

Song Lyrics That Make Us Cry: Word Use and Meaning

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Abstract

This study analyzed the lyrics of songs that respondents ($N = 2060$) reportedly cried over. We first characterized these lyrics by comparing them to those of popular chart music. We then examined relationships between linguistic markers and themes for the most frequently reported emotions when crying over music: being moved, sadness, and their combination. We expected crying-song lyrics to be sadder than those of chart music. For specific song emotions, we anticipated the most negative language in sad songs, and the most positive in being-moved songs, with songs evoking both falling somewhere in between. Compared to chart music, crying songs are sadder and more sincere. Regarding the three emotion subcategories, minimal but significant differences in the use of first-person pronouns, words expressing sadness, and time focus indicate that the lyrics of songs evoking sadness are more self-focused and sadder than those associated with being moved. Lyrics of songs that evoked both sadness and being moved were also sadder than those that evoked only being moved. The thematic analysis revealed that the high levels of second-person pronouns across all crying songs reflect an emphasis on social bonds. In addition to social bonds, themes include major life events and the emotions associated with these people and events. There is considerable overlap among the three investigated song emotions in these themes. Listeners are likely to cry when their pains and most cherished experiences are put into words and combined with music. The minimal differences between the emotional subcategories for themes and linguistic markers suggest that personal associations and contexts may matter more for the emotional outcomes investigated when crying over music.

Keywords: crying, emotion, linguistic inquiry and word count software (LIWC), lyrics, music, tears

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Introduction

Music is a powerful emotional stimulus that can elicit a wide range of emotions in listeners (e.g., Eerola & Saari, 2025; Gabrielsson & Wik, 2003; Juslin & Laukka, 2004). Crying, including the sensation of feeling like crying (i.e., having moist eyes and/or a lump in one's throat), is a typical emotional response to listening to music (e.g., Cotter et al., 2018, 2019; Gabrielsson, 2011; Hanser et al., 2022). The question of why music can evoke tears remains a matter of debate (e.g., Cotter et al., 2018, 2019; Juslin, 2019; Miceli & Castelfranchi, 2003; Vingerhoets, 2013). Recent studies show that, in addition to personal associations (e.g., recalling memories), situational factors (e.g., being at a funeral), and musical characteristics (e.g., the music sounding beautiful or sad), listeners also attribute their tears to song lyrics (Cotter et al., 2019; Hanser et al., 2022; Mori, 2022). However, to date, these lyrics have received little research attention. The present study characterizes the lyrics of tear-eliciting songs by comparing their word usage to that of popular chart music. The second objective is to compare the specific word usage and lyrical themes of crying songs associated with sadness and/or being moved, as these were the most frequently reported emotions (54% and 65%, respectively) in our previous work on crying in response to music (Hanser et al., 2022).

Sadness and being moved often accompany one another (Cullhed, 2020) and are common emotional responses when listening to music, even when it does not make us cry (Juslin & Laukka, 2004). Moreover, tears in daily life are also often associated with sadness and being moved (e.g., Menninghaus et al., 2015; Zeifman & Brown, 2011). Specifically, adult crying is commonly interpreted as an expression of sadness (Zeifman & Brown, 2011) and tears are considered a strong signal to observers that one requires physical or emotional aid (e.g., Gračanin et al., 2018). Additionally, crying individuals are perceived as warmer as they are assumed to experience feelings of being moved. This may make observers more prone to approach and aid criers (Zickfeld & Schubert, 2018). Being moved is considered a desirable and predominantly positive, as well as a more positive than negative, mixed emotion (Menninghaus et al., 2015; Zickfeld et al., 2019). It is often experienced when undergoing or observing acts of prosocial behavior, during critical life events involving significant others, and when having strong emotional responses to art (e.g., Gabrielsson, 2011; Gabrielsson & Wik, 2003; Kuehnast et al., 2014; Menninghaus et al., 2015; Mori & Iwanaga, 2017; Zickfeld et al., 2019). Being moved can thus be considered other-focused, as reflected in feelings of empathy and a sense of connection people experience when listening to moving music (Vuoskoski et al., 2022). This is opposed to feelings of sadness, which direct attention toward the self (e.g., Sedikides, 1992). This difference in focus may be reflected in song lyrics.

Several studies have examined the emotions involved in crying over music. Cotter and colleagues (2018, 2019) identified two emotional classes associated with the urge to cry while listening to music, labeled sadness and awe. The distribution of

these classes appears to be consistent: sadness and awe accounted for 63% and 37%, respectively, in the first study (2018), and 60% and 40% in a follow-up (2019). Awe-inspired episodes are more emotionally positive, result mainly from the music itself (e.g., its beauty), and occur less frequently than sad-crying episodes. In the latter case, song lyrics and extra-musical factors (e.g., sad memories and personal associations) are important triggers for crying. The sad-crying category consists of negative valence emotions. Although these studies did not directly measure feelings of being moved, several emotions that make up the awe-inspired class of crying (e.g., amazement, awe, chills, being touched) are conceptually related to it (see Cotter et al., 2018; Coutinho et al., 2017; Konečni, 2005; Menninghaus et al., 2015; Vuoskoski et al., 2022).

Mori and Iwanaga (2017) demonstrated that tear-evoking songs were seen as sad and calming, while chill-inducing songs were perceived as both happy and sad. These authors further found that tears, but not chills, predicted feelings of being moved by music. They suggest that feelings of being moved result from a combination of pleasure and relief of tension. In music, this can be achieved through the interplay of acoustic and lyrical features. Indeed, shedding tears while listening to music is predicted by songs that evoke mixed emotions through their acoustic features and lyrics about sad farewells (Mori, 2022).

Surprisingly, the lyrics of songs that trigger tears have received limited attention to date, although there is strong reason to examine these texts. Common denominators in the lyrical features of the diverse songs that make people cry (Cotter et al., 2018, 2019; Hanser et al., 2022; Mori, 2022), may help us understand why, in addition to idiosyncratic preferences and listening contexts (cf. Eerola et al., 2025), these songs trigger tears in listeners. This may help us better understand tearful responses to music, and perhaps to the arts in general. Moreover, music listening fulfills various important psychological functions, including mood regulation and fostering social cohesion (e.g., Schäfer et al., 2013). Understanding the role of song lyrics in these processes may facilitate practical applications in, for example, (music) therapeutic settings.

As mentioned above, tear-eliciting songs are mostly perceived as sounding sad, and it is plausible that their lyrics reflect this. Listening to sad-sounding music has been associated with increased compassion, empathic responses, and prosocial decision making (McDonald et al., 2022). Song lyrics may help facilitate these processes. Lyrics enhance the effect of sad music more than they do for happy music (Ali & Peynircioğlu, 2006; Brattico et al., 2011; Fiveash & Luck, 2016). When feeling sad, people tend to prefer music that matches their mood (e.g., Hunter et al., 2011) and perceive greater sadness in emotionally ambiguous/mixed music (Hunter et al., 2008). This preference is most prominent when experiencing interpersonal sadness, such as losing a significant other (DeMarco et al., 2015; Lee et al., 2013). These interpersonal losses preceded music listening to feel comforted. The latter is also accompanied by feelings of sadness and being moved (Hanser et al., 2016).

