime example of calm, reflective monologuing. One of the monologues needed for the study

at hand

is a calm one that is void of any extreme emotions such as anger, extreme happiness or sadness. The approach the writers took for this monologue was to give Freeman a reflective, peaceful piece to end the film. Looking back and discussing crime, his contend excitement to see his longtime friend Andy and imagining the beauty of the Pacific saying "I hope the Pacific is as blue as it has been in my dreams." (Freeman, The Shawshank Redemption Ending, Youtube, 1:59)

The character Red was an insightful and wise man through the film and his many pieces of dialogue through "The Shawshank Redemption" helped the main character Andy and the viewer learn a lot about themselves internally. This last monologue and the closing dialogue of the film is Red's chance to reflect. He is finally out and has broken his parole by travelling to see Andy but this is his way of "Getting busy livin'" rather than dying. The monologue and the delivery by Freeman gives a calm, insightful image of the inner workings of Red's brain and how he is thinking at this moment in time. This is a perfect example for the project at hand and to somber yet positive delivery and message behind the monologue will be interesting to see and understand how it changes based on the music played prior to the performance.

This monologue will be used under the heading of "calm monologue" for the project at hand. It has all the traits of a calm, reflective monologue that could be manipulated based on the performance of the actors and their emotional delivery caused by the music. It is a short monologue but there is a lot of room to play with delivery and timing. This will hopefully change based on the music, especially comparing the calm music to the chaotic piece. There are a lot of directions an actor can go with this monologue looking at areas of hope, sadness, reflection, and fear and perhaps asking them questions about their feelings and emotions towards the monologues before filming and before subjecting them to the musician influences would be interesting to see. Understand how they intend to deliver the piece based on their prior knowledge of the film and if that stays true or is altered by the musical influence.

This closing monologue is an extremely excellent way to close an already incredible movie. As stated previously Red was seen as a man of insight and wisdom to others in the film and the viewer. In this piece he is finally giving himself that insight. The underlying message that is seen on screen during this monologue is that he decides to live and go to Mexico rather than ending his own life as his precious friend Brooks did when he was released from prison. This self inflicted insight leaves the viewer knowing that Red truly means the first line of the monologue "Get busy livin' or get busy dyin'".

and filmed five times. One with no musical influence and four with each musical piece played to the performer beforehand. The hope is to see a development of emotions based on the musical piece listened to before the performance. This monologue is exactly the "calm, reflective but open to interpretation" piece that is needed for this study. Out of all the monologue performances the calm versus the chaotic are two of the most exciting to see and to see how they develop and are perceived by the viewers.

The "I remember better with you" Monologue by Dory in "Finding Nemo" 2003 is a heart wrenching short piece of writing. After Marlin finds out that they are too late to save his son Nemo, he wants to leave and go home heartbroken. What follows is a short but extremely effective monologue by Dory begging him not to go because in her words "And I look at you and I, I'm home" (Kinetic Typography - Finding Nemo (Dory Monologue), YouTube, 0.35). Dory has found something unexpected in her travels. She has found somewhere where she feels like she belongs. For a children's film this monologue is truly heartbreaking and embodies the feeling of sadness and loss that Dory is feeling as she sees her newfound "home" leaving and the thought of being left alone sinks in.

The authors of this monologue are trying to convey the sheer panic Dory feels as she begs for Marlin to not leave. Also betraying the sadness and emptiness she feels being left alone. Dory's frustration when she says "I remember things better with you" (Kinetic Typography - Finding Nemo (Dory Monologue), YouTube, 0.22) and then struggle to remember under the stress and sadness of the situation. "P. sheeran, ugh, forty two,ugh, I remember it, I do, it's there" (Kinetic Typography - Finding Nemo (Dory Monologue), YouTube, 0.24). The end of the monologue cements into the viewer the final heartbreaking blow to Dory's pled as she said she doesn't want to for and Marlin follows with his sadden exiting line "I'm sorry Dory, but I do" (Kinetic Typography - Finding Nemo (Dory Monologue), YouTube, 0.51).

This monologue is a prime example of pure sadness and heartbreak being displayed through writing. It is a child movie so the language used is on the simpler side but this does not take away from the emotions displayed in the piece. The piece will be used in the project at hand as the "sad monologue" and based on the actor's delivery of the monologue and their timing could be interpreted by the viewer in different ways. Sadness, panic, breakdown, emptiness and many other emotions could be displayed depending on how the actor decides to deliver it and hopefully with influence from different musician pieces an expected delivery could be produced. The writing of this piece is extremely successful in its attempts to convey a sadden and frantic Dory and a defeated Marlin. The use of simpler language so that all ages can process and understand the grief seen in the scene is extremely successful. The use of this choice of language leaves room for expressive emotional display and the ability to play with the timing of the delivery to alter the viewer's perception of the emotions seen.

