DURMS
Durham Undergraduate Research in Music & Science

The Effects of Background Music and Musical Sophistication on Cognitive Task Performance

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ABSTRACT

The aim of this study was to discover the optimal background music (BM) condition for students' cognitive performance across three tasks. The study expands upon previous research to look more closely at the interaction effect of musicians versus non-musicians, as determined by a Goldsmiths Musical Sophistication Index (Gold-MSI) test (Müllensiefen et al., 2014), in three musical condition categories. 40 participants completed an online digit-span (DS), technical skills (TS), and alternative uses (AU) test under the musical condition of either silence, classical, or pop music. It was hypothesised that silence would be the optimal condition for the most difficult task, and for musicians across all tasks, and additionally that pop music would be detrimental across all tasks. Whilst the results largely showed no significance, findings generally aligned with these hypotheses, also finding musicians and non-musicians to be affected differently by the musical conditions.

1. INTRODUCTION

With adults listening to music for an average of 961 hours and 10 minutes per year (Ferjan, 2023), much of this listening time is spent whilst completing other tasks, such as studying, with many students claiming that music enhances their work (Anderson & Fuller, 2010). Despite this, the effects of BM on cognitive task performance has been a topic of research which has produced largely inconclusive results (Schellenberg & Weiss, 2013). For example, Kämpfe et al. (2011) concluded that music, in comparison to silence, has an overall negative effect on task performance. On the other hand, Angel et al. (2010) found BM to enhance cognitive abilities.

A notable study is de la Mora Velasco's (2020), which reviewed 30 studies on the effects of BM, conducted between 2008-2018. This systematic review gave inconclusive results, with 11 studies reporting positive effects of BM, 10 reporting neutral effects, and 9 reporting negative effects. Acting as a guide for future research, it was found that no studies had explored the effects of BM on more complex cognitive tasks, requiring the creation or evaluation of knowledge, which is why the present study included an AU test which is an example of a more complex cognitive task. Similarly, the present study utilised a TS test as only one study in the review was found to look at this type of task (Cockerton et al., 1997). Additionally, the review found participants' musical training to be an essential factor, despite the majority of studies failing to report it. Therefore, it was important when creating the experiment design to include questions to assess participants musical training.

The following experiment aims to investigate the effects of different BM conditions, specifically silence, classical and pop music, in relation to cognitive task performance in 3 types of task. These entail a short-term memory test, measured via digit-span performance (Richardson, 2007), a technical skills test (Beetux Software, 2023), and a complex cognitive task in the form of an alternative uses test (Ritter & Ferguson, 2017). The investigation chose to specifically look at young adults, as the population sample taken was Durham University students between the ages of 18-27. Participants were asked to complete an online survey whereby they answered 18 questions from the Gold-MSI scale, then completed the three cognitive tasks in a randomly assigned music condition, before reflecting on their experience.

Looking at previous research, three hypotheses arise for this experiment. The first hypothesis is that silence will be the optimal condition for musicians across all tasks. This was found to be the case in a study by Patston and Tippett (2011), whereby they divided participants into 'expert musicians' and 'non-musicians' and found that musicians performed worse in the presence of BM. The second hypothesis is that participants will perform better in silence in the most difficult task, which shall be determined by the test score results. This was proved to be the case in a study by Furnham and Bradley (1997) as results showed the more complex the task, the more detrimental the effect of BM. This also correlates to research by Kahneman (1973), who proposed a 'cognitive-capacity hypothesis', whereby tasks requiring much cognitive processing limit the capacity to process other information, such as BM. The third, and final, hypothesis is that pop music will have a detrimental effect on task performance

across all tasks. This was shown by Salamé, P., & Baddeley, A. (1989) who discovered that vocal music caused significantly more disruption than instrumental music in relation to short-term memory performance.

2. METHOD

Apparatus and Stimuli. The apparatus used in this study consisted of an online Qualtrics survey which was made up of demographic questions, Gold-MSI questions, a DS, TS, and AU test, and reflective questions. Firstly, a Gold-MSI test was chosen for its effectiveness of assessing musical sophistication. The original questionnaire consists of 39 questions, however a shortened version which has 18 questions was used within this study to reduce the time the survey took, increasing participants likelihood of completing the survey in its entirety and reducing the effects of respondent fatigue, which has been shown to be detrimental to the quality of data participants provide (Ben-Nun, 2008).

Before conducting the main study, a pilot study was used to identify the optimal stimuli and to ensure the tests were of comparable difficulty. It was found from this pilot that the preferred genres of BM that participants usually listen to were silence, classical, and pop music, which is why they were chosen as the genres of stimuli in the main survey. As familiarity of BM has been shown to be an important factor in task performance (Hilliard, 1979), the pieces of classical and pop music chosen were well known. The pop music was taken from the best-selling singles of all time in the Official UK Chart (Griffiths, 2022), and the classical music was taken from 'The 50 Greatest Pieces of Classical Music' album (London Philharmonic Orchestra, 2009). The music was compiled into two YouTube playlists, which participants would be presented the link to if they were randomly assigned either genre.

The test consisted of three types of questions. The first was the DS test where participants were presented with a series of numbers, shown one second apart, of between 3-8 digits long. This was shortened from the initial pilot study, which used numbers between 3-10 digits, as no participant could recall a number with greater than 8 digits. Furthermore, the time each digit was displayed for was shortened from 1.5 to 1 second after feedback from participants in the pilot study. The second test was the TS test which consisted of a series of 10 questions (Beetux Software, 2023) with multiple choice answers. For example, an image of three pairs of scissors would be shown and participants would need to select the pair that would require the least effort to cut. The final AU test was chosen as no studies have been found that explore the impact of BM on more complex cognitive tasks which require the creation of knowledge (de la Mora Velasco, 2020). Participants were given the name and image of three objects (a paperclip, brick, and saw) and had one minute to come up with as many alternative uses for these. The survey required the use of an electronic device (phone, laptop, or tablet) which had access to YouTube. Headphones were recommended but not required.