Notably, music can induce various types of sadness in listeners, such as melancholy, grief, or comforting sorrow (e.g., Herdson et al., 2023). Melancholy and grief are considered very sad states that mostly differ in arousal level, with grief being highly arousing, and melancholy less so, while comforting sorrow is described as a relatively high-valence, low-arousal type of sadness. Our focus on the various emotions accompanying crying episodes may reveal lyrical differences that could point toward multiple types of sadness. Given that being moved is considered a positive or positively mixed emotion (Menninghaus et al., 2015; Zickfeld, 2019), the lyrics of songs that evoke being moved may be less negative or more positive than those of songs that evoke only feelings of sadness.

The investigation of lyrics often uses Linguistic Inquiry and Word Count Software (LIWC; Pennebaker et al., 2015). With LIWC, lyrics of self-identified sad songs have been found to include fewer positive emotion words (though see Hanser et al., 2024) and fewer references to the present compared to lyrics of happy-sounding songs (Garrido, 2017). Moreover, negative emotion words are more frequent in sad songs, especially those expressing sadness (Hanser et al., 2024, 2025) and anger (Garrido, 2017). Sadder-sounding songs also typically have a lower overall word count (Hanser et al., 2024, 2025).

Furthermore, lyrics of songs with a strong focus on social bonds contain high levels of second-person pronouns (Hanser et al., 2024, 2025; Packard & Berger, 2020). Frequent use of second-person pronouns in lyrics has been linked to greater commercial success and popularity, particularly when ‘*you*’ is the object of a sentence, e.g., ‘*I love you*’ (Packard & Berger, 2020). In this context, second-person pronouns may help listeners think of someone important to them. Given the relevance of social connections to feeling moved, specific pronouns and words relating to these connections are therefore likely to be relevant in the lyrics of crying-evoking songs.

Lastly, authenticity, a summary variable in LIWC that assesses a text’s sincerity, which has recently been used to explore lyrics (Eaton et al., 2022; Kalichman & Smyth, 2023; 2025), might be relevant for the current research (Newman et al., 2003). This variable was developed to detect word use indicative of deception, of which authenticity is the opposite. Deceptive language contains fewer first and third person pronouns, more negative emotion words, and more motion verbs (Newman et al., 2003). Authenticity may be relevant in relation to crying, as tears are generally considered honest and sincere signals to observers, which may foster sympathy and a willingness to help (cf. Wróbel et al., 2025). We assert that crying songs may have high levels of authenticity. First, people may be more likely to cry if they believe the lyrics to be sincere, which could make it easier for listeners to feel compassion or empathy toward the messages in these texts. Second, listeners may be more likely to cry if they perceive the lyrics as genuinely reflecting and expressing their own concerns.

Overview of the Present Study

The present study aims to examine the lyrics of songs that elicited tears from participants. First, we characterize crying-song lyrics by comparing them to those of popular chart music. We anticipate that the lyrics of crying songs will be more negative/sadder than those of chart music. We examine word count, authenticity, pronoun use (first-person singular and plural, second-person), emotion words (positive and negative; the latter further categorized into anger, anxiety, and sadness), and time focus (past, present, future). We further expect crying songs to contain fewer total words, more negative-emotion words, especially those that express sadness, more words referring to the past, and fewer words relating to the present.

Additionally, we examine the lyrics of crying songs as a function of the reported emotions. We compare the following three self-reported emotional categories: sadness, being moved, and the combination of sadness and being moved. We expect that the lyrics of songs evoking sadness contain the most negative language, whereas those evoking feelings of being moved contain less negative language, and that songs evoking both sadness and being moved fall somewhere in between. This means that songs evoking sadness will include the most words related to negative emotions, specifically sadness, and words related to the past. We also expect this category to have the fewest words related to the present. No additional expectations were formulated for the other variables, as this work is partially exploratory.

Since contextual information may be lost when relying solely on word-count software (e.g., Jackson et al., 2022), we also conducted a brief thematic analysis of the lyrics of songs that were mentioned ten or more times to contextualize LIWC-scores and detect potential differences in semantic content.

Method

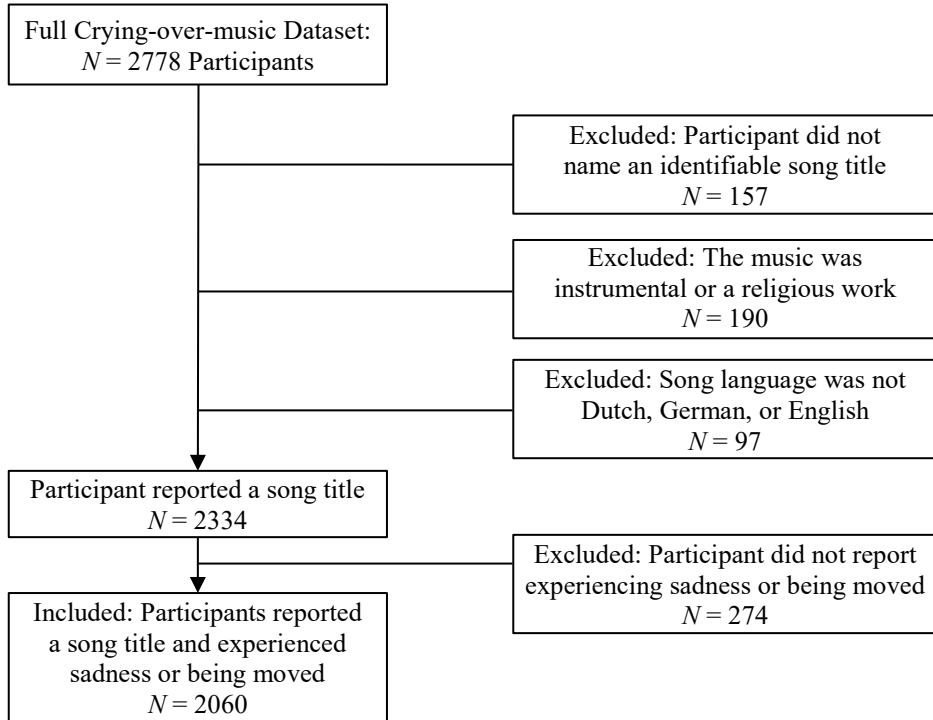
Participants

A subset of participants from the database previously reported on by Hanser and colleagues (2022) provided the data. This database, which contains information on the crying-over-music experiences of $N = 2778$ participants, was collected from December 21, 2006, until January 2, 2007, by the senior authors. At the time, ethical permission for such a study was not required. As this is an existing dataset, further assessment was waived by the Tilburg University ECB EC-2017.EX62. Data cannot be shared publicly, as participants did not provide permission and this is not covered in the waiver. Participants from this dataset were included in the present study if they: (1) reported an identifiable popular song over which they cried, and (2) reported experiencing feelings of sadness or being moved (both Yes/No, see Measures). As our focus was on the lyrics of popular music, participants who reported listening to religious and instrumental music were excluded. Analyses were limited to songs in Dutch, English, and German due to previously reported similarities in word use in

lyrics written in these languages (Hanser et al., 2024, 2025). This resulted in the inclusion of $N = 2060$ ($M_{age} = 38.46$, $SD_{age} = 10.65$, age range 18 – 66, $Mdn = 40.00$, 1310 women) participants and songs (see Figure 1). Participant-reported songs were subsequently clustered into the reported emotion categories: sad songs (560), being-moved songs (767), and songs that evoked both sadness and being moved (733).