In conclusion, this is an excellent piece of emotional writing. It will be used as the titled "sad monologue" of the current study at hand and with the use of music influences the performance will be altered with areas such as delivery intensity, emotions displayed and timing seen to be affected. Dory is stricken with sadness and grief not just over the loss of Nemo but the loss of her dear friend Marlin who is leaving her alone and empty in the wide and unforgiving ocean. This piece will be great to see in contrast with the other monologues chosen for this study.

study. Hopp's is giving a motivational speech to all the newly recruited animal officers with the core message being that to make the world a better place, one must try. "I implore you: Try. Try to make the world a better place. Look inside yourself and recognize that change starts with you. It starts with me. It starts with all of us." (Zootopia (2016) - Hopp's Final Monologue, YouTube, 0:50)

Another prime example of the use of simpler, yet effective language to display a common theme amongst viewers young and old. Simpler to the "calm" monologue from "The Shawshank Redemption" a sense of reflection and self-learning is displayed in this piece. The writer is trying to convey to viewers of all ages in a happy and motivational way that all the changes needed in the world start with oneself. They start with you and your outlook and approach. "But we have to try. So, no matter what type of person you are, from the biggest elephant to our first fox," (Zootopia (2016) - Hopp's Final Monologue, YouTube, 0:39). This is also the closing monologue for the film and for Hopp's the self-reflection is important and this new understanding of oneself and the motivation to the others listening is where the source of the happiness comes from.

This monologue will be used as the "happy" piece for the current study. The way happiness is portrayed is the overall underlying message but emotions of courage, bravery and self-love are also present. The wholesomeness of this entire piece and its motiving message of how we are the change is extremely inspiring and a perfect portrayal of real and raw happiness and self reflection. The piece will be used alongside the other monologues and music chosen and written for the current study. The hope is to see a genuine difference in emotional portrayal, intensity and timing when it comes to different takes based on different pieces of music.

The monologue is extremely successful in portraying pure and raw happiness in the form of self reflection and using that reflection to motivate others with a strong, moving speech. The use of simpler language works perfectly for what the writers are trying to achieve and allows the piece to be understood and processed by people of all ages. The insightfulness of the main character and the core message of the speech is moving and thought provoking.

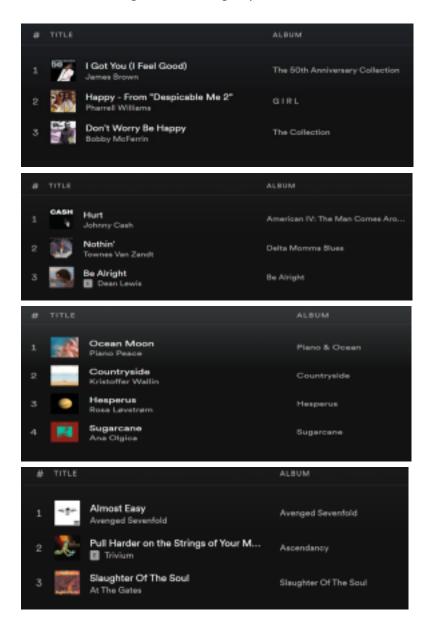
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The research is a perfect example and will be used for the "sad" monologue. Animated films have a unique childlike way of dealing with emotions and conveying messages to the viewer. The underlying themes and emotions of happiness, pride. Courage and wisdom make this

monologue truly triumphant. The piece will be a unique contrast to the other monologues used in this study and seeing how the actors process and deliver these pieces based on their own emotional understanding of them and the effects of musical including will be interesting to document.

The first thing that was done was choosing what emotions the study wanted to analyze. The final decision was that four monologues would be used with four different emotions In Order of recordings: (Happy, Sad, Calm, Chaotic).

Four Spotify playlists were put together under the same emotional catalogs and these were to be used during the recording days.



The questionnaires were written up following a planning session about what exactly the questions wanted to answer. A questionnaire for the actors to fill in prior to the day was created. This was to gauge their emotional state and if they had taken part in an experiment

like this before. Another questionnaire was created to gauge their understanding of their own performances and this was taken by them after every recording. Lastly a questionnaire was created for everyone reviewing the footage. This gauged the reviewer's emotional state prior to watching the footage, what the emotions displayed by the piece was and which performance displayed these emotions the strongest and the weakest.

An information sheet was sent out and IADT's ethical guidelines were followed to ensure everyone was comfortable and happy with their environment and discussing such a personal topic as emotion.

The location was chosen. Due to a mix, up with STC a room for the given recording was not available so a secondary location was chosen in The International Bar's Comedy Club located on Wicklow Street. Due to Covid and the need for health and safety the number of crew was limited to 2 people and one actor at all times. Kenan Flannery as sound recordist and Nadine Pichler as videographer. The location was scouted prior to the day of recording to ensure that it had a neutral feeling to it and that it wouldn't affect the actors in a positive or negative way.

The survey undertaken prior to the recording day was done by the actor no more than 48 hours before recording day.

The Recording days took place on the 3rd and the 10th of March. Two hours were allocated to each actor and there were 2 actors each day. The actor's performance their given monologue 5 times. Once freely, based on their own understanding and emotions towards the monologue. Followed by four more times, each time before the recordings the actor would sit in a quiet, darkened space and listen with headphones to the entire playlist. Once the playlist was finished they quickly took their place before the camera and performed the monologue.

Sarah Walsh - Zootopia Monologue - Happy

Roy O'Connor - Get Busy Livin' Monologue - Calm

Jackie Carroll - Sally Monologue - Chaotic

Following the end of the recording days the footage was edited and synced with the external audio recorded. The footage of each set of monologues were then edited together to make one full video to simplify the process for the reviewer.