Participants. The pilot survey was sent to a selection of 10 musical and non-musical friends with ages between 20-21, as this was the target demographic for the study. For the main study, 70 people started the survey however there was a total of 40 participants that completed the experiment. The ages of these ranged from 18-27, giving a mean age of 22.2 (SD=6.66). Most people were female, with 28 females, 10 males, 1 non- binary person, and 1 preferring not to say their gender completing the survey.
Participants were all drawn using volunteer sampling as the survey was shared on social media platforms. This meant that a large number of participants could access the survey, including people who did not necessarily live or study in Durham.

Design. The study used a largely quantitative design. The independent variable was the type of music listened to (silence, classical, pop). The dependent variables were participants musicianship level (musician vs non-musician), which was determined by the answers to the 18 Gold-MSI questions, and the scores of the three tests.

Procedure. Before the survey began, participants were required to read and consent to the experiment, which outlined what the study entailed, eligibility age, and technical requirements. It was also stated that the survey should be completed alone, after comments in the pilot study which indicated that participants would have found the test more challenging to complete in public. *Figure 1* outlines the procedure of the survey.

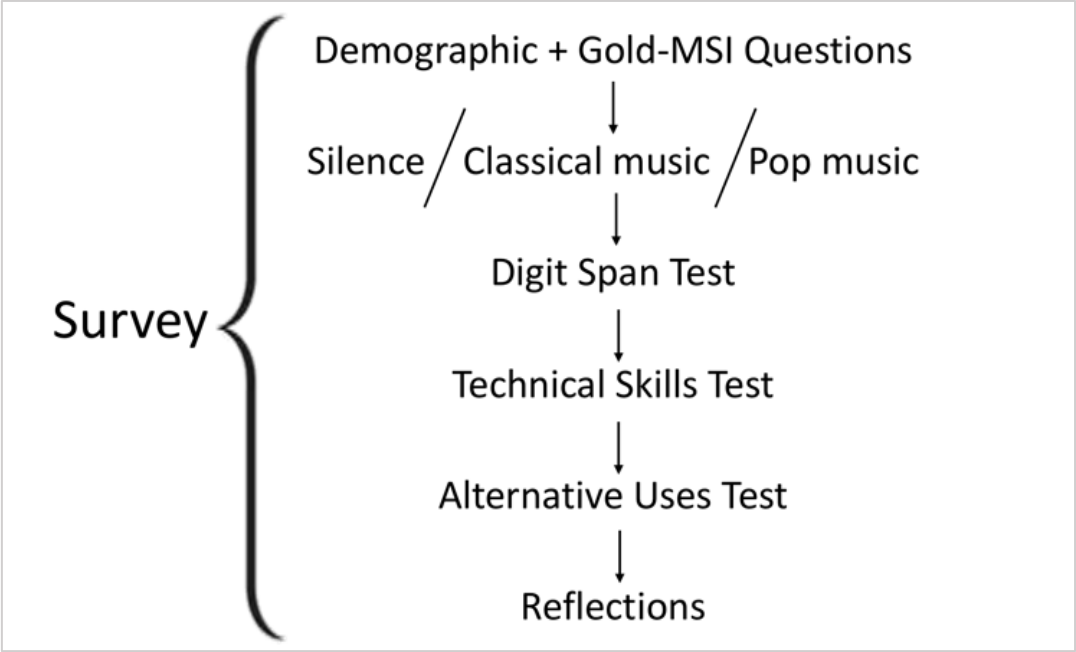

Figure 1. Flowchart of the experimental design.

Participants answered some basic demographic questions, such as their age and gender, before completing the eighteen Gold-MSI questions. Fifteen of these questions were on a 7-point Likert scale ranging from 'Completely Disagree' to 'Completely Agree', which were presented in a matrix table. The remaining questions were multiple choice, with 7 numerical options given for each answer, with the exception of the question "the instrument I play best (including voice) is __" where a text answer was required. Then, participants were randomly allocated a type of BM to listen to, which was provided in the form of a URL link to the relevant YouTube playlist. Participants then completed the three tests (DS, TS, AU) as outlined earlier. Finally, there were a series of reflection questions which assessed what genres of BM participants usually listen to and participants were also asked to rank the tasks in their order of difficulty. The survey ended with a 'Thank You' GIF, to ensure participants finished the experiment in good spirits after the series of tests.

3. RESULTS

Gold-MSI. The data analysis was performed using R-Studio and Excel. Participants musicianship level was assessed using the Gold-MSI scoring template, and each question was given a score between 1-7. When participants were given the Gold-MSI questions, it was important to avoid acquiescence bias. Therefore, some questions were asked in a reverse manner which has been shown to avoid the predictability of questions (Józsa, 2017). 10 questions scored the maximum number of points (7) by answering 'Completely Agree', whilst the other questions scored the maximum number of points by answering 'Completely Disagree'. This generated a score between 18-126 for each participant, with a higher score indicating a higher level of musical sophistication. The results (*Figure 2)* showed that there was a range of scores between 38-114, with the mean Gold-MSI score being 82.65 (SD = 17.88).