Figure 1

Flow Chart of the Included Participants



Measures

In addition to demographic information (age, sex), the following questions from the music-listening-tailored version of the Adult Crying Inventory (ACI; Vingerhoets, 1995; Vingerhoets & Cornelius, 2001) were utilized: (1) What song did you listen to when you cried? (free response - artist & title); (2) Which of the following emotions or feelings did you experience while crying? Sadness, Being moved (both Yes/No).

Song Lyrics and Text Preparation

Crying Songs: Lyrics were collected from online sources, with preference given to artist websites, followed by online repositories such as Genius.com, Lyricfind,

AZlyrics, Songteksten.nl, and Muzikum.eu. Word repetition as found on these websites was retained. While we recognize that this may greatly affect the word count, our motivation is that listeners will find these lyrics in a similar form. Moreover, when listening to these songs, repetition is present, which may contribute to the emotional experience. Non-lyrical meta information (e.g., [bridge]) was removed. Several common expressions were standardized (e.g., ev'ry - every) before processing through LIWC2015 (Pennebaker et al., 2015). The word categories investigated are provided in Table 1. To improve the quality of the analyses, all lyrics were translated into English. English was selected since most songs are already in English, and the Dutch LIWC dictionary is based on an older version of the English LIWC dictionary (see Boot et al., 2017). Dutch and German texts were machine-translated using DeepL (<https://www.deepl.com/en/translator>).

Table 1

Overview of Investigated LIWC Categories with Examples From the LIWC2015 Manual (Pennebaker et al., 2015)

Word category	Example words
Pronouns	
First-person singular pronouns	I, me, my
First-person plural pronouns	We, us
Second-person pronouns	You, yours
Emotion words	
Positive emotions	Love, sweet
Negative emotions	Hurt, ugly
Anxiety	Fear, worry
Anger	Hate, annoyed
Sadness	Sad, cry, grief
Time orientations	
Past focus	Ago, did
Present focus	Today, now
Future focus	Will, soon
Authenticity	Summary variable computed by: 1st person pronouns + 3rd person pronouns + differentiation – motion. Higher scores indicate higher authenticity.

Note. See Newman et al., 2003, for more information on authenticity and its construction.

Chart Music: For the comparison with chart music, we compiled a dataset consisting of all no. 1 hit songs (source: <https://www.top40.nl/bijzondere-lijsten/alle-nummer-1-hits-per-jaar>) in Dutch, German, and English from the Dutch national Top 40 (from 1965 to April 2025), totaling 779 songs. It should be noted that although the control selection is not equal in size to the sample of crying songs, it provides a reasonable overview of popular music in the Netherlands from the past decades.

Moreover, by comparing crying songs to general chart music, we assert that people did not cry or cried less in response to the selection of chart music. However, we cannot exclude the possibility that people cried over songs in the control selection. Chart songs were collected, pre-processed, and translated similarly as crying songs. Websites for song lyrics and chart data were consulted between February and April 2025. Lists of songs, overall word frequencies, and the steps of thematic analysis are available as supplemental material on OSF (see OSF project: <https://osf.io/qhvbc/overview>; Hanser, 2026). Supplemental material is also available on the journal's website (<https://pt.ffri.hr/pt/issue/view/52>).

Statistical Analyses and Software

Data was analyzed using SPSS 28 and JASP 0.19.3. Due to violations of normality, non-parametric tests were used. Differences between crying songs and chart music were assessed using Mann-Whitney U tests. The reported effect size for these tests is the rank-biserial correlation, with demarcations small .1, medium .3, large .5. Kruskal-Wallis and post-hoc tests were conducted to assess whether LIWC-values differed for people experiencing sadness, being moved, or sadness/being moved while crying. Bonferroni corrections were applied to post-hoc tests. Effect size η^2 is provided for the Kruskal-Wallis test with demarcations small .01, medium .06, and large .14. Findings were considered significant at $p \leq .05$. Lastly, we employed non-parametric correlations to explore associations between several variables of interest.

Results

Characterization of Crying Songs Compared to Chart Music

We analyzed the values provided by LIWC. LIWC counts and categorizes words into psychologically relevant categories using a validated internal dictionary and reports these as percentages of the total word count (Tausczik & Pennebaker, 2010). We first evaluated the hypothesis that crying-song lyrics are sadder than those of chart music. As shown in Table 2, crying songs contained significantly fewer words and were more authentic, albeit minimally, than chart music. In addition, crying songs contained more negative-emotion words than chart music, specifically more words expressing anxiety and sadness. Crying songs were also more focused on the past and less on the present. Effect sizes were small to medium. Words expressing anxiety were few overall and may not be relevant. There were no differences in the use of positive-emotion words or second-person pronouns. These findings show that the lyrics of crying songs are shorter, more authentic, and more negative, specifically sadder, than those of popular chart music.

Table 2
Mann-Whitney U Tests and Descriptive Overview of Crying Songs and Chart Music

Variable	Crying (2060 songs) <i>Mdn (IQR)</i>	Chart (779 songs) <i>Mdn (IQR)</i>	<i>z</i>	<i>p</i>	Effect size [95% CI]
Word count*	224 (104)	288 (168)	16.28	<.001	-.40 [-.44 - -.35]
Authenticity*	89.46 (37.07)	81.40 (48.85)	-4.11	<.001	.10 [.05 - .15]
Pronouns					
First-person singular	8.71 (7.36)	8.39 (8.32)	0.66	.512	-.02 [-.06 - .03]
First-person plural	0.32 (1.56)	0.38 (1.49)	1.38	.169	-.03 [-.08 - .02]
Second-person	5.48 (7.05)	5.08 (6.21)	-0.86	.390	.02 [-.03 - .07]
Emotion words					
Positive emotion	3.36 (3.10)	3.17 (3.86)	-0.83	.408	.02 [-.03 - .07]
Negative emotion*	1.85 (2.30)	1.41 (2.12)	-6.43	<.001	.16 [.11 - .20]
Anxiety*	0.00 (0.40)	0.00 (0.27)	-2.73	.006	.06 [.01 - .10]
Anger	0.00 (0.53)	0.00 (0.48)	-0.84	.403	.02 [-.03 - .07]
Sadness*	0.70 (1.59)	0.34 (1.01)	-8.70	<.001	.21 [.16 - .25]
Time orientation					
Past focus*	2.78 (3.97)	2.09 (3.62)	-4.56	<.001	.11 [.06 - .16]
Present focus*	14.92 (7.18)	15.51 (6.96)	3.46	<.001	-.08 [-.13 - -.04]
Future focus	1.74 (2.55)	1.73 (2.73)	-0.85	.396	.02 [-.03 - .07]

Note. Except for word count and authenticity, values are percentages of the total number of words. Effect size is the rank-biserial correlation with demarcations small .10, medium .30, and large .50.
 *denotes a significant difference

Comparison of Crying Songs Based on Reported Emotions of Sadness and Being Moved

To evaluate our second research question, Kruskal-Wallis tests were conducted to examine potential differences in word usage of songs that evoked sadness (S), sadness and being moved (SBM), and only being moved (BM). As shown in Table 3, there were no significant differences in word count, authenticity, second-person pronouns, positive emotion words, and anxiety. Importantly, second-person pronouns were high in all three song-emotion categories ($M_S = 5.95$, $M_{SBM} = 5.82$, $M_{BM} = 5.44$), and positive-emotion words were nearly twice as frequent as negative-emotion words ($M_{pos} = 3.94$, $M_{neg} = 2.39$).