Reviewers for the footage were then contacted. This was done through the researcher's friend group and Facebook groups based on acting and music. They were sent out an information sheet and IADT's ethical guidelines and the set of monologues with the questions on www.SurveyMonkey.com.

The answers and data collected will be then analyzed and displayed in a clear and understandable manner.

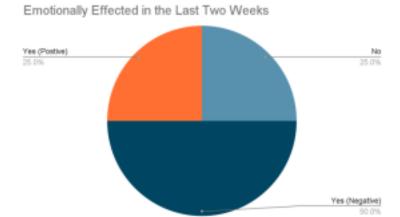
The theorized conclusion is that the footage that is chosen to be the best will have a correlation match between their expected emotions from the monologue and the music played prior to the piece.

the actors prior to the filming. As explained previously the importance of this survey was to understand the actors emotional state before recording.

- 1.Has anything happened in the past 2 week that has drastically affected you emotionally? Positive or negative?
- 2.If so, explain briefly (If comfortable to do so)
- 3. Have you ever been involved in a project about music's effects on emotions or an actors performance before?
- List your top 3 music genres
- 5. Are there any musical genres you dislike?
- 6. Do you think listening to particular music before a scene can have an effect on an actor's performance?

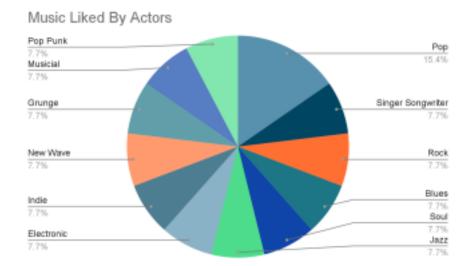
If so, how?

- 7. Did you know of this particular monologue prior to your involvement in this project?
- 8. How does the monologue initially make you feel?

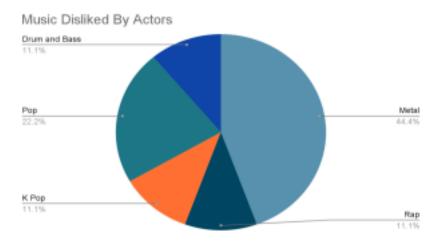


The reasons were due to a mix up in a new job, a friend needing help and a very successful end of year result. After analyzing these results and the footage after the recordings the conclusion was made that though the study needed to be aware of these events and how they could affect the actors the performances seemed natural and not extremely swayed by their situations.

All actors said that this was their first time being involved in a study such as this. This is good for research so that no prior understanding of such a study is had by any of the actors.



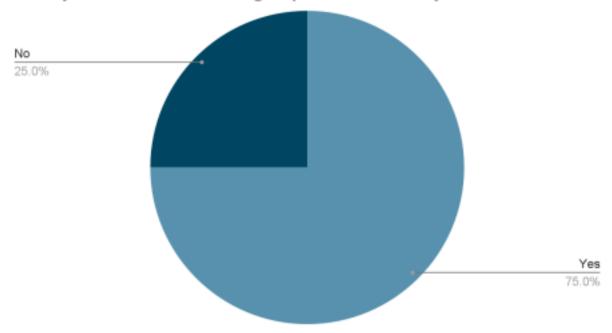
There was a wide, diverse selection of music liked by the actors involved. The only musician genre that came up more than once was Pop. Rock was also mentioned but as its sub genres e.g. Pop Punk and Grunge. The reason this question is important to ask is so that if a particular Spotify playlist is noticeably affecting the actor the researchers can see if the actors were fans of the music genre or if they disliked it. All Genres mentioned below.



All actors said that they were not fans of different forms of Metal. This result was interesting to see and remembering this for when the discussion about the best performances arise is important as the Chaotic playlist is very Mental orientated. All genres mentioned below.

All actors involved believe that music can and will have an effect on an actor's performance during a scene.

How you seen this monologue prior to the study?



Understanding how the actors personally see the monologue and what emotions are present is important to understand as seeing if their portrayal of these emotions change based on the music is what the basis of this study is.

The "Chaotic" monologue was interpreted by the actor as frustration and sadness. This is what the researchers expected from this monologue.

To quote the actor on his understanding of the "Calm" monologue, "It makes me feel a sense of longing and hope that may have been missing in another person's life. As if there is nothing left to lose, the worst is over. Anything that happened in the past doesn't matter. There is excitement as well as peace, a heavy load has been lifted. It's an overwhelming piece that makes me feel happy and light". The sense of calm reflection, peace and hope is similar to the researcher's expected understanding of this piece.

The "Happy" monologue was seen as positive and hopeful which matches up to the expected emotional response of the researcher.

The "Sad" monologue was understood as sadness and a feeling of loss.

Understanding that the actor's interpretation of the pieces was similar to the expected understanding the researcher had will help see if the portrayal of these emotions changes extremely when music is involved.

Also analyzing how the actors were feeling prior to the study and seeing that their situations did not affect their performances drastically and being on the same wave of understanding as the actors when discussing the expected emotional response from theses monologues will mean that it will be much easier to see an emotional change based solely on the music's effect on the actors.

The key notes from the survey prior to recording were:

The overall dislike of Metal music and how the chaotic playlist would affect the actors.

Their emotional situations and how drastic it would affect their performance meaning the shift in emotions may not be 100% the music and particularly their prior emotional state.