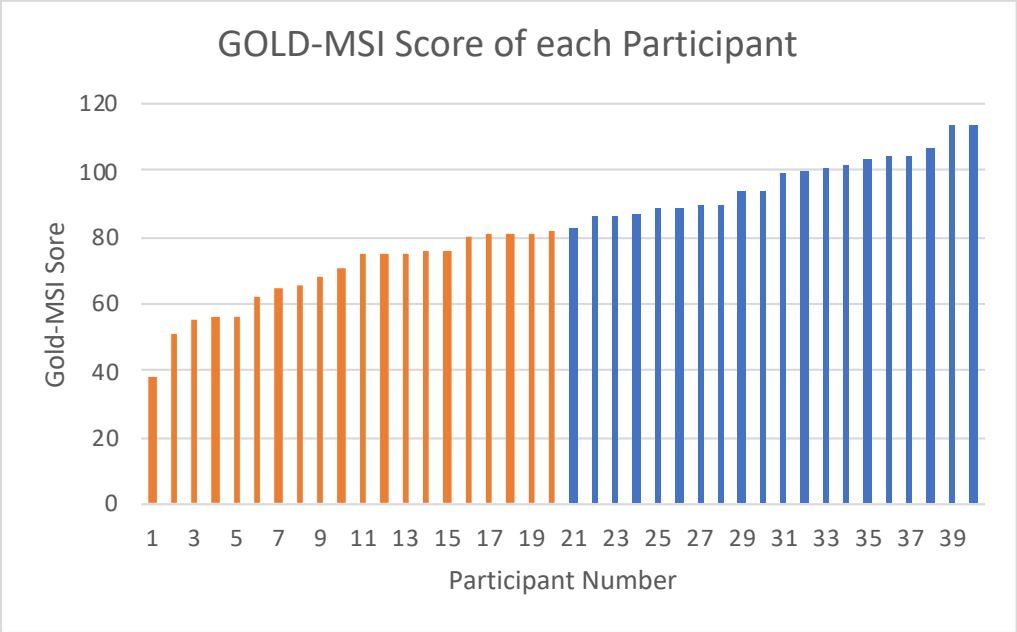

Figure 2. Gold-MSI Test Scores

The median score was found to be 82.5, which provided the cut off point for a musician versus a non-musician, with the 20 participants scoring less than 82.5 being put into the category of non-musician, and those scoring higher than 82.5 being a musician. When asked what instrument they played best, there was a range of answers given (11 reported voice, 8 piano, 3 clarinet, 3 flute, 3 guitar, 1 trumpet, 1 saxophone, 1 cornet, 1 marimba, 1 trombone, 1 violin, 1 oboe, 1 horn, and 4 N/A).

DS Test. In the DS test, participants were given a point for each number they could successfully recall in its entirety, to give a minimum score of 0 and a maximum score of 6 (as there were six numbers between 3-8 digits long). These scores were then calculated into a percentage. The results showed that the optimal music condition was classical music, as the overall mean scores for the DS test were 68.89% in silence, 70.83% for classical, and 66.67% for pop music, as shown in *Figure 3*.

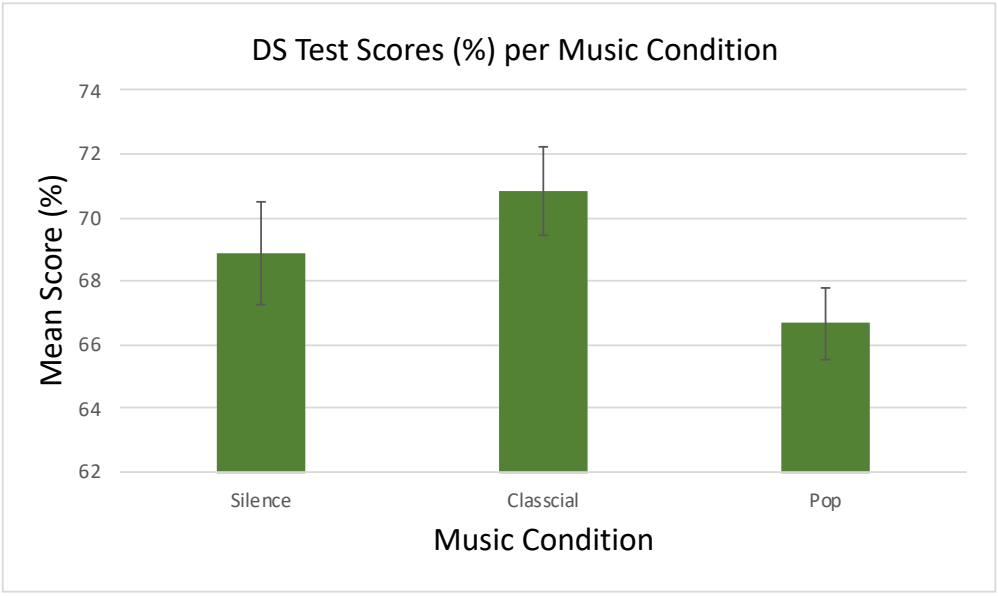

Figure 3. DS Test Scores for each music condition.

When an ANOVA test was carried out, the ensuing *p*-value was .95, showing no significance. Although it is important to highlight this statistical insignificance between the types of BM and test scores, interestingly pop music resulted in the lowest mean score which aligns with the third hypothesis. Furthermore, musicians

outperformed non-musicians in the DS test, with musicians having a mean score of 75% in comparison to non-musicians with a mean of 62.5% (*Figure 4*).

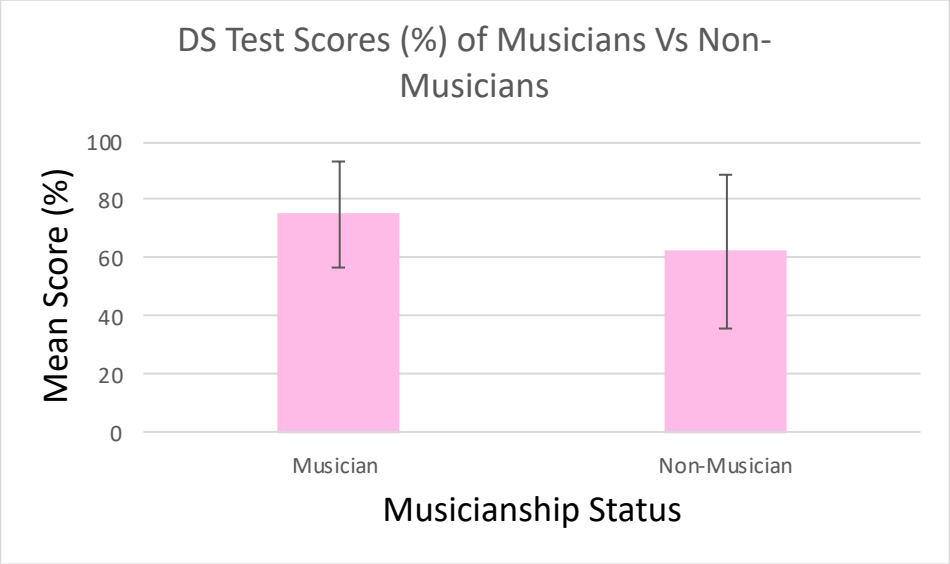

Figure 4. DS Test Scores of Musicians Vs Non-Musicians.