A significant difference was found in the use of first-person pronouns. First-person pronouns were more frequent in S songs compared to BM songs ($p = .035$), but there was no difference between S and SBM songs ($p = .812$) or SBM and BM songs ($p = .384$). Regarding emotional tone, negative words differed between the three categories. These were more frequent in S than in BM songs ($p = .042$), but there was no significant difference between SBM and BM ($p = .074$) or S and SBM songs ($p = 1.000$). The difference in negative-emotion words was entirely due to words expressing sadness, and sadness words differed significantly between the song categories. BM contained fewer words expressing sadness than S ($p < .001$) and SBM songs ($p < .001$), while S and SBM songs did not differ ($p = .324$). Moreover, there were significant differences among the three time orientations of past, present, and future focus. There was a greater focus on the past in BM compared to SBM songs ($p = .041$), but there was no difference between S and BM ($p = .137$) or between S and SBM ($p = 1.000$). Unexpectedly, words related to the present were more frequent in S than in BM songs ($p = .004$), while there was no difference between S and SBM ($p = .595$) or between BM and SBM ($p = .119$). Lastly, despite the significant difference among the three song-emotion categories for future-focused words, post-hoc tests revealed no significant differences after correcting for multiple tests: BM and SBM ($p = .074$), S and BM ($p = .053$), and S and SBM ($p = 1.000$).

Although the differences were significant, caution is needed in interpretation, as effect sizes were minimal to small at best. Findings show differences between sadness (S) and being moved (BM) in the use of first-person pronouns, negative-emotion words, specifically those expressing sadness, and words relating to time. There were no significant differences between S and SBM. Sad songs were indeed the most emotionally negative, while being-moved songs were the least. Songs that evoked both emotions fell in between, as suggested by the difference in words expressing sadness and relating to the past for BM and SBM, and the lack of significant differences between the other variables.

Table 3
Differences and Descriptive Statistics for LIWC Categories Related to Experienced Feelings of Sadness, Being Moved, and the Combination of Sadness and Being Moved

Variable	Sadness (N = 560)		Sadness and Being Moved (N = 733)		Being Moved (N = 767)		H	p	η^2 [95% CI]
	Rank	Mdn (IQR)	Rank	Mdn (IQR)	Rank	Mdn (IQR)			
Word count	1071.15	229 (97)	1017.20	223 (103)	1013.53	224 (109)	3.61	.165	.000 [.000 - .007]
Authenticity	1042.31	90.58 (34.97)	1048.13	90.58 (35.49)	1005.03	87.63 (38.95)	2.29	.318	.000 [.000 - .007]
First-person singular	1074.67 ^a	9.13 (7.74)	1037.91	8.76 (7.40)	991.17 ^a	8.24 (7.24)	6.56	.038*	.002 [.000 - .011]
First-person plural	1046.15	0.37 (1.68)	1032.93	0.34 (1.56)	1016.75	0.28 (1.41)	.91	.634	.000 [.000 - .004]
Second-person	1061.51	5.58 (6.67)	1046.18	5.48 (7.25)	992.87	5.48 (6.82)	5.11	.078	.000 [.000 - .007]
Positive emotion	1030.93	3.48 (3.27)	1028.99	3.28 (3.16)	1031.63	3.33 (3.04)	.01	.996	.000 [.000 - .004]
Negative emotion	1065.18 ^a	1.93 (2.49)	1052.81	1.88 (2.26)	983.85 ^a	1.74 (2.33)	7.66	.022*	.003 [.000 - .010]
Anxiety	1009.95	0.00 (0.41)	1034.60	0.00 (0.40)	1041.58	0.00 (0.41)	1.36	.508	.000 [.000 - .005]
Anger	1021.77	0.00 (0.52)	1031.59	0.00 (0.55)	1035.83	0.00 (0.52)	.23	.890	.000 [.000 - .003]
Sadness	1094.21 ^a	0.85 (1.45)	1061.72 ^b	0.77 (1.65)	954.15 ^{a,b}	0.58 (1.42)	21.60	<.001*	.010 [.003 - .020]
Past focus	1051.67	2.82 (3.83)	1061.25 ^a	2.82 (4.00)	985.66 ^a	2.47 (3.70)	7.04	.030*	.002 [.000 - .010]
Present focus	1085.32 ^a	15.23 (6.91)	1042.37	14.94 (6.79)	979.13 ^a	14.63 (7.63)	10.77	.005*	.004 [.001 - .013]
Future focus	1063.09	1.85 (2.47)	1053.59	1.73 (2.71)	984.63	1.68 (2.33)	7.36	.025*	.003 [.000 - .010]

Note: Rank = mean rank. Except for word count and authenticity, values are percentages of the total number of words. Effect size η^2 demarcations small .01, medium .06, and large .14.

*denotes a significant difference

^{a, b}denotes a significant effect between song-emotion categories after Bonferroni-corrections

The difference in first-person pronouns and the non-significant trend for second-person pronouns among the three song emotions are of interest, as these could imply differences in a song’s focus, specifically through the relationship between *I* and *you*. We therefore examined these pronouns, negative-emotion words, and words expressing sadness further for each song-emotion using nonparametric correlations. Significant but low Spearman correlations (Table 4) showed that for all three emotion categories, increased use of first-person pronouns was associated with lower use of negative-emotion words overall, but not with words expressing sadness. This suggests that as self-references increase, negative words decrease, except for words specifically related to sadness. Moreover, first-person singular pronouns and second-person pronouns were positively correlated for SBM and BM songs, but not for S songs. This suggests that the lyrics of S songs are more self-focused than those of BM or SBM songs. Lastly, there was a positive correlation in SBM songs between words expressing sadness and second-person pronouns, suggesting that the lyrics of these songs may focus on sadness in relation to someone else or on someone else’s pain.

Table 4

Nonparametric Spearman Correlations Between Pronouns, Negative Emotion Words, and Sadness for Each Song-Emotion Category

Variable	Sadness				Sadness and Being Moved				Being Moved			
	1	2	3	4	1	2	3	4	1	2	3	4
1. 1 st person singular	-				-				-			
2. 2 nd person pronouns	.036	-			.106**	-			.128***	-		
3. Negative emotion	-.090*	.011	-		-.150***	.037	-		-.082*	.000	-	
4. Sadness	.026	.006	.736***	-	.012	.077*	.716***	-	.025	.034	.725***	-

Note. Negative emotion and sadness are correlated because sadness is part of the negative emotion summary variable.