Prior understanding of the monologues and perhaps any memories attached to the monologues and/or films/tv shows which may affect the expected delivery.

Discussing the survey results done by the actors

Monologue One - Dory - (Sad)

Actor: Fathimah Kara

Interestingly, the actors stated that their best performance was the one connected to the sad music playlist. The is in line with the hypothesis puts forward by this study. The actor states that the sad music made her "naturally sad" and it made it feel "more nature and not focused". Fathimah believed that the performance linked to the chaotic playlist was the worst. This is probably due to the chaos being near polar opposites in terms of expression to the emotion of sadness. She states that the music had a negative effect on her performance saying she feeling "rush and not connected to the piece, fully out of the scene".

Other interesting comments made by Fathimah were that the performance linked to the calm playlist was "lacky" and "void of energy" and that the music was very clearly "altering her emotions" and said that this was "a great tool for all actors to add to their collection"

Monologue two - Zootopia - (Happy)

Actor - Sarah Walsh

Sarah, stated that her best performance was the one linked to the happy playlist and the sad playlist. The is probably due to both playlist expression a different type of emotional response for the piece. The happy playlist helped push the happy, hopeful element of the piece and the sad playlist might may have established a more somber, empathetic side of the actor displayed in the piece. Sarah stated about the happy playlist performance that the music made her feel "lighter" and the positive music "warmed me up" to the monologue. Other notes to be aware of was that Sarah stated that the sad music reminded her of positive memories she had of the songs so perhaps that's why the sad and happy playlist had a similar effect.

Her less favorite performance was the piece with non-music, calm playlist and chaotic. She states that the piece with no music was "rushed" and that she would have liked "time to adjust" to the piece in the recording space more. The recording days were on a tight time schedule and because of this there may have been a sense of tension in the area to get all recordings done. This feeling is different for every actor as other actor adjusted to the space quicker than others.

Sarah stated about the calm playlist monologue that it made her "too calm" and took her "out of the scene" and the chaotic piece "boost my confidence" but also "made me far too pumped"

Monologue three - Get Busy Livin' - (Calm/Reflection)

Actor - Roy O'Connor

Roy stated that his best performance was the monologue linked to the calm playlist. He discussed how the calming medication link music made his focus on the line about "I hope the Pacific is as blue as it has been in my dreams." This is a positive comment because it shows the meditative state the music put the actor in. He also said that the music helped him "focus on breathes" he was taking and made him "very aware of everything" he was doing.

His least favorite recording was the monologue linked to the sad playlist. He stated that this playlist caused his tempo and timing to slow down drastically and it caused him to be "far too calm".

Other interesting comments made by Roy about the study were that the Chaos of the chaotic playlist caused him to mess up his lines and that the joyfulness of the happy music gave him energy.

Monologue four - Sally - (Chaotic)

Actor - Jackie Carroll

Jackie's favorite recording was the monologue linked to the chaotic playlist. She states that the music helped her "feel the piece much more" and that the "frustration" brought out from the music helped her match the piece's expected emotional response.

Her least favorite performance was the one linked to no playlist. She stated that due to it being the first time to film she was "Nervous" and "self-conscious".

Other interesting comments made by Jackie were that the happy music, though not expressing some emotional context as the monologue still helped her focus due to its catchy-ness and how it helped her get into the mood to perform. The sad music brought out a more somber side of the piece and took the monologue a different but still unique direction and the calming playlist turned out to have a similar effect as the happy playlist but unfortunately it caused Jackie to be too calm and comfortable taking her out of the scene and looking focused.

Lastly, she noted that every playlist took her to a different emotional place and though some of the performances didn't match up with the wanted emotions of the piece the still helped dramatically and caused her to perform better than she did without music. She stated that she will "definitely be using music before performance in the future".

Closing notes on this section

Based on the feedback from all the actors it is very clear that they believe that the music has had an overall positive effect on their performances and all of them choose the monologue that matched closest to the music of the emotional content. This proves the hypothesis that music, according to the actors, has an effect on their performance and that it would be a good tool to incorporate into an actor warm up routine, especially for new actors and mature actors looking for ways to channel certain emotions.

After analyzing the footage and the survey done by the actors it's noticeable that even though the music interest of each actor was different that didn't affect the overall study because the actors were more focused on the emotions they wanted to express and used the music, even the music they did not like to help express it. The only issue that was found was if the actor has an opposite reaction to the expected emotional response from a piece of music. This can be due to positive or negative memories or thoughts about certain music which causes the actor to view positive music as negative and vice versa.

Discussing survey results done by the reviewers of monologue footage

The survey and the edited monologues were sent out to multiple people through friend groups and film networking groups on Facebook. One issue we came across from the beginning of sending out these surveys was that the time to watch and complete one survey was anywhere from 5 to 20 minutes depending on the monologue. This was a lot of time to expect people to give up for free and if this research was done again in the future the study would probably have benefited from having fewer monologues and focusing on one emotion instead of four. Due to this we have small groups of reviewers, in future versions of this study a bigger sample group will be needed to confirmed the results found during this study

Something that was noted was though the space was neutral in emotion there was a lot of external noise. The actors mentioned that the noise did not distract them and some of them said they did not notice it but it is important to note as it could have affected them indirectly. If this research was done again a quieter space would be needed for filming.