Whilst the *p*-value of .08 showed no statistical significance, there is precedent that musicians have a higher working memory capacity, as discovered in previous studies, which is replicated in this study to a near statistically significant level. When looking at the interaction effect between the variables, *Figure 5* shows that silence resulted in the highest test scores for musicians, which aligns with the first hypothesis. Interestingly, classical music was the optimal condition for non-musicians, whereas musicians performed worse with this type of BM, indicating that classical music acted as a distraction for musicians. Whilst the *p*-value of .07 showed no significance, again this is nearing statistical significance, and therefore a pairwise t-test was run between each music condition. While a t-test showed no significant difference between musician and non-musiciain DS performance for both classical music (p=.31) and pop music (p=.15), there was a significant difference in the silence condition (p=.04). This suggests that musicians performed significantly better than non-musicians in the silence category for the DS test.

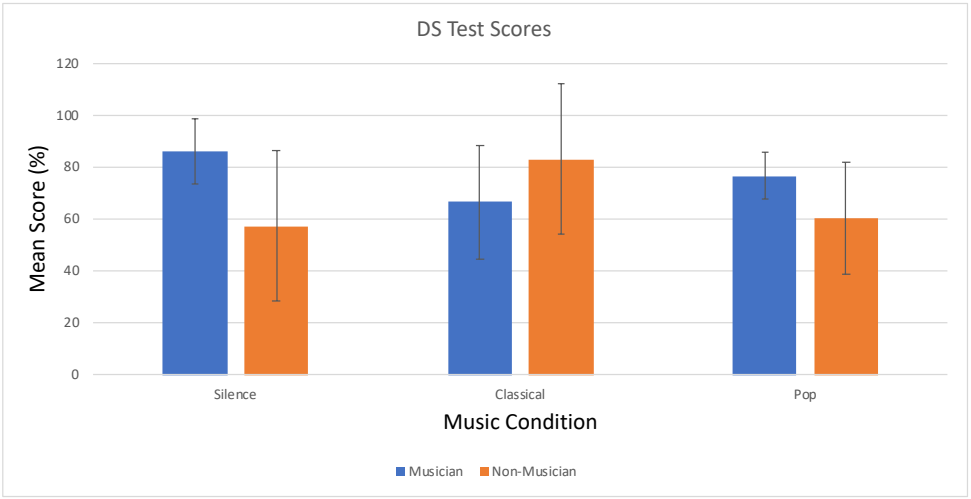

Figure 5. Interaction Effect of DS Test Scores.

TS Test. In the TS test, participants were given a point for each correct answer, to give a minimum score of 0 and a maximum score of 10, which were calculated into a percentage. Unlike the DS test, the music conditions produced similar results of 46%, 48.33%, and 48.46% for the silence, classical and pop music categories respectively (*Figure 6*). Whilst this gave an insignificant result (p-value = .91), intriguingly pop music produced the highest scores, which goes against the third hypothesis. Similarly, the difference between musicians and non-musicians scores was insignificant (p-value = .87), with only 1% difference between their scores of 47% and 48%.

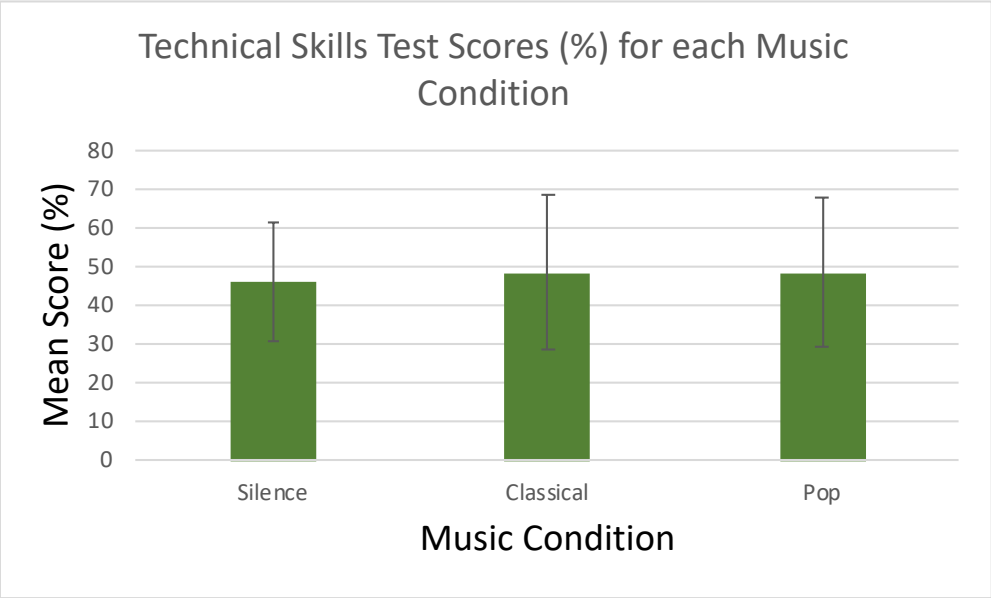

Figure 6. TS Test Scores for each music condition.

When analysing the interaction effect, the TS test produced similar patterns to the DS test. As *Figure 7* shows, silence was the optimal condition for musicians whereas classical music was the best BM for non-musicians. Whilst the interaction effect was insignificant (*p*-value = .56), the bar chart shows trends which align with the first hypothesis. However, unlike the DS Test, no significance was found in the t-test between the groups of musicians vs non-musicians in silence (*p*-value = .43), classical (*p*-value = .64), and pop music (*p*-value = .53).

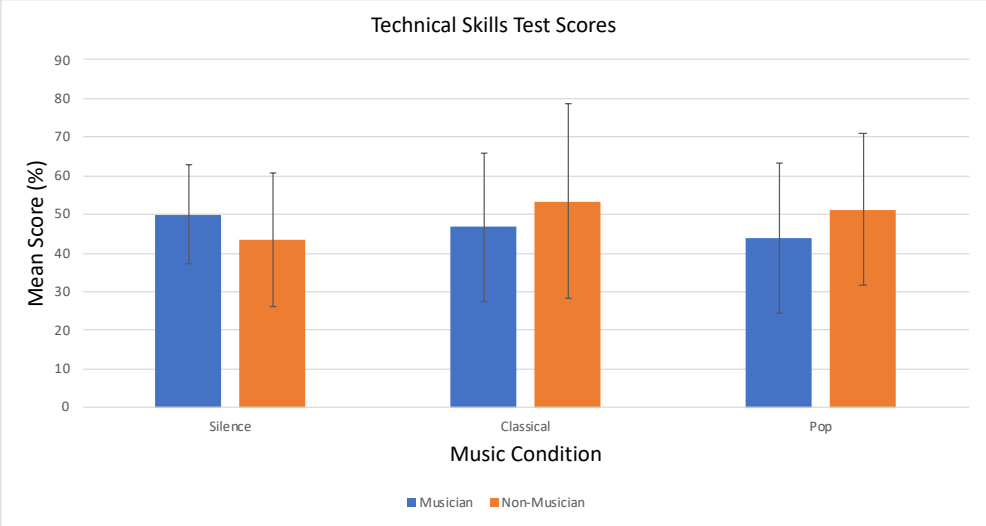

Figure 7. Interaction Effect of TS Test Scores.

AU Test. In the AU test, participants were given a point for each alternative use they came up with for three given objects (a brick, paperclip, and saw). This gave a range of scores between 1-26. Some answers that participants came up with included a paperweight as a use for the brick, a hairclip for the paperclip, and a ruler for the saw. *Figure 8* demonstrates that classical music provided the optimal condition for the test, with a mean score of 13.08, whereas pop music produced the lowest mean score of 8.23, supporting the third hypothesis. However, this does not fully support this hypothesis as the *p*-value of .17 was statistically insignificant.

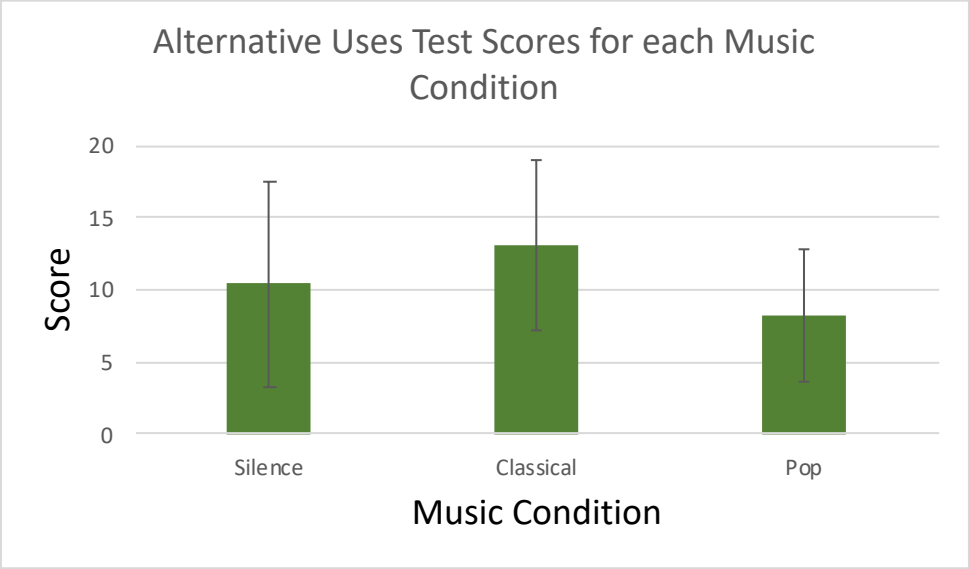

Figure 8. AU Test Scores for each music condition.

Similarly to the TS test, musicians and non-musicians had comparable mean scores, with musicians performing insignificantly (p-value = .73) better with a score of 10.85 compared to non-musicians 10.15. When looking at the interaction effect *(Figure 9)*, both musicians and non-musicians performed better when listening to classical music, indicating that this genre helps performance in complex cognitive tasks. However, the ANOVA test produced a p-value of .91, with t-tests also showing no significance between the groups of musicians vs non-musicians in silence (p-value = .91), classical (p-value = .94), and pop music (p-value = .55).

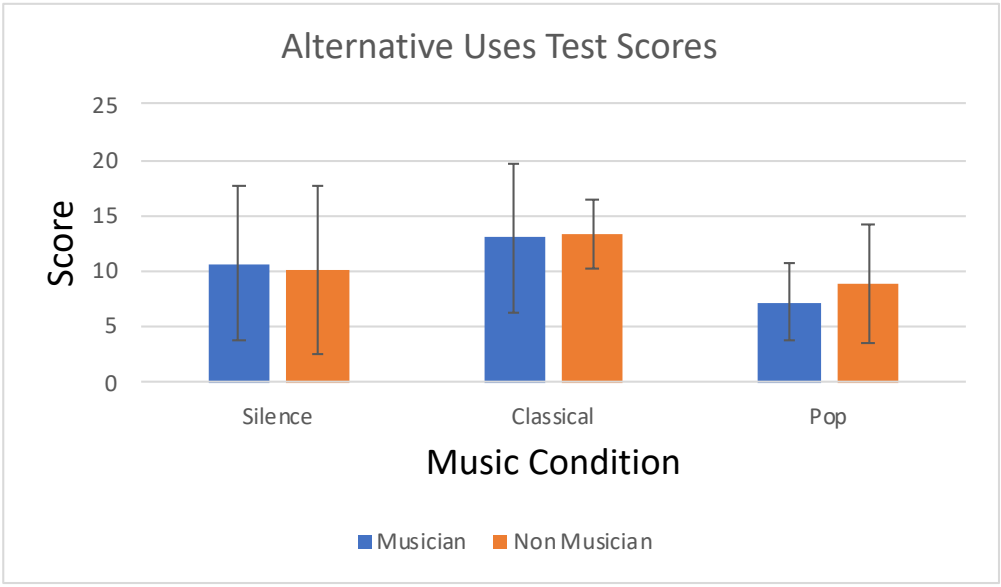

Figure 9. Interaction Effect of TS Test Scores.

Reflections. After the three tests, participants were asked to reflect on their experience and rate the tests based on their level of difficulty. This found the DS test to be the most difficult, with 27 out of 40 participants rating it as the trickiest test. This was followed by the technical skills test, as 9 ranked it most difficult, with the remaining 4 indicating that they found the AU test the most challenging. There was also a question which asked what genre of music participants usually listen to when they study and, as *Figure 10* shows, classical music was the most popular answer, closely followed by silence.

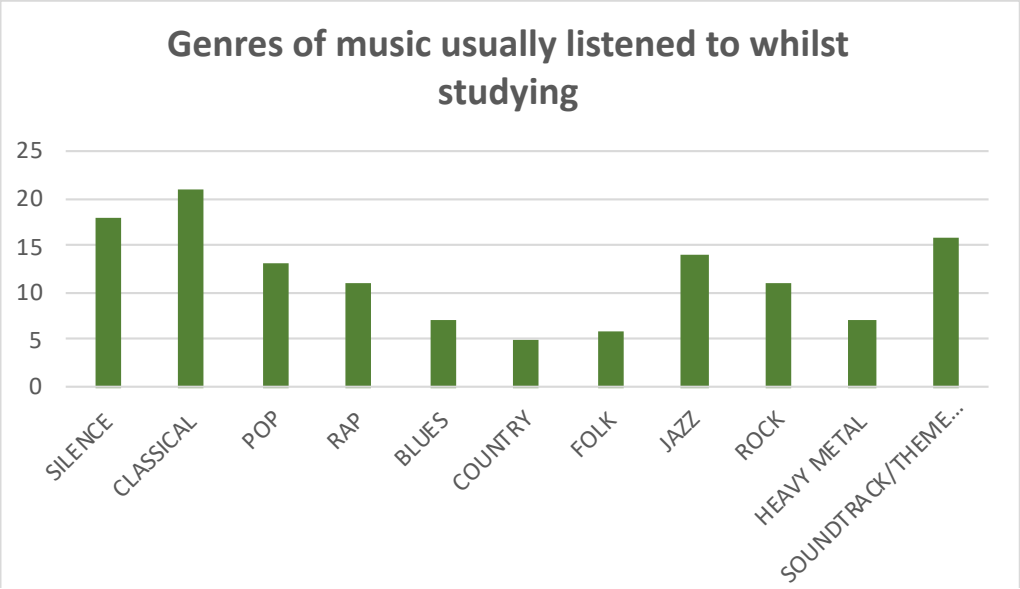

Figure 10. Genres of music usually listened to when studying.

4. DISCUSSION

The principal aim of this study was to discover whether there is an optimal BM condition for different types of task. Additionally, it looked at the difference BM had on the task performance of musicians versus non-musicians, as limited studies have been found to report this (de la Mora Velasco, 2020).

The first hypothesis, that silence will be the optimal condition for musicians across all tasks, was indicated to be true across the DS and TS tests, with musicians that completed the tasks in silence having the highest scores. Whilst there was no significance in this result, the fact that they performed best in silence could indicate that musicians are more susceptible to being distracted by BM, which aligns with the findings of Patston and Tippett (2011). Their results discovered that the processing of music and certain cognitive tasks calls upon shared cognitive resources, therefore resulting in BM interfering with musicians' abilities to process both the task and music simultaneously. Similarly, this aligns with Kahneman's (1973) capacity model of attention, which offers the idea that the amount of attention that can be deployed at any one time is limited and has been found to be the case in other studies exploring the effects of BM (Tze, 2010).

The second hypothesis was that participants would perform better in silence in the most difficult task. The results showed the DS test to be the most difficult task, as self-selected by participants. Interestingly, classical music provided the overall optimal condition for this test, in addition to the AU test, which goes against this hypothesis and the findings of Furnham & Bradley (1997), who discovered that music of any genre was detrimental to immediate recall on memory tests. However, previous research has indicated that classical music can have a positive effect on test scores. For example, the Mozart effect, proposed by Rauscher et al. (1993) showed evidence that listening to Mozart before a spatial ability test improved performance. However, it should be noted that the present study asked participants to listen to the music in the background, rather than before the tests. Furthermore, there have been attempts to replicate this study which has produced mixed results. For example, Chabris (1999) produced a meta-analysis across 16 studies and found only a small effect of listening to Mozart on spatial reasoning, instead concluding an 'enjoyment arousal' effect, suggesting that cognitive arousal and spatial tasks both utilise the right-hemisphere locus. Similarly, Husain et al. (2002) proposed an 'arousal hypothesis', suggesting BM enhances cognitive performance due to its stimulating effect which increases mood, arousal, and enjoyment of the task. This could offer an explanation as to why classical music was the optimal condition for the DS test. Furthermore, results showed that classical music was the optimal condition across all three tasks for non-musicians, further demonstrating that classical music could positively impact study.

The third hypothesis stated that pop music would be detrimental across all tasks, as shown by Salamé, P., & Baddeley, A. (1989). Results indicated that this was the case for the DS and AU tasks, with participants interestingly performing best under the pop music condition for the TS test. Nevertheless, whilst the results were insignificant, they do indicate findings similar to previous research. For example, after a meta-analysis of 8

studies, Kämpfe et al. (2011) found BM to have an overall negative effect on task performance. It also should be taken into consideration what elements of the music, for example, the lyrics, tempo, or instrumentation, impact task performance. As it has been found that fast and loud music can be more disruptive (Thompson et al., 2011), this could explain why the genre of pop music, which often incorporates a fast tempo and louder dynamic, negatively impacts test performance. However, it should be taken into consideration that classifying music intro genres can be difficult due to many pieces having overlapping genres, such as electronic pop.

My results regarding the test scores of musicians versus non-musicians proved inconclusive, with the TS and AU tests generating marginally different score results. However, the difference of scores in the DS test was 75% for musicians compared to 62.5% for non-musicians, which neared statistical significance ($p = .08$). Additionally in this test, musicians outperformed non-musicians under the condition of silence to a significant level. The long-term effects of musical training have been found to facilitate other abilities, such as language skills (Forgeard et al., 2008), mathematical ability (Anvari etal., 2002), and general intelligence (Helmbold et al., 2006), suggesting that the DS test results demonstrates the positive correlation between musicianship level and task performance. Specifically, Talamini et al. (2017) found musicians to have a superior short-term memory, as used in the DS test, compared to non-musicians. However, it is essential to highlight that correlation does not equal causation, as it is unclear whether musical ability causes higher test scores, or whether individuals who perform better on tests are more likely to become musicians.

It is also important to consider the use of BM on a wider range of activities, such as driving or sporting performance. Particularly in relation to young people, listening to music whilst driving has been shown to increase driver miscalculations (Brodsky, 2013), despite 2/3 of people reporting to listen to music whilst driving as they feel this is less distracting than conversation (Dibben & Williamson, 2007). Similarly to the present study, these effects are dependent on genre, with faster and louder music being the most problematic. In contrast, this type of music has been found to aid running (Edworthy & Waring, 2006), demonstrating how BM choice is dependent on the task.

Limitations. It should be considered that the participants of this survey were all from a Western, educated background, which only accounts for 12% of the global population (Henrich et al., 2010). Therefore, the results cannot be generalised outside of this group, especially as the sample size was small, with only 40 people completing the survey. Furthermore, the design of the survey could be improved upon through the use of a Latin square design, as found in Davisson's (2021) study, which ensures an equal number of participants are placed into each category. A limitation of the present study is that there were an unequal number of participants within each category, for example 6 musicians took the tests in silence, whereas 9 non-musicians took the test in silence, due to participants being placed into the categories of musician and non-musician only after completion of the survey. Therefore, the pilot study could have utilised the Gold-MSI test to assess musicianship level, to ensure the main study had an even distribution of musicians and non-musicians within the three musical conditions.
This study chose to look at young adults (aged 18-27), as this age range is often associated with using BM whilst studying. However, future studies could investigate the older generation, as there has been research to suggest that older adults' processing speed and memory improves with music (Bottiroli et al., 2014). The effect of music on the memory of the older generation is an important area of research, particularly with rising dementia cases (Dementia Forecasting Collaborators, 2022), whereby there is evidence suggesting that music can improve cognitive function in people living with dementia (Moreno-Morales et al., 2020), suggesting future studies could look into what types of music contribute to this.

This study was carried out online which meant participants were not required to travel. However, a limitation of this is that participants could have taken the tests without listening to the BM. This could be rectified by holding the survey in a lab, which also ensures completion of the test as 70 people started the survey however only 40 completed it in its entirety.

Moreover, the study incorporated YouTube playlists as part of its design, and therefore it should not be ruled out that the results may have been influenced by visual content, for example the videos or lyrics accompanying the musical pieces, which has been shown to be detrimental to task performance (Pool, 2003).

Furthermore, this study was relatively short, lasting approximately 15 minutes, to decrease the likelihood of fatigue effects (Lavrakas, 2008). However, further research could look at the use of BM over a long period of time, as students have been shown to spend an average of 1.5-2 hours in the library per day (Scoulas et al., 2022). Therefore, if more was known about what type of BM is optimal for studying, this could impact students at universities and beyond.

5. CONCLUSION

This study built upon previous research to explore the effects of BM on studying. Whilst the results largely held no significance, the study did show tendencies that aligned with previous research which suggests that silence and classical music are favoured above pop music for most types of task, regardless of musicianship level. Studying is an integral part of student life, and with the advent of streaming platforms such as Spotify making music more readily available than ever before, it is an important topic of research. Especially in the wake of the COVID19 pandemic, where people often turned to music to boost their mood and decrease loneliness (Schäfer et al., 2020), if more was known about music's ability to enhance task performance then it could have wider benefits on other aspects of people's lives such as their mental health. In particular, if more studies were found to show the positive impact that music and musical training have on other subjects, such as mathematics and the recalling of information, then this could be beneficial to the arts sector as a whole. In a society which often undervalues creative subjects, as shown by government funding cuts, for example the proposal to cut funding of arts subjects at universities by 50% (Bakare et al., 2021), it is vital to show the wider value of music in society.

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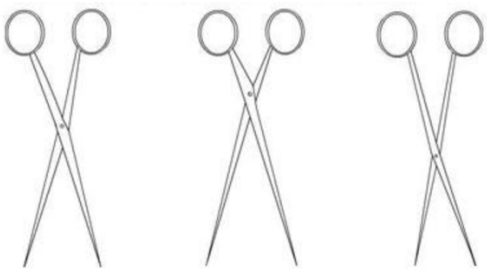
APPENDIX

18 question version of the Gold-MSI Test used within this survey

1. I spend a lot of my free time doing music-related activities.
2. I enjoy writing about music, for example on blogs and forums.
3. If somebody starts singing a song I don't know, I can usually join in.
4. I can sing or play music from memory.
5. I am able to hit the right notes when I sing along with a recording.
6. I can compare and discuss differences between two performances or versions of the same piece of music.
7. I have never been complimented for my talents as a musical performer.
8. I often read or search the internet for things related to music.
9. I am not able to sing in harmony when somebody is singing a familiar tune.
10. I am able to identify what is special about a given musical piece.
11. When I sing, I have no idea whether I'm in tune or not.
12. Music is kind of an addiction for me - I couldn't live without it.
13. I don’t like singing in public because I’m afraid that I would sing wrong notes.
14. I would not consider myself a musician.
15. After hearing a new song two or three times, I can usually sing it by myself.
16. I engaged in regular, daily practice of a musical instrument (including voice) for ___ years.
17. At the peak of my interest, I practiced ___ hours per day on my primary instrument.
18. I can play ___ musical instruments
19. The instrument I play best (including voice) is ____

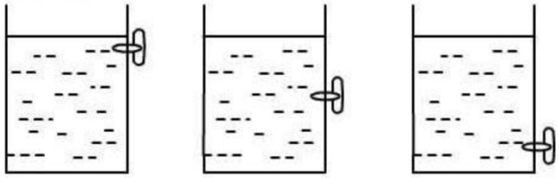
Technical Skills Test

1. Which of the following requires the least effort to cut?

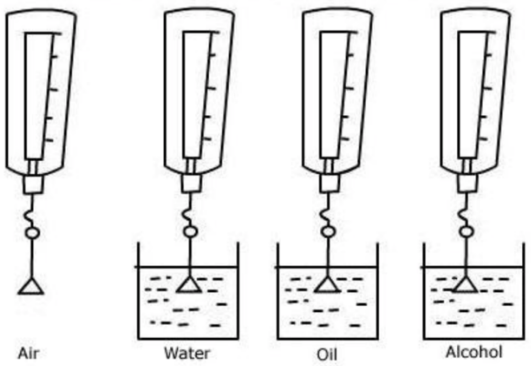


2. Which of the following will require the least amount of paint to cover it completely?

3. Uncorking which of the following plugs will make the leaking water travel the farthest?

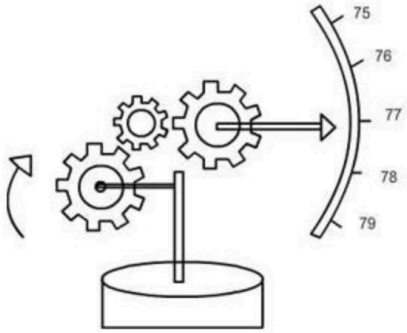


4. The weight of the body as shown by the spring balance will be:



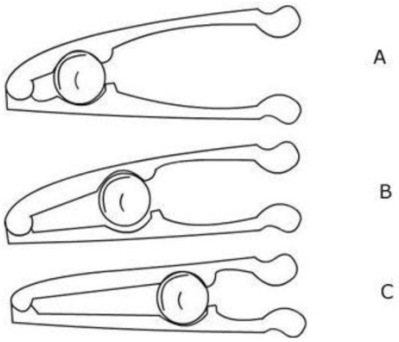
A) Maximum in Air, minimum in Water
B) Maximum in Oil, minimum in Air
C) Maximum in Alcohol, minimum in Air
D) Maximum in Air, minimum in Alcohol

5. In which direction will the pointer move?

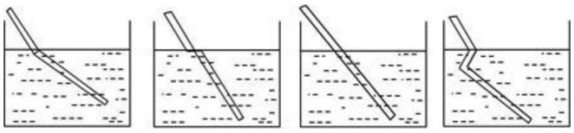


A) Towards increasing temperature
B) Towards decreasing temperature
C) Will not move at all

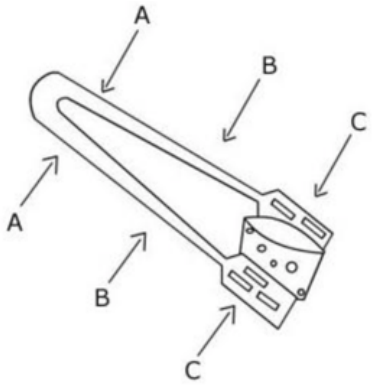
6. In which of the following would you have to invest the least effort to crack the nut?



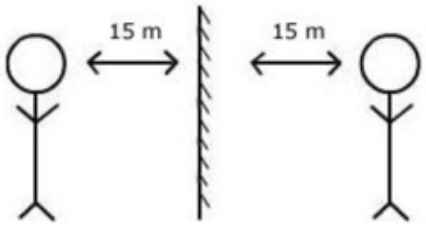
7. What would a glass rod look like when immersed in water?



8. Where should you hold the tongs to invest the least amount of effort in order to lift the piece of pastry?

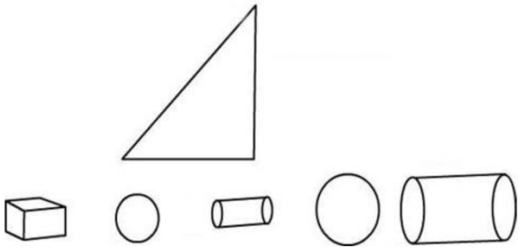


9. While looking at his reflection in a glass mirror, a man calculates that he is 30m away from his virtual image. By what distance would his image move closer to him if the mirror is moved 5m closer to the man?



A) 15m
B) 20m
C) 25m
D) 10m

10. Which of the following shall slide the fastest on the below incline?



Alternative Uses Test

Please write as many alternative uses for a PAPERCLIP

Please write as many alternative uses for a BRICK

Please write as many alternative uses for a SAW

Music Condition Playlists

Classical Music: https://youtube.com/playlist?list=PLqWEdipDk5GLcg54b76LdNpsap2tY3AfH

1. Camille Saint-Saens – The Swan: Carnival of the Animals
2. Pyotr Ilyich Tchaikovsky – Dance of the Sugar Plum Fairy
3. Edvard Greig – Peer Gynt Suite No.1, Op. 46: I. Morning Mood
4. Richard Wagner – Ride of the Valkyries
5. Pyotr Ilyich Tchaikovsky – Swan Lake (Swan Theme)
6. Wolfgang Amadeus Mozart – Symphony No.40 in G minor, K550: I. Molto Allegro

Pop Music: https://youtube.com/playlist?list=PLqWEdipDk5GL07kGKfyUFAluB2OeKwutC

1. Cher – Believe
2. Aqua – Barbie Girl
3. Maroon 5 – Moves Like Jagger
4. Survivor – Eye of the Tiger
5. Mark Ronson (ft. Bruno Mars) - Uptown Funk
6. Pharrell Williams – Happy
7. Britney Spears – Baby One More Time