* $p < .05$. ** $p < .005$. *** $p < .001$.

Thematic Analysis of Recurring Songs

Out of 2060 participant-reported songs, 1133 were unique. Eighteen songs were mentioned 10 times or more by 281 participants. These recurring songs were used to contextualize LIWC findings, as they may contain tear-triggering features that transcend personal preferences. For the thematic analysis, the first author closely read all lyrics and formulated initial themes (themes were not predetermined). The lyrics were then reread, themes were re-evaluated, and, where possible, overlapping themes were narrowed down to key words. An overview of songs and themes can be found in Table 5.

Table 5
Thematic Analysis of the Most Frequently Mentioned Songs

Artist and Title	Mentions			Themes	
	Total	S	SBM		BM
Andrea Bocelli/Sarah Brightman – Time to Say Goodbye*	14	7	6	1	Farewells; relationship; reminiscing; loss; longing
André Hazes – De Vlieger	14	9	5	0	Loss; death; parent-child relationship; continuing bonds; religion
Anouk – One Word	10	6	3	1	Sad memories; (troubled) relationship; regret; loss; continuing bonds
Bette Midler – The Rose	12	2	7	3	Love; break-up; hesitant to start a new relationship; hope
Boudewijn de Groot – Avond	31	5	12	14	Love; faith (God/relationship); uncertainty in life; passing of time
Christina Aguilera – Hurt	15	5	9	1	Rejection; forgiveness; regret; love
Eric Clapton – Tears in Heaven	12	6	5	1	Sadness; religion; continuing bonds; death
Frans Halsema – Voor Haar	14	0	2	12	Love; faith (relationship), acceptance of shortcomings, passing of time
John Miles – Music	10	2	4	4	Ode to music
Gerry and the Pacemakers – You Never Walk Alone	12	1	4	7	Setbacks; consolation; hope; social support
Karin Bloemen – Geen Kind Meer	22	3	12	7	Parent-child relationship; loss; death; different life stages; regret; growing up
Marco Borsato – Afscheid Nemen Bestaat Niet	16	3	12	1	Sadness; farewells; continuing bonds
Pink Floyd – Comfortably Numb	13	2	4	7	Reminiscing; altered consciousness; drugs/medical
Queen – Love of My Life	14	3	6	5	Love; break-up; (continued) support
R.E.M. – Everybody Hurts	11	5	5	1	Setbacks; pain is part of life; hope; consolation
Stef Bos – Papa	37	11	17	9	Parent-child relationship; different life stages; growing up
U2 – One	11	6	1	4	Love; (troubled) relationship
Venice – The Family Tree	13	4	7	2	Family; death; farewell; support; consolation; continuing bonds; setbacks
Total mentions	281	80	121	80	

Note. S = Sadness, SBM = sadness and being moved together, BM = Being moved.

*We considered the full text in English by Sarah Brightman for Time to Say Goodbye.

We identified three overarching themes. First, themes related to social connections were present in all but one song. The latter dealt with an appreciation of music. These connections were not limited to romantic love but could pertain to any significant other. The type of relationship or the person of affection was not always clear from the text. Second, there were themes related to both positive (e.g., being in romantic relationships) and negative (e.g., loss of a loved one, breakups) major life events. The third theme was related to the emotions experienced in connection with the people involved and the life events. Common emotional experiences included feelings of sadness and regret, as well as overcoming or handling life's struggles, consolation, and continuing bonds.

When associating recurring songs with emotion categories, none of the songs was linked exclusively to a single emotion, although some songs were mentioned more frequently in one category than in the other. This was likely due to the varying degrees of sadness within these songs, as demonstrated by LIWC. When liberally considering the themes in relation to the evoked emotions, sadder songs focused more on negative major life events, while songs that (also) evoked feelings of being moved emphasized more positive life events, support, or an emotional resolution to suffering. More specifically, the only song that stood out in the "being moved" category, Frans Halsema's *Voor Haar/For Her*, is a song that praises one's partner, expresses trust in the relationship, and reflects on the passing of time. One of the sad songs, André Hazes *De Vlieger/The Kite*, tells of a father observing his son attach a letter addressed to his deceased mother to a kite, in which the child shares his sorrows and how much he misses her. The most-mentioned song, *Papa/Dad* by Stef Bos, which appeared frequently in all three song-emotion categories, tells of an adult reflecting on growing up, experiencing a sometimes-troublesome relationship with their father, and realizing they increasingly resemble him. Songs that fall into multiple emotion categories illustrate the nuanced findings from LIWC and point to lyrical ambiguity and content that can apply to multiple contexts.

Discussion

We analyzed linguistic markers and themes in the lyrics of songs that evoke tears. First, we characterized crying-song lyrics by comparing them to those of chart music. We hypothesized that crying-song lyrics would be more emotionally negative, specifically sadder. Results show that lyrics of crying-eliciting songs were shorter, more emotionally negative, specifically through words expressing sadness, and these songs were focused more on the past and less on the present, which corresponds to previous findings on the lyrics of sad-sounding music (Garrido, 2017; Hanser et al., 2024, 2025). Songs containing more words related to the past and fewer to the present may help listeners reminisce (Garrido, 2017). Sad memories have specifically been reported as a trigger for music-elicited tears (Cotter et al., 2019; Hanser et al., 2022). Contrary to Garrido (2017), who compared sad and happy

songs, we found no differences in the use of positive-emotion words or words expressing anger. Our findings thus confirm the expectation that crying-song lyrics are sadder than those of chart music but do not fully align with previous studies on sad music. The latter may be explained by the control songs used or by music's ability to induce different types of sadness in listeners (Herdson et al., 2023), which may partly result from lyrical differences.

New in this study was the observation that crying-song lyrics are somewhat more authentic. Criers may not only be considered as more sincere (e.g., Wróbel et al., 2025), but more authentic lyrics may more easily elicit tears in listeners as well. The underlying mechanisms for this finding require further investigation. LIWC analyses of authenticity in lyrics are of recent date and have mostly been considered in relation to the sincerity of an artist's image (e.g., Eaton et al., 2022; Kalichman & Smyth, 2023, 2025). Normative values for authenticity in song lyrics are not available, and there is ongoing discussion about how applicable this variable is to these texts. A comparison with other art forms, such as creative writing or poetry, may prove valuable. The current findings suggest that this variable may be relevant to both song popularity (cf. Eaton et al., 2022), and personally meaningful songs.

Our second objective was to evaluate word usage in relation to the reported emotions that accompanied tears, namely sadness, being moved, and the combination of both. We hypothesized that the lyrics of songs evoking sadness would contain the most negative language, those evoking feelings of being moved would contain less negative language, and songs evoking both sadness and being moved would fall in between. Findings partially supported these expectations. Sad songs contained the most negative words, especially those expressing sadness. Being-moved songs contained the least negative language and the fewest words expressing sadness. Songs evoking both emotions indeed fell in between, as indicated by their lower use of words expressing sadness compared to songs that only evoke being moved. However, there were no significant differences between songs evoking sadness or those evoking both emotions. Moreover, sad songs used the most first-person pronouns. More frequent use of first-person pronouns has previously been associated with increased self-focus (DeWall et al., 2011), as well as feelings of sadness and depression (Rude et al., 2004). Regarding time orientation, surprisingly, only songs evoking both emotions and not sad songs contained significantly more words relating to the past than being-moved songs. Furthermore, contrary to our expectation that fewer negative songs would contain more words related to the present, being-moved songs did not have more words related to the present but contained fewer words relating to time overall. Being-moved songs may be less related to a specific event or memory and may instead focus on a timeless statement that conveys a "universal truth" to listeners, such as *I love you*.

Crying songs that evoked sadness and sadness/being moved were indeed sadder than songs that evoked only feelings of being moved. However, the absolute differences in first-person pronouns, negative words, specifically those expressing

sadness, and time-related words among the three song-emotion categories were minimal, especially compared to the differences found between crying songs overall and chart music. Minimal differences were to be expected, since being moved is often considered a mixed emotion consisting of both positive and negative emotional components (Menninghaus et al., 2015). The song-emotion categories of sadness we investigated - sadness/being moved, and being moved - can therefore be expected to overlap in their emotional tone. This emotional tone can be regarded as conveying a sense of sadness for all three song-emotion categories. The overall comparison of crying songs to chart music supports this.

Results from both LIWC and the thematic analysis strongly suggest an emphasis on social connections in crying-song lyrics overall. All three song-emotion categories showed high use of second-person pronouns, which may help listeners think of someone dear to them (Packard & Berger, 2020). This may apply to all songs that emphasize personal meaning (see Hanser et al., 2024, 2025). First-person plural pronouns (*we*) can also express relationships, but in line with the pertinent literature, these words seemed less important in crying-song lyrics than second-person pronouns (DeWall et al., 2011; Packard & Berger, 2020).

Thematically, song lyrics focused on social connections, (major) life events that tend to involve these connections, and the emotions related to these people and events. The specific nature of the relationship was not always made clear, nor was the object of affection always specified. However, relationships tended to focus on significant others (e.g., a love interest, family). Song lyrics also varied in the degree of detail they provided for a described situation. Descriptions sometimes remained general, focusing more on the feelings associated with events (e.g., a loss, farewells, and life transitions) rather than on specific circumstances. This lyrical ambiguity may be a key feature of these songs, as it allows people in various situations to relate to the texts. The identified themes correspond to descriptions of situations that trigger feelings of being moved (e.g., Cullhed, 2020; Kuehnast et al., 2014; Menninghaus et al., 2025), sadness, and tears (e.g., Vingerhoets, 2013). These themes also support and expand upon findings that lyrics about significant others and sad farewells trigger tears in listeners (Mori, 2022).

Regarding our three song-emotion categories, there was considerable overlap in what recurring songs were named in each category. The identified themes may therefore also apply to each category. However, in combination with LIWC results, it can be argued that songs evoking sadness emphasize sad events/feelings more than those evoking feelings of sadness/being moved and being moved. Correlational data further suggest that sad songs are more focused on the narrator's sadness. In contrast, being-moved songs and songs evoking both emotions focus more on the narrator's relationship with others. Furthermore, songs evoking both emotions could focus on sadness in relation to someone else or someone else's pain. These potentially novel findings require replication and further research attention, as the correlations were significant but low. More advanced research methods, such as latent Dirichlet

allocation (Mori, 2022), may be necessary to reliably link themes to evoked emotions. Personal associations (e.g., specific memories) and listening contexts (e.g., hearing the song at an anniversary or memorial service) may, however, matter more for the investigated emotional outcomes than the themes themselves.

The present findings may have several more implications for the further study of lyrics. First, as mentioned above, music can evoke various types of sadness (Herdson et al., 2023; Menninghaus et al., 2015; Vuoskoski et al., 2022). As demonstrated by the current work, LIWC may be sensitive enough to discern these various states of music-induced sadness; however, the results also show that these lyrical differences may be no more than nuances. Second, words related to sadness might be a better indicator of a song's mood than LIWC's more general negative or positive word categories (cf. Eaton et al., 2022). Moreover, positive-emotion words were more frequent than negative words in all three song-emotion categories in the present study. Song lyrics may typically have some degree of mixed positive and negative emotions. As with auditory cues (e.g., Hunter et al., 2008), listeners may interpret these emotionally mixed and ambiguous cues in song lyrics as sadder when they are already in a sad mood. Some of music's supporting effects may originate in these mixed emotions, as song lyrics may not only reflect and acknowledge feelings of sadness, but simultaneously offer positive notes as well.

To summarize, the lyrics of songs that may make people cry mostly express sadness and can be considered sincere. Thematically, they are not about just anyone or anything but are perceived as expressing who and what is especially important to listeners. Like tears in general, those shed over music indicate who and what is valuable to the person crying (e.g., Cullhed, 2020; Miceli & Castelfranchi, 2003; Szynger et al., 2025). Although music does not directly cause the pain and suffering that often underlie tears in daily life (e.g., Vingerhoets, 2013), the lyrics describe these emotional struggles in relation to significant others and major life events. Listeners may cry when they feel that their worries, values, and what or who is dear to them are expressed in words. As suggested by Mori and Iwanaga (2021), this may result from a gradual build-up of tension and subsequent relief through music's auditory and lyrical attributes, which can be considered a form of catharsis.

Limitations and Future Directions

Several limitations characterize the present work. First, our findings may apply only to a specific portion of crying-over-music episodes, as song lyrics are most important in episodes marked by sadness (Cotter et al., 2019). Whereas other studies found that as many as 40% of crying-over-music episodes are associated with more positive emotions (Cotter et al., 2018, 2019), in the present dataset, few participants reported that positive emotions (e.g., joy) accompanied their tears (Hanser et al., 2022). We would expect to see more substantial differences, for example, in words expressing sadness between songs that evoke more distinct emotions, such as sadness

and joy, than between songs that evoke sadness and being moved. Lyrics and personal associations are less critical to crying-over-music episodes characterized by positive emotions; instead, these feelings primarily arise from the music itself, such as its beauty. By focusing on the lyrics, our current work may be less applicable to crying as a purely aesthetic response to music listening (see e.g., Cotter et al., 2018, 2019; Miceli & Castelfranchi, 2003) and does not apply to crying in response to instrumental music.

Second, the discrete emotion categories applied in this study through a Yes/No response format may not be as informative or ecologically valid as emotion scales or classes of emotions for characterizing crying-over-music episodes. Taking into consideration classes of emotion, such as those identified by Cotter et al. (2018, 2019), or emotion scales, may better reflect the existence of multiple types of music-induced sadness and the complex experience of crying over music.

Third, in the present dataset, we do not have information about the context or situation in which the music was heard. We also do not know whether listeners had a specific purpose for listening to this music. A recent framework that focuses on music's functions and situational contexts (Eerola et al., 2025) may prove valuable in the further study of music and tears.

Lastly, popular music has undergone considerable changes in its acoustic and lyrical attributes in recent decades. Over the past five decades, the lyrics of some pop music genres have become simpler and more repetitive, while also becoming more negative and more frequently addressing personal topics (Parada-Cabaleiro et al., 2024). It is unclear what this means for the tear-eliciting power of music. Are the lyrics of crying songs also becoming more negative? Future studies should consider changes over time and across different genres, as this may reveal societal changes in how sadness is experienced/portrayed in lyrics and potentially how tears and those who cry are viewed.

Conclusion

The present study is one of the few to explore various aspects of lyrics belonging to songs that people reported crying over. Compared to the lyrics of popular chart music, the lyrics of tear-eliciting songs come across as more sincere, and their emotional tone is one of profound sadness. When considering the lyrics of crying songs in relation to evoked emotions, subtle differences exist in the word usage of songs that evoked feelings of sadness, sadness/being moved, and being moved. Songs that evoked feelings of sadness were more self-focused and sadder than being-moved songs. Thematically, crying songs emphasize important social connections, major life events in which significant others play a role, and the emotions surrounding these people and situations. When it comes to vocal music, tears may be shed when the lyrics address listeners' pain, core values, and what is dear to them.

These texts, combined with music that expresses or evokes appropriate emotions, may explain some of the tears in the varied experience of crying over music.

Author Contribution Statement. **Waldie E. Hanser:** Conceptualization, Formal analysis, Writing – Original draft; **Ruth E. Mark:** Conceptualization, Data curation, Writing – Review & Editing; **Ad J. J. M. Vingerhoets:** Conceptualization, Investigation, Writing – Review & Editing.

Ethics Statement. Data were collected in 2006 when ethical approval for this type of study was not needed. The study was conducted in accordance with ethical standards for research involving human participants and adhered to the principles of the Declaration of Helsinki. Further approval was waived by the Ethics Committee of Tilburg University EC-2017.EX62 for analysis and publication of this non-interventional study.

Data Availability Statement. The data that support the findings of this study are available upon reasonable request from the corresponding author. The data are not publicly available as participants did not provide permission to do so and this is not covered in the waiver by the Tilburg University Ethics Committee.

References

- Ali, S. O., & Peynircioğlu, Z. F. (2006). Songs and emotions: Are lyrics and melodies equal partners? *Psychology of Music*, 34(4), 511–534.
<https://doi.org/10.1177/0305735606067168>
- Boot, P., Zijlstra, H., & Geenen, R. (2017). The Dutch translation of the linguistic inquiry and word count (LIWC) 2007 dictionary. *Dutch Journal of Applied Linguistics*, 6(1), 65–76. <https://doi.org/10.1075/dujal.6.1.04boo>
- Brattico, E., Alluri, V., Bogert, B., Jacobsen, T., Vartiainen, N., Nieminen, S., & Tervaniemi, M. (2011). A functional MRI study of happy and sad emotions in music with and without lyrics. *Frontiers in Psychology*, 2, Article 308.
<https://doi.org/10.3389/fpsyg.2011.00308>
- Christenson, P. G., De Haan-Rietdijk, S., Roberts, D. F., & Ter Bogt, T. F. M. (2019). What has America been singing about? Trends in themes in the US top-40 songs: 1960–2010. *Psychology of Music*, 47(2), 194–212. <https://doi.org/10.1177/030573561774820>
- Cotter, K. N., Silvia, P. J., & Fayn, K. (2018). What does feeling like crying when listening to music feel like? *Psychology of Aesthetics, Creativity, and the Arts*, 12(2), 216–227.
<https://doi.org/10.1037/aca0000108>
- Cotter, K. N., Prince, A. N., Christensen, A. P., & Silvia, P. J. (2019). Feeling like crying when listening to music: Exploring musical and contextual features. *Empirical Studies of the Arts*, 37(2), 119–137. <https://doi.org/10.1177/0276237418805692>

- Coutinho, E., & Scherer, K. R. (2017). Introducing the GENEVA Music-Induced Affect Checklist (GEMIAC) a brief instrument for the rapid assessment of musically induced emotions. *Music Perception: An Interdisciplinary Journal*, 34(4), 371–386. <https://doi.org/10.1525/mp.2017.34.4.371>
- Cullhed, E. (2020). What evokes being moved?. *Emotion Review*, 12(2), 111–117. <https://doi.org/10.1177/1754073919875216>
- DeMarco, T. C., Taylor, C. L., & Friedman, R. S. (2015). Reinvestigating the effect of interpersonal sadness on mood-congruency in music preference. *Psychology of Aesthetics, Creativity, and the Arts*, 9(1), 81–90. <https://doi.org/10.1037/a0038691>
- DeWall, C. N., Pond Jr, R. S., Campbell, W. K., & Twenge, J. M. (2011). Tuning in to psychological change: Linguistic markers of psychological traits and emotions over time in popular US song lyrics. *Psychology of Aesthetics, Creativity, and the Arts*, 5(3), 200–207. <https://doi.org/10.1037/a0023195>
- Eaton, J., Sharma, A., & Law, D. (2022). “I may look fake but I’m real where it counts”: Positivity and authenticity in the songs of Dolly Parton. *Psychology of Aesthetics, Creativity, and the Arts*, 9(2), 205–217. <https://doi.org/10.1037/aca0000527>
- Eerola, T., Kirts, C., & Saarikallio, S. (2025). Episode model: The functional approach to emotional experiences of music. *Psychology of Music*, 53(4), 590–615. <https://doi.org/10.1177/03057356241279763>
- Eerola, T., & Saari, P. (2025). What emotions does music express? Structure of affect terms in music using iterative crowdsourcing paradigm. *PLoS ONE*, 20(1), Article e0313502. <https://doi.org/10.1371/journal.pone.0313502>
- Fiveash, A., & Luck, G. (2016). Effects of musical valence on the cognitive processing of lyrics. *Psychology of Music*, 44(6), 1346–1360. <https://doi.org/10.1177/0305735615628057>
- Gabrielsson, A. (2011). *Strong experiences with music: Music is much more than just music*. Oxford University Press.
- Gabrielsson, A., & Wik, S. L. (2003). Strong experiences related to music: A descriptive system. *Musicae Scientiae*, 7(2), 157–217. <https://doi.org/10.1177/1029864903007002>
- Garrido, S. (2017). *Why are we attracted to sad music?*. Palgrave Macmillan.
- Gračanin, A., Bylsma, L. M., & Vingerhoets, A. J. (2018). Why only humans shed emotional tears: Evolutionary and cultural perspectives. *Human Nature*, 29, 104–133. <https://doi.org/10.1007/s12110-018-9312-8>
- Hanser, W. E., (2026, January 25). Song lyrics that make us cry: Word use and meaning. Retrieved from <https://osf.io/qhvbv/>
- Hanser, W. E., Mark, R. E., & Vingerhoets, A. J. J. M. (2022). Everyday crying over music: A survey. *Musicae Scientiae*, 26(3), 516–537. <https://doi.org/10.1177/1029864920981110>