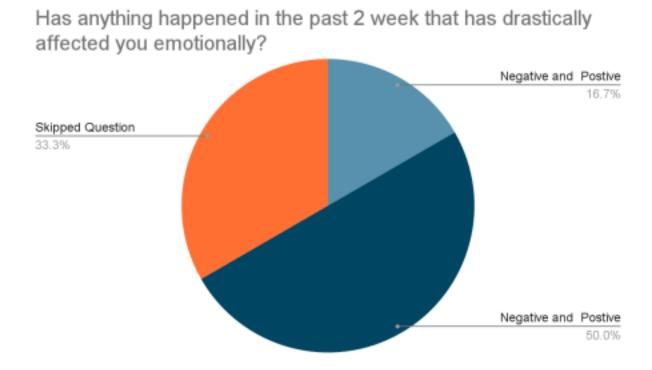
- Has anything happened in the past 2 week that has drastically affected you emotionally?
 Positive or negative?If so, explain briefly (If comfortable to do so)
- Have you ever been involved in a project about music's effects on emotions or an actor's performance before?
- 3. In your opinion, what are the main emotions of this monologue?
- 4. Which recording best displays these emotions?
- Explain briefly why you choose this recording?
- 6. In your opinion, which of the recordings was least effective at displaying the emotions you named?
- 7. Explain briefly why you choose this recording?
- 8. Do you have any notes or additional information regarding any element of this project that you would like the researchers to know?

Monologue one - Dory - (Sad)

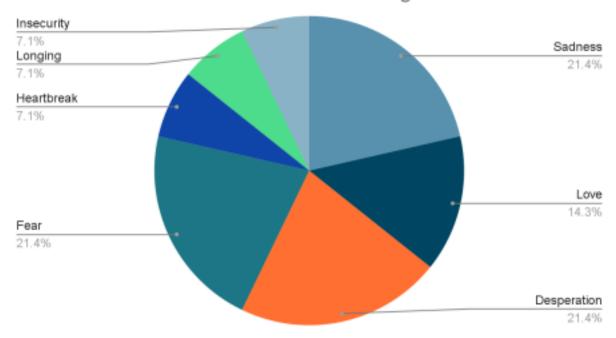
6 Reviewers

Actor - Fathimah Kara

The same first question from the other survey about emotional state was used in this survey. As established previously, the researchers made the conclusion that people's emotional state would not affect their answer drastically but the question was still included so that this factor could be considered when reviewing the results.

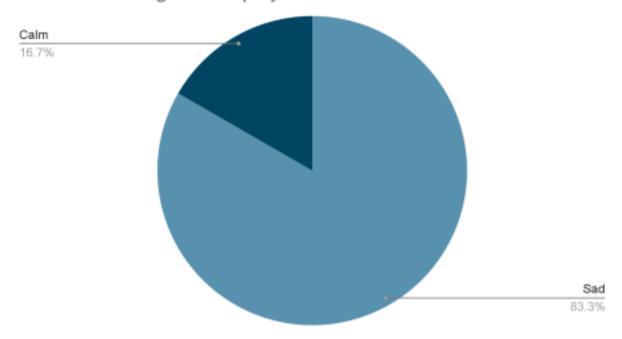


what are the main emotions of this monologue?



The main emotions that came up were fear, desperation and sadness. These emotions line up with the expected emotional response decided by the reviewer.

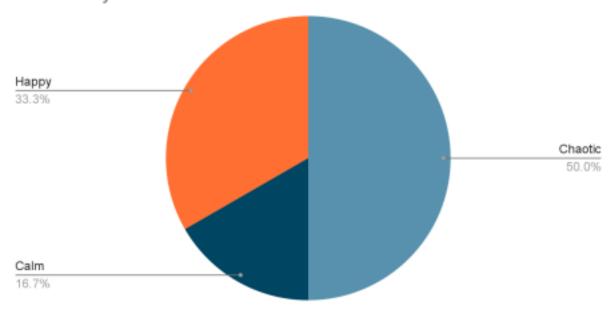
Which recording best displays these emotions?



About 80% of reviewers chose the recording connected to the sad music playlist. This is proof that perhaps the hypothesis that music that correlates to the given emotions in a scene can actually improve an actor's performance and cause them to perform better. Different comments on why the reviewer picked this recording was because "the change in her voice, facial expressions and body movements.", "it was slow, her facial expressions were clear and her voice was full of sadness" and "provoked emotions while watching, actress had tears building up, shaky breaths taken".

Interestingly, one reviewer chose the monologue linked to the calm playlist. The same reviewer named longing as one of the main emotions. The link between the two could be that element of reflection and want seen in the piece, Fathimah was calmer and in return perhaps more reflective looking during that recording. Quoting the reviewer, they picked this recording because it was "More passion and connected with me."

which of the recordings was least effective at displaying the emotions you named?



The Monologue linked to the Chaotic playlist was voted by half of the reviewers. This lines up with the hypothesis as the high level of energy produced by the actor after listening to the intense chaotic did not match the emotional expression expected for such an emotional piece. Reviewer who chose this monologue justified their choice by saying "raised voice, came across as frustrated even angry at parts" and "the actress spoke fast and there was more anger than sadness in her actions and tone of voice."

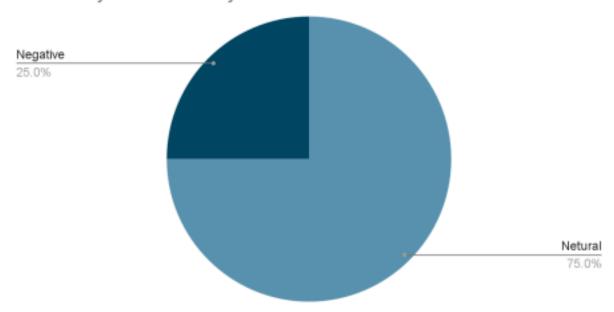
Based on the results, it is fair to say that the reviewers unbiasedly agree that music that correlates to the expected emotional response of a scene can actually improve the actor's performance to be more expressive in the correct fashion.

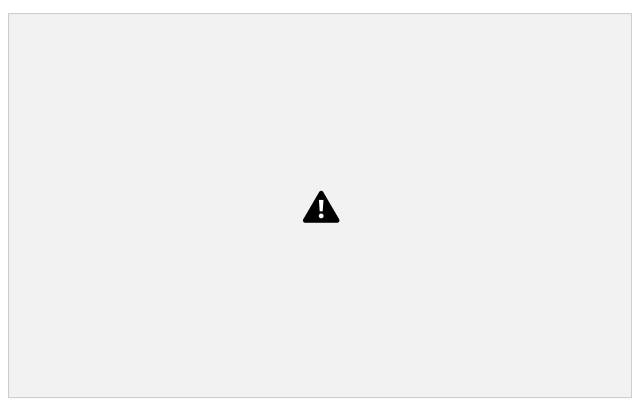
Monologue Two - Zootopia - (Happy)

8 Reviewers

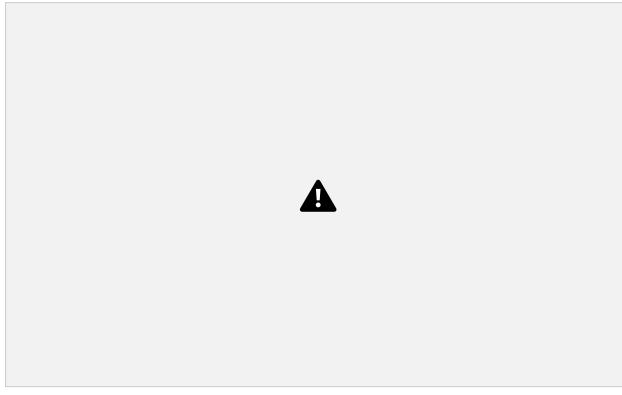
Actor - Sarah Walsh

Has anything happened in the past 2 week that has drastically affected you emotionally?



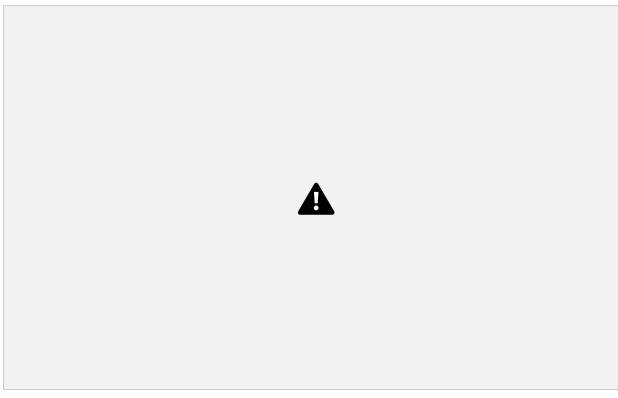


The main emotions that came up were Happiness, Hope and Motivation. This links up with the expected emotional response put forward by the researchers.



In line with the hypothesis, the monologue linked to the happy playlist was voted as the best performance. The music and its effects on the actors caused them to perform better according to the reviewer. The reviewer who voted happy stated they picked it because "facial expressions really supported the emotions present. Her voice also sounded hopeful and uplifting" and "They sound the happiest".

Interestingly, no music, sad and calm were also chosen by different reviewers but in the minority. This could be due to personal preference. It is also interesting to note that no one chooses the chaotic monologue.



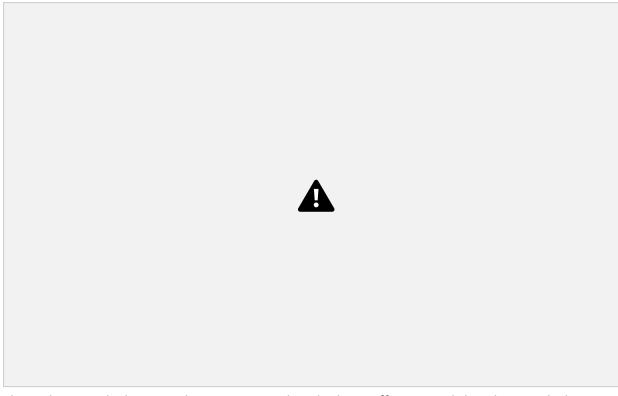
Interestingly, the calm playlist monologue was majorly voted as the least effective. Reviewers stated that "less animated, spoke slower with less expression on face, seemed more introverted" and "actress was very monotone, didn't express hope in facial expressions". As seen previously in the other recordings the calm playlist seems to relax the actor too much and takes them out of the scene. Perhaps this is what happened during this monologue.

Monologue Three - Get Busy Livin' - (Calm) 6 Reviewers Actor - Roy O'Connor 45



The results from the survey were interesting as the highest voted recordings were the Chaotic playlist and the happy playlist monologue. The reviewers who chose chaotic stated that the "Body language has changed completely compared to the other performances, words are accompanied by, i.e., shaking hands and his voice is higher than in the other performances." and "you can see the excitement in his face and movement". Considering excitement and reflection were some of the main emotions mentioned by the reviewers, perhaps the energy provided by the chaotic playlist caused the actor to be more animated and that is why the reviewers chose this performance.

Similar to the happy playlist monologue. The excitement and hopefulness the reviewers saw in the piece was displayed through the happiness expressed in the happy playlist monologue.



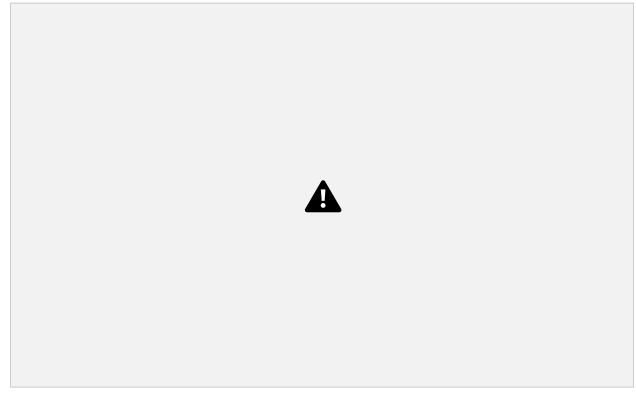
The sad music playlist monologue was voted as the least effective and this aligns with the hypothesis as the piece is about hopefulness and has much more positivity displayed then negativity.

The reviewers who chose the sad monologue stated "no hand gestures/movements, very monotone/slow" and "Hardly any changes in his voice. No body movement".

Monologue Four - Sally - (Chaotic)

5 Reviewers

Actor - Jackie Carroll

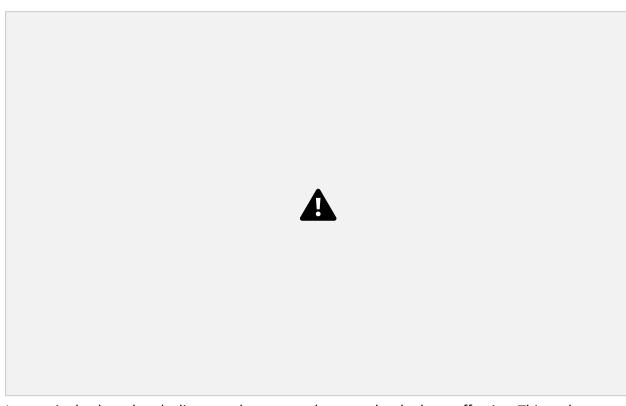




The key emotion seen by the reviewers was Anger. Other emotions like frustration and chaos also help back the point that the reviewer has some general understanding of the emotional context.



60% of reviewers believed that the chaotic playlist monologue was the best display of emotions proving the hypothesis. They stated that this performance was the "most visible agitation, words are flowing more (speaking faster), body language more open" and "Relatable and most real. Biggest impact".



Interestingly, the calm playlist monologue was chosen to be the least effective. This makes sense considering the intense wild chaos of the piece and how it is the polar opposite.

The reviewer stated about the calm monologue that "there was less anger in this performance" and "wasn't convincing".

Closing Discussion for reviewer's survey

It seems to stand that the hypothesis of music correlated to the emotions of the scene helps an actor get the best out of their performance, both the actors and reviewers' results seem to show this.

Of course, there are outlines such as memories attached to music that could change their expected response or emotional events that happened recently which could cause the actor and/or the reviewer to be swayed in one way but overall it seems that music as a tool for emotional control and manipulation for an actor is an incredible tool which should be used more in the field.

The process of undertaking such a project led to a lot of learning gained by the researchers. Firstly, the importance of large focus groups and perhaps giving an incentive or award to participants to ensure more took part.

The survey and results seem to show that music does have an effect on an actor's performance and it can be used to positively or negatively shift their emotional response to enhance or worsen their performance. It would be interesting to process forward with a more in-depth and bigger study in this area to see if these results are isolated or if they translate to a bigger focus group.

The skills of filmmaking, boom operating, editing and directing were also learned during this study and will be furthered in the future to obtain some work experience in this field. The contacts in the film industry will also be used to test the role of music curator on a set and see if this theory of using music to emotional effect of an actor can be used in a real-world setting.

The skills of writing concise and clear questions for questionnaires was also gained.

Interestingly, what shocked the researcher most was seeing how complex and individual the emotional understanding of the pieces was to each person. Whether it was the reviewers and their understanding of the main emotions or the actors and how sometimes the expected emotional response was not obtained due to memories linked to the monologues or recent emotional events.

This could mean that for this to work in the real world to its maximum effect it would have to be extremely personalized and individual .

The results that were hypotheses from the beginning of this thesis were obtained but unfortunately, they would have been strengthened by a bigger focus group. The connections made during this study as well where achieved and will help further this research into the real world and perhaps following this project the footage and survey could be done by more participants and see if the results change.

Conclusion

To summarize, this thesis investigated the link between music and emotions. The researchers hypothesized whether listening to music before a scene that correlates to a scene's expected emotional response could cause the actor to perform better and enhance the overall piece. This was done to introduce a new tool into an actor's arsenal for preparing and also could open up career opportunities for musicians and producers to work as music curators, creating personalized and individual music or playlists for actors. Surveys were created to analyze the actors' personal feeling of their performances and reviewers' unbiased opinions. Actors were filmed in a neutral space created by the researcher. The hypothesis put forward was proven to be true and the actors and reviewers both agreed on similar emotions expected from a scene and that the music correlated to that expected emotion enhanced the performance.

If this project was continuous, forward money would be invested to hire a focus group company such as "Innovate Solutions Ireland" who specialized in paid focus groups. Also focusing on one emotion/monologue at a time to get extremely in depth. It would be interesting to see if certain emotions are more affected than others. It would also be interesting to get some real-world applications of this being used, perhaps documenting an actor using it every day and getting their honest opinion or get a job as a music curator on a set and seeing if its financially viable for the filming company and if it has positive effect to where it would be worth investing in for a film company.

<u>Bibliography</u>

Alec Berg, director. Barry: "The Audition", Screenplay by Bill Hader, May 12, 2019 YouTube, uploaded by Lbillhaderisbarry, May 15, 2019,

https://www.youtube.com/watch?v=gw62N4v8Cwo

Andrew Stanton, director. Finding Nemo: "I remember better with you Monologue", Screenplay by Andrew Stanton, Bob Peterson, David Reynolds, May 30, 2003, YouTube, uploaded by NewLollyVideos, Jan 31, 2012, https://www.youtube.com/watch?v=Xce953JfrdA

Byron Howard, Rich Moore, director. Zootopia: "Hopp's Final Monologue", Screenplay by Jared Bush, Phil Johnston, March 4, 2016, YouTube, uploaded by Pigeonification, May 20, 2016, https://www.youtube.com/watch?v=3dSIPI47X3E&list=PLV-zUI87BUMm_b <a href="https://www.youtube.com/watch?v=3dSIPI47X3E&list=PLV-zUI87BUMm_b <a href="https://www.youtube.com/watch?v=3dSIPI47X3E&list=PL

Frank Darabont, director. The Shawshank Redemption: "Get Busy Living or Get Busy Dying Monologue", Screenplay by Frank Darabont, September 23, 1994, YouTube, uploaded by DarkSanctuaryBBS, Jul 20, 2011, https://www.youtube.com/watch?v=46GwJbrMghQ

Georg Juckel, Christine Heinisch, Anna Welpinghus, Martin Brüne. "Understanding Another Person's Emotions—An Interdisciplinary Research Approach" Published online 2018 Sep 6, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6135884/

Jennifer Lee Poland, "Lights, Camera, Emotion!: An Examination on Film Lighting and Its Impact on Audiences' Emotional Response", Cleveland State University ,2015, p.1 - 113, https://engagedscholarship.csuohio.edu/cgi/viewcontent.cgi?article=1378&context=etdarchive

Kathleen Ann Corrigal, "Music: The language of emotion", Handbook of psychology of emotions: Recent theoretical perspectives and novel empirical findings MacEwan University, October 2013, pp.299-326, Vol. 2,

https://www.researchgate.net/publication/257431972 Music The language of emotion

Kenan Flannery, director. "Dory Monologues - Thesis Year 4 - Kenan Flannery", Screenplay by Andrew Stanton, Bob Peterson, David Reynolds, May 30, 2003, YouTube, uploaded by Kenan Flannery, April 27, 2022, https://youtu.be/asrnFw4-QAo

Kenan Flannery, director. "Sally Monologues - Thesis year 4 - Kenan Flannery", Screenplay by Bill Hader, May 12, 2019 YouTube, uploaded by Kenan Flannery, April 27, 2022, https://youtu.be/D https://youtu.be/D

55

Kenan Flannery, director. The Shawshank Redemption: "Get Busy Livin' Monologues - Thesis year 4 - Kenan Flannery", Screenplay by Frank Darabont, September 23, 1994, YouTube, uploaded by Kenan Flannery, April 27, 2022, https://youtu.be/lom/WWVZNMk

Kenan Flannery, director. Zootopia: "Zootopia Monologue - Thesis year 4 - Kenan Flannery", Screenplay by Jared Bush, Phil Johnston, March 4, 2016, YouTube, uploaded by Kenan Flannery, April 27, 2022, https://youtu.be/jvZOL89|Wtw

Ng Chirk Jenn, "Designing A Questionnaire", Department of Primary Care Medicine, University of Malaya, 2006 Apr 30, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4797036/

Susana Dinis, Emília Duarte, Paulo Noriega, Luís Teixeira, Elisângela Vilar, Francisco Rebelo, "Evaluating Emotional Responses to the Interior Design of a Hospital Room: A Study Using Virtual Reality", 2013, p.1 - 9,

https://link.springer.com/content/pdf/10.1007%2F978-3-642-39238- 2_52.pdf