Symphonies vs. Silence: How Does Music Affect Work Performance?

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Introduction

Imagine this: you're slouching at your desk, staring at the mountain of tasks you have yet to complete, and your productivity is at a minimum. How do you combat this? Do you pull out your headphones and your favorite playlist, hoping they'll get you in the groove to work? Or do you cut out the distractions and try to focus without any bothersome background noise? The debate on whether music enhances or hinders work performance is a long one running with many studies reporting mixed results. Some individuals say that listening to music uplifts their mood and boosts their productivity, while others insist that working in silence is the key to sustaining focus. While it is difficult to make a definite claim on how music affects work, one important consideration is that different ways of listening to music can lead to different outcomes. It is worth examining how emotional, cognitive, and background use of music impact job satisfaction and performance.

Previous Findings: What's the Big Debate?

Early studies investigating the effect of music on work performance have often posed contradictory findings. Shih, Huang, and Chiang (2012) found that background music containing lyrics had a negative effect on attention and concentration. Similarly, Padmasiri and Dhammika (2014) reported that listening to relaxing music decreased work performance. However, this study didn't consider contexts where workers can choose music rather than just being exposed to it in their work environment. Lesiuk (2010) found that people listening to their preferred music reported lower stress and better mood, as well as improved performance in situations with high cognitive demands. Likewise, a study by Haake (2011) indicated that music at work evokes positive emotions, resulting in feelings of inspiration, concentration, and stress reduction. It may be that workers prefer listening to music because it makes work more enjoyable and increases satisfaction and creativity. However, it's evident that the content and context of music matter greatly.

Music Genre and its Impact

Chamorro-Premuzic and Furnham (2007) describe three ways that people use music in everyday life. The first is emotional use, which refers to evoking positive or negative moods, changing the emotional state, or expressing pleasure in experiencing an emotion that isn't necessarily positive (e.g., finding comfort in sad music). The second is cognitive use, which entails listening to music for intellectual purposes and enjoying the technical aspects. An example of this is seeking out classical or jazz music—not because it's unlikely to elicit emotions, but because its complexity allows for rational appreciation and suits those who like intellectually stimulating experiences. The last is background use, which involves listening to music while performing other tasks without getting distracted.

Using these three uses of music as a foundation, a study by Sanseverino et al. (2022) sought to understand how emotional, cognitive, and background use of music affect perceptions of job satisfaction and performance. They hypothesized that (1) emotional use has a positive relationship to job satisfaction and performance, (2) cognitive use has a positive relationship to job satisfaction and no direct relationship to performance, and (3) background music has no direct relationship to job satisfaction or performance. To test this, 424 participants were instructed to complete a questionnaire about their music listening habits while working. 57.7% reported listening to music, 26.5% reported not listening to music because they could not, and 15.8% reported not wanting to listen to music. For this study's purposes, only the 244 participants who stated that they listen to music while working were considered.

Music use was determined using fifteen questions from Chamorro-Premuzic and Furnham's 2007 study, which consisted of five questions for each use of music. Respondents rated how they use music on a Likert scale from 1 ("strongly disagree") to 5 ("strongly agree"). Job satisfaction was assessed with five questions on the same scale, and respondents rated their satisfaction in various areas such as relationships, physical conditions, and prospects. Finally, job performance was measured using four questions. Participants were asked to rate how effective they've felt regarding different aspects of their performance, such as, "How effective were you in performing without mistakes?" Altogether, these measures would uncover whether different uses of music are correlated with different work outcomes.

Results and Implications

Sanseverino's 2022 study found that both job satisfaction and performance are positively correlated with emotional use of music, which confirms the first hypothesis. Cognitive use showed non-significant relationships both with satisfaction and performance, disproving the second hypothesis. Finally, background use had a negative correlation with job satisfaction, disproving the third hypothesis, and didn't show any significant relationship with job performance. Age, interestingly, showed a negative relationship to all three uses of music, indicating that music use during work may decrease as people grow older. Another fascinating finding was that men were less likely to use background music and more likely to engage in cognitive use.

In this study, emotional use of music was the only type associated with positive effects on both job satisfaction and performance. But why is this, and what aspects of emotional use could lead to more positive outcomes than other uses of music? It may be that enjoying the emotion elicited by music enhances perceptions of work satisfaction. In turn, this combination of a charged emotional state and increased satisfaction could contribute to more positive perceptions of tasks accomplished at work.

Cognitive use of music, which was more common in men than women in this sample, is surprisingly not related to job satisfaction. However, this could be explained by the participants that were recruited; this study intentionally excluded professional musicians who engage with this type of music more frequently, resulting in a sample that had low scores on cognitive use. Another explanation for this low number could be that the positive emotions evoked from cognitive use were mistaken for emotional use, which would be far more common in this sample of non-musicians. Future studies with more representative samples—including musicians and more women engaging in cognitive use—could further investigate why cognitive use is unrelated to job satisfaction. One possibility is that appreciating the technicality of music adds an extra requirement to work, so cognitive use distracts workers from pursuing more important tasks. Therefore, this would counteract any positive activation they get from enjoying the structure of music.

Lastly, background use of music seemed to only have negative effects in this study, including a significant negative correlation with job satisfaction. However, this study cannot assume any causal relationships due to its cross-sectional design; that is, data on music habits and satisfaction was collected at a single point in time, so it's unclear which came first. It's possible that the effect is reversed and the more people feel dissatisfied with their work, the more they use music as background noise.

This general rule that correlation is not causation is important to keep in mind for all three uses of music and their reported effects. To determine any causality, it would be necessary to conduct further longitudinal studies; that is, research that repeatedly measures effects over time rather than a single instance. Future work could also apply this research to the real world and outline how organizations can use music as a resource. Even an approach as simple as implementing quiet workspaces, where employees are free to engage with their chosen music or none at all, can increase performance and satisfaction across the board while accounting for individual preferences.

Conclusion

The conversation surrounding the influence of music on work performance is nuanced, with various studies reporting different results. While some swear by the motivational power of their favorite songs to boost productivity, others find comfort in the tranquility of a silent workspace. The study conducted by Sanseverino et al. (2022) sheds light on the multifaceted relationship between different uses of music and job satisfaction and performance. Emotional use of music was found to be positively correlated with both job satisfaction and performance, suggesting that the emotions evoked by music can enhance perceptions of work satisfaction and task accomplishment. On the other hand, cognitive use of music did not show any significant relationships, and background use of music primarily demonstrated negative effects, particularly concerning job satisfaction. This suggests that excessive reliance on music as background noise could be a common reaction to feeling dissatisfied with work. However, it's important to note that reasons for listening to music and the outcomes gained vary from person to person. By recognizing the different ways music is used and its varying effects on job satisfaction and performance, organizations can tailor strategies to support their employees' well-being and productivity. From creating designated quiet spaces to offering flexibility in music choices, accommodating different preferences is key to creating a productive and enjoyable workplace.

References

1. Chamorro-Premuzic, T., & Furnham, A. (2007). Personality and music: Can traits explain how people use music in everyday life?. *British journal of psychology*, 98(2), 175-185.https://doi.org/10.1348/000712606X111177

2. Haake, A. B. (2011). Individual music listening in workplace settings: An exploratory survey of offices in the UK. *Musicae Scientiae*, 15(1), 107-129.https://doi.org/10.1177/1029864911398065

3. Lesiuk T. (2010). The effect of preferred music on mood and performance in a high-cognitive demand occupation. *Journal of music therapy*, 47(2), 137–154. https://doi.org/10.1093/jmt/47.2.137

4. Padmasiri, M. D., & Dhammika, K. A. S. (2014). The effect of music listening on work performance: a case study of Sri Lanka. *Int. J. Sci. Technol*. Res, 3(6).

5. Sanseverino, D., Caputo, A., Cortese, C. G., & Ghislieri, C. (2022). "Don't Stop the Music,"Please: The Relationship between Music Use at Work, Satisfaction, and Performance. *Behavioral Sciences*, 13(1), 15. https://doi.org/10.3390/bs13010015

6. Shih, Y. N., Huang, R. H., & Chiang, H. Y. (2012). Background music: effects on attention performance. *Work*, 42(4), 573–578. https://doi.org/10.3233/WOR-2012-1410