- Hanser, W. E., Mark, R. E., & Vingerhoets, A. J. J. M. (2024). Music and lyric characteristics of popular Dutch funeral songs. *OMEGA-Journal of Death and Dying*, 89(2), 452–469. <https://doi.org/10.1177/00302228221075471>
- Hanser, W. E., Loepthien, T., Mark, R. E., & Vingerhoets, A. J. J. M. (2025). Linguistic and thematic attributes of German pop songs used at funerals. *OMEGA-Journal of Death and Dying*. Advance online publication. <https://doi.org/10.1177/00302228251375112>
- Hanser, W. E., Ter Bogt, T. F. M., Van den Tol, A. J. M., Mark, R. E., & Vingerhoets, A. J. J. M. (2016). Consolation through music: A survey study. *Musicae Scientiae*, 20(1), 122–137. <https://doi.org/10.1177/102986491562026>
- Herdson, O., Eerola, T., & Javadi, A. H. (2023). Analysis and classification of music-induced states of sadness. *Emotion Review*, 15(2), 99–117. <https://doi.org/10.1177/17540739221140472>
- Hunter, P. G., Schellenberg, E. G., & Griffith, A. T. (2011). Misery loves company: Mood-congruent emotional responding to music. *Emotion*, 11(5), 1068–1072. <https://doi.org/10.1037/a0023749>
- Hunter, P. G., Schellenberg, E. G., & Schimmack, U. (2008). Mixed affective responses to music with conflicting cues. *Cognition & Emotion*, 22(2), 327–352. <https://doi.org/10.1080/02699930701438145>
- Jackson, J. C., Watts, J., List, J. M., Puryear, C., Drabble, R., & Lindquist, K. A. (2022). From text to thought: How analyzing language can advance psychological science. *Perspectives on Psychological Science*, 17(3), 805–826. <https://doi.org/10.1177/17456916211004899>
- JASP Team. (2024). *JASP* (Version 0.19.3). [Computer software]. Retrieved from <https://jaspstats.org/>
- Juslin, P. N. (2019). *Musical emotions explained: Unlocking the secrets of musical affect*. Oxford University Press.
- Juslin, P. N., & Laukka, P. (2004). Expression, perception, and induction of musical emotions: A review and a questionnaire study of everyday listening. *Journal of New Music Research*, 33(3), 217–238. <https://doi.org/10.1080/0929821042000317813>
- Kalichman, S. C., & Smyth, J. M. (2023). “And you don’t like, don’t like the way I talk”: Authenticity in the language of Bruce Springsteen. *Psychology of Aesthetics, Creativity, and the Arts*, 17(5), 581–589. <https://doi.org/10.1037/aca0000402>
- Kalichman, S. C., & Smyth, J. M. (2025). “There’s no one as honest as those in pain”: The language of Tom Petty’s song lyrics. *Psychology of Music*, 53(2), 176–191. <https://doi.org/10.1177/03057356241235645>
- Konečni, V. J. (2005). The aesthetic trinity: Awe, being moved, thrills. *Bulletin of Psychology and the Arts*, 5(2), 27–44. <http://konecni.ucsd.edu/pdf/2005%20Aesthetic%20Trinity,%20Bulletin%20of%20P.%20and%20A.pdf>

- Kuehnast, M., Wagner, V., Wassiliwizky, E., Jacobsen, T., & Menninghaus, W. (2014). Being moved: Linguistic representation and conceptual structure. *Frontiers in Psychology*, 5, Article 1242. <https://doi.org/10.3389/fpsyg.2014.01242>
- Lee, C. J., Andrade, E. B., & Palmer, S. E. (2013). Interpersonal relationships and preferences for mood-congruency in aesthetic experiences. *Journal of Consumer Research*, 40(2), 382–391. <https://doi.org/10.1086/670609>
- McDonald, B., Böckler, A., & Kanske, P. (2022). Soundtrack to the social world: Emotional music enhances empathy, compassion, and prosocial decisions but not theory of mind. *Emotion*, 22(1), 19–29. <https://doi.org/10.1037/emo0001036>
- Menninghaus, W., Wagner, V., Hanich, J., Wassiliwizky, E., Kuehnast, M., & Jacobsen, T. (2015). Towards a psychological construct of being moved. *PLoS ONE*, 10(6), Article e0128451. <https://doi.org/10.1371/journal.pone.0128451>
- Miceli, M., & Castelfranchi, C. (2003). Crying: Discussing its basic reasons and uses. *New Ideas in Psychology*, 21(3), 247–273. <https://doi.org/10.1016/j.newideapsych.2003.09.001>
- Mori, K. (2022). Decoding peak emotional responses to music from computational acoustic and lyrical features. *Cognition*, 222, Article 105010. <https://doi.org/10.1016/j.cognition.2021.105010>
- Mori, K., & Iwanaga, M. (2017). Two types of peak emotional responses to music: The psychophysiology of chills and tears. *Scientific Reports*, 7(1), Article 46063. <https://doi.org/10.1038/srep46063>
- Mori, K., & Iwanaga, M. (2021). Being emotionally moved is associated with phasic physiological calming during tonic physiological arousal from pleasant tears. *International Journal of Psychophysiology*, 159, 47–59. <https://doi.org/10.1016/j.ijpsycho.2020.11.006>
- Newman, M. L., Pennebaker, J. W., Berry, D. S., & Richards, J. M. (2003). Lying words: Predicting deception from linguistic styles. *Personality and Social Psychology Bulletin*, 29(5), 665–675. <https://doi.org/10.1177/0146167203029005010>
- Packard, G., & Berger, J. (2020). Thinking of you: How second-person pronouns shape cultural success. *Psychological Science*, 31(4), 397–407. <https://doi.org/10.1177/0956797620902380>
- Parada-Cabaleiro, E., Mayerl, M., Brandl, S., Skowron, M., Schedl, M., Lex, E., & Zangerle, E. (2024). Song lyrics have become simpler and more repetitive over the last five decades. *Scientific Reports*, 14(1), Article 5531. <https://doi.org/10.1038/s41598-024-55742-x>
- Pennebaker, J. W., Boyd, R. L., Jordan, K., & Blackburn, K. (2015). *The development and psychometric properties of LIWC2015*. University of Texas at Austin.
- Rude, S., Gortner, E. M., & Pennebaker, J. (2004). Language use of depressed and depression-vulnerable college students. *Cognition & Emotion*, 18(8), 1121–1133. <https://doi.org/10.1080/02699930441000030>

- Schäfer, T., Sedlmeier, P., Städtler, C., & Huron, D. (2013). The psychological functions of music listening. *Frontiers in Psychology, 4*, Article 54458. <https://doi.org/10.3389/fpsyg.2013.00511>
- Sedikides, C. (1992). Mood as a determinant of attentional focus. *Cognition & Emotion, 6*(2), 129–148. <https://doi.org/10.1080/02699939208411063>
- Szyncer, D., Gracanin, A., & Lieberman, D. (2025). Emotional tears: What they are and how they work. *Emotion and Human Behavior, 46*(1), Article 106652. <https://doi.org/10.1016/j.evolhumbehav.2025.106652>
- Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology, 29*(1), 24–54. <https://doi.org/10.1177/0261927X09351676>
- Vingerhoets, A. