

Do Christians Engage Differently with Modern Christian Worship Songs when Actively Singing Versus Listening?

Molly Farrell
University of Durham

ABSTRACT

This study aimed to investigate the engagement of Christians with modern worship songs when singing versus listening. Participants of Christian religion ($N=173$) completed an online questionnaire describing their experiences with singing and listening to worship music. The results show that singing worship music is more engaging than listening in terms of mood improvement, lyrical engagement, improved focus, physical response, and overall emotional experience. Hereby, the findings demonstrate substantially greater engagement with singing than listening as a result of singing's active nature. The findings also show that any exposure to worship music produces predominantly positive affect in Christians, predominantly due to the meaningful lyric content.

1. INTRODUCTION

Worship music has long been an integral part of the life and worship of Christian believers. It is in response to God's love and Jesus' sacrifice that believers worship, which is both a natural response to God's grace and a Biblical command (New International Version, 1 Chronicles 16: 23). For believers since Biblical times worshipping God has commonly been in the form of singing, often in a group setting (New International Version, Psalm 149: 1). Within the last century technological advances have meant that listening to music, including worship music, has become more accessible and particularly prevalent on a personal level.

As pointed by Abernathy et al. (2015), four fundamental aspects of the Christian worship have been established by Saliers (2001): 1) the purpose of worshipping is to give God glory; 2) the glory of God is as is written in God's word: the Bible; 3) 'worship is always "culturally embodied and embedded"'; 4) worship involves the whole life and the whole being: heart, mind, soul and strength (*New International Version*, Matthew 22: 37).

Regarding the music itself used to facilitate this worship or 'glorifying of God' (Saliers, 2001), previous research has found exposure to worship music has a positive impact on mood and spiritual edification (Byrd, 2019; Miller & Strongman, 2002). Miller and Strongman (2002) found that when 95 Pentecostal church-members completed a questionnaire examining their mood at different points during a service, there was a significant increase in scores from before the service to after the music/sung-worship section. Meanwhile in a similar experiment where 70 Christian university students listened to unfamiliar worship songs in a classroom setting, Byrd (2019) found that Spiritual Transcendence Index (STI) scores were

significantly higher after listening to the worship song than before. Byrd (2019) found that listening to worship music led to greater spiritual edification and improvement in mood, also demonstrating an increase in spiritual edification provided by exposure to worship music. These findings corroborated the findings of Miller and Strongman (2002) that mood improves for Christians after exposure to worship music, here extended from Miller and Strongman's investigation on singing, to the act of listening to worship music.

The improvement in mood for Christians after exposure to worship music is a result of both familiarity and meaningful lyric-content (Miller & Strongman, 2002). In Miller and Strongman's second study, 51 participants (half Pentecostal Christians, half non-Christian) were played secular and worship music. Pentecostals enjoyed the worship lyrics significantly more than non-Christians, and had a greater enjoyment from the worship lyrics than secular, while non-Christians displayed minimal difference (Miller & Strongman, 2002). Furthermore, Byrd's study (2019) used unfamiliar worship songs differing in lyric-content and found that mood still significantly improved in Christians after exposure to unfamiliar, yet still meaningful lyrics. Byrd (2019) found that greatest spiritual edification came from theological or an integration of theological and emotional lyrics rather than solely emotional lyrics, suggesting exposure to theological, Biblical 'Truths' in worship music causes greatest spiritual edification, here within the context of group listening.

Previous research has found that group singing causes changes in mood, with positive improvements to mood observed after singing (Behrens & Green, 1993; Gfeller, et al., 1991; Landreth, 1974; Wedin, 1972), and larger positive mood changes notable after singing than listening (Unwin et al., 2002). Contrary to their expectations, Unwin et al. (2002), did not find a significant difference in mood change when singing than listening, likely due to the similar experiences shared by the control listening group and the singing group in the same room during the experiment.

In a similar study, Kreutz et al. (2004) found that when an amateur choir completed the PANAS questionnaire capturing mood states (Watson et al., 1988) and gave saliva samples before and after a sung rehearsal, repeating this the following week while listening to the same music, singing produced significantly greater positive affect than listening. They also found a decrease in negative affect after singing, and an increase in negative affect after listening, as well as a large increase of S-IgA/albumin after singing, with no change in S-

IgA/albumin levels after listening. This demonstrates choir singing having a positive impact on emotions and immune functions, and a more substantial and more positive affect than listening (Kreutz et al., 2004). Kreutz's et al. (2004) study used classical music in a foreign language (Latin), potentially contributing to the negative-affect of listening. The present study seeks to address this using familiar music/language, whilst looking at the replicability of Kreutz's et al. (2004) findings across genres, notably worship music.

The present study aims to fill the gap in the past literature surrounding the overlap of the impact of exposure to worship music, and the differences between singing and listening. This study subsequently aims to investigate whether Christians engage differently with modern worship songs when actively singing versus listening. The main hypotheses of this investigation are that:

- a. There would be a greater engagement with singing worship songs than listening, and that this would be a result of singing being more active than listening.
- b. Engagement with worship music, whether singing or listening would produce predominantly positive affect.

The first hypothesis follows the findings of Kreutz et al. (2004), showing that participants engage more when singing than listening, challenging Unwin et al. (2002) who found little difference between singing and listening. The current study hypothesises that singing, being more active than listening, would be the primary cause of this; active both physically and mentally/spiritually, as, in Christian worship, the words have deep meaning for believers.

The second hypothesis is based on the findings of Miller and Strongman (2006) and of Byrd (2019), who found respectively that singing and listening to worship music both produce predominantly positive affect.

This study is highly relevant at this point in time as sung worship is currently prohibited in Church buildings due to the Covid-19 pandemic. Worship can now only be listened to in Church. This study is the first to look at the impact of this upon engagement in Christian worship. Thus, it draws together research into the purpose of worship and the impact of singing vs. listening to music.

2. METHOD

Design. This study consisted of an online questionnaire in which participants were asked a variety of questions describing their personal experiences with singing versus listening to worship music. This study uses mixed-methodology with a combination of quantitative, close-ended questions in which participants were asked to select one of two (or more) options that best described their views, and qualitative, short-answer follow-up questions employed to further explore participants reasons for their close-ended responses.

Participants. Participants in this study included 173 Christians aged 18-92 ($M = 39.65$; $SD = 21.0$). Of the participants 66.5% were female, 32.9% male, and 0.58% non-binary/third gender. All participants stated that they attend church on a regular basis, 91.3% of whom attend at least once a week. Participants were recruited through opportunity sampling, sharing of the questionnaire on social media platforms and distribution on a church's email list.

Procedure and Materials. Participants were asked twenty-nine questions using the online survey software Qualtrics. Participants were first asked some demographic questions surrounding age, gender, faith, and frequency of church attendance. Participants were then asked some warm-up questions: their favourite worship song and why, as well as what in their view is the purpose of worship music. Questions then focussed on how participants engage with singing verses listening to worship music, starting with the contexts and frequency in which participants sing and/or listen to worship music.

The following questions explored five key factors of engagement: mood change, lyrical importance, mind-wandering, physical response and overall emotional engagement, using close-ended questions accompanied by short-answer follow-up questions. There was also a question investigating whether participants felt they engage differently with worship music than secular music and their perceived reasons for this. The questionnaire concluded by providing an opportunity for any final comments.

3. RESULTS

Overall Emotional Response. The study found that 85.5% of participants had an overall greater emotional response to singing than listening to worship music (Figure 1). The primary reasons participants gave greater response to singing was the idea of *active* participation (23.7% out of 148 "singing" responses), followed by a feeling of greater *involvement* (14.2%), *lyric meaning* (13.5%) and singing's involvement of the *whole being* – heart, body, mind and spirit (12.8%) in the act of singing worship to God. Meanwhile for the 14.5% who preferred listening, the primary reason given was *lyrical reflection* (44.0% of the 25 "listening" responses), followed by not being distracted by the act of singing (28%).

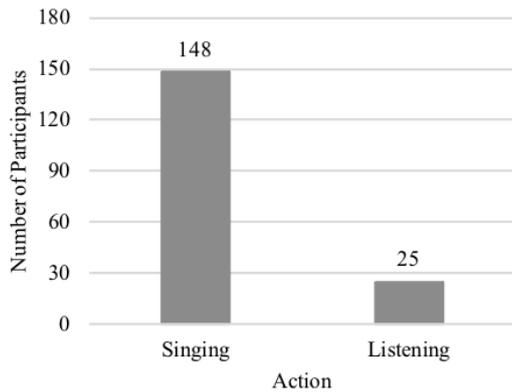


Figure 1. Overall stronger emotional response to singing or listening to worship music

Mood. Regarding mood, 85% of participants said their mood typically changes after singing worship songs while 75.5% said their mood changes after listening. A chi-squared test showed an association between singing/listening to worship music and changes in mood ($\chi^2 = 61.17, P < 0.00001$). The most common affects used by participants to describe how their mood changes were, for both singing (S) and listening (L): uplifted (S: 52.8%, L: 36.6%), joyful (S: 30.1%, L: 12.4%), and peaceful (S: 28.2%, L: 32.7%), all of these notably being positive affects. Other themes included: positive, feeling closer to God, focussed on God, hopeful, thankful, reflective, and less stressed.

Lyrical-Engagement. When asked about the importance of engaging with the lyrics when singing and listening, the most common response for singing for 43.9% of the participants, was that it was ‘extremely important’, and another 41.0% of the participants said lyrical engagement when singing was ‘very important’. Whereas for listening, lyrical engagement was viewed as slightly less important with the majority, 45.7% of the participants, stating that lyrics are ‘very important’, while 23.7% saw it as only ‘moderately important’ and 22.5% as ‘extremely important’. Meanwhile 63.6% stated they focus more on the lyrics when singing, 9.3% focus more on lyrics when listening and 27.2% focus on them the same doing both.

Mind-Wandering. When asked how likely participants felt it is for their minds to wander when interacting with worship music, on a scale of 1 to 5 (1 being “never”, 5 “always”), the mean response for singing was 2.34, and the standard deviation 0.93; while listening exhibited greater tendency for mind-wandering, $M = 3.36, SD = 0.95$. A paired *t*-test showed a significant difference between the mean values for singing and listening ($T(172) = 3.69, P < 0.05$).

Physical Response. In terms of physical responses to worship music when singing and listening, as demonstrated by the chart below (Figure 2), participants reported notably higher likelihood of physical engagement when singing, than when listening. A chi-squared test showed an association between singing/listening and physical response ($\chi^2 = 53.8, P < 0.00001$).

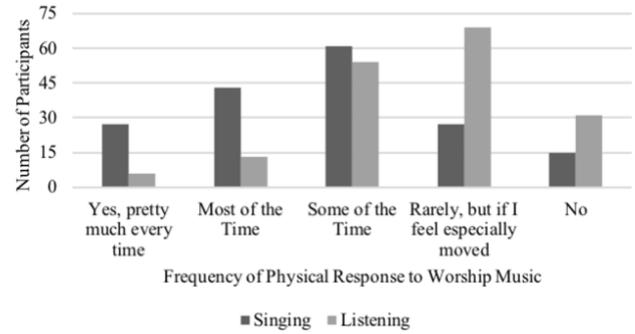


Figure 2. Frequency participants pertain to a physical response when singing or listening to worship music

Of those who responded to the follow-up question asking to describe these physical responses (125 participants for “singing”, 138 participants for “listening”) the most common responses are displayed in Table 1, with hand/arm raising being the greatest physical movement for both interactions.

Table 1. The Most Common Physical Actions in Response to Singing and Listening to Worship Music

Physical Movement	Singing (%)	Listening (%)*
Hand/Arm Raising	61.6	38.4
Sway	44.8	24.6
Dance	16.8	18.1
Kneel/Bow	15.2	10.2
Other Hand Movements	11.2	10.9

Contexts for singing/listening. The mean time reported spent singing worship music in a typical week was 1.70 hours ($SD = 1.40$); while the mean time spent listening was 2.39 hours per week ($SD = 1.84$). The main contexts for singing versus listening to worship music are displayed in Table 2, with both singing and listening principally occurring in Church, while singing is next most commonly done during everyday activities, and listening when working.

Table 2. The Most Common Contexts for Engaging (Singing and Listening) with Worship Music

Context for worship	Singing (%)	Listening (%)
Church	98.8	85.6
Individual worship	56.7	65.9
Everyday activities (i.e. housework)	67.6	63.6
Working	0	74
Travelling	6.9	61.9
Exercising	2.3	27.8

Purposes for Worship. The primary purposes reported by participants for reasons they worship are reported in Table 3.

Table 3. The Most Common Purposes for Worship

Purpose for Worship	Percentage of participants' responses (%)
Glorify and Worship God	44.51
Intimacy with God	39.88
Praise God for who He is/His acts	28.90
Encourage one another (Collective)	26.59
Declare Truth	16.76
Spurred on/reminded of God's goodness	16.18
Uplifted/delighting in Christ	15.61
Fix eyes on God	11.56
Feel Holy Spirit's Presence	9.82
Biblical command/Obedience	8.09
Emotions	8.09

Worship vs. Secular Music. In terms of worship music versus secular music, 90.17% of the participants said that they engage differently with worship music than with secular music. Of these the primary reasons specified are demonstrated in Table 4.

Table 4. The Most Common Reasons for Engaging with Worship Music than Secular Music

Reason for different engagement with worship music	Percentage of participants' responses (%)
Worship words are meaningful eternal truths	55.77
Worship is Spiritually deeper about relationship with God	24.36
Secular words are irrelevant/meaningless	17.95
Worship lyrics are relevant and relatable	11.54
Secular songs more about other factors e.g. music, not the words	8.97
Worship is singing to/about God	8.33
Worship is more personal	7.05

4. DISCUSSION

The results of this study support hypothesis a, that there would be greater engagement when singing worship songs than listening. In all the five key factors of engagement investigated, results demonstrated greater engagement with singing than with listening. This was most evident in the results of the final overall emotional engagement question, in which 85.5% of participants said they had a greater emotional response with singing than listening, due to singing's active, participatory nature. The results of the physical response questions further this idea of singing being more active. There were notably higher levels of physical response reported for singing than listening, both overall and within the specified physical movements, where in all primary movements but dancing a

greater percentage of participants listed each movement for singing than listening, e.g. hand/arm raising 61.6% for singing and 38.4% for listening.

The more active nature of singing can also pertain to the contexts of worship where listening tends to be more passive. Significantly more participants stated they listened to music in contexts where the music is not the primary focus than singing. For example, 74% of the participants listened to worship music when working while zero participants reported that they sang and worked, and when travelling 61.9% of the participants listened and only 6.9% reported singing, with all but one (everyday activities) of the main singing contexts being where singing is the primary focus. This increased focus on worship music when singing is reflected by the mind-wandering results which demonstrate a significantly greater likelihood of mind-wandering when listening than singing. This tendency to focus less when listening is also demonstrated by how only 9.3% of the participants said they focus more on the lyrics when listening than singing, while the remaining 90.7% focus more on lyrics when singing or both the same.

It is notable that this study found such evident differences in engagement when singing than listening compared with Unwin et al. (2002), who found little difference in impact on mood change between them. This is likely because this study investigated five key aspects of engagement whereas Unwin et al. (2002) focussed on mood change only. Interestingly, of the five key aspects, mood change exhibited the smallest difference between singing and listening where 85% of the participants reported a change in mood when singing worship music and 75.5% when listening, both demonstrating exposure to worship music significantly impacting mood similarly to Unwin et al. (2002).

Byrd (2019)'s findings likewise demonstrated an improvement in mood and spiritual edification after listening to worship music, which is corroborated by the results of this study. Unlike the findings of Kreutz et al. (2004) this study found that despite a lower level of engagement when listening than singing, participants still responded exceedingly positively when listening to worship music, as demonstrated by the primary reasons for changes in mood after listening (as well as singing) to worship music being positive affects: uplifted, joyful, and peaceful. The reason for this difference to Kreutz et al. (2004) is likely a result of the genre differences. Biblical 'Truth' underpins most worship music, meaning most worship songs are relevant and meaningful to Christians, unlike classical music where lyrical content is variable in relevance to participants, and which in Kreutz et al. (2004) was in a foreign language ('Mozart's Requiem' in Latin). Additionally, as demonstrated by the findings of this study aligning with Saliers' assertion (2001), stating that the primary purpose of worship music for Christians is not for their own enjoyment but to 'glorify and worship God', unlike the purpose of a choir rehearsal which is 'to practice singing' (Kreutz et al., 2004) and is therefore more dependent on the perceived success and enjoyment of the rehearsal by the individual rather than for the enjoyment of God in worship music.

It is also notable how 85.6% of the participants in this study stated they listen to music in church. Ordinarily before the Covid-19 pandemic, as highlighted by Bryson et al. (2020), church services united believers in shared sung worship. During the pandemic, services have adapted to government guidelines meaning any in-person worship may not contain congregational singing, instead listening to the same music, often sung by a band. The results of this study are notable for how the majority of the participants now say they listen to music in church, whereas before the pandemic this figure would likely have been lower.

Limitations. The limitations of this study include the fact that taking place during the Covid-19 pandemic resulted in participants having not experienced singing in collective worship in church as they had always previously done, in eleven months, meaning recollections of sung worship and pre-pandemic perceptions of sung worship may have altered. The study also only looks at the engagement with the genre of worship music and would potentially have benefitted from a control group of another genre of music to compare the findings of worship music to.

Future Directions. Future research in this field should focus on investigating whether such high levels of engagement when singing compared to listening extends to other genres, or whether this is unique to worship music. Further investigation should also explore further the impact of meaningful lyrics on engagement with worship music compared to secular music, and also look further at the longer-term impact of the Covid-19 pandemic on the engagement of Christians with worship music.

Conclusions. Overall, this study has filled a gap in the literature finding that there is greater engagement with worship music when singing than listening, predominantly due to the more active nature of singing meaning participants engaged with the music more. This study also demonstrates Christians responding with an overall positive engagement to any exposure to worship music whether singing or listening, which are possibly a result of these songs being filled with meaningful, Biblical 'Truth'.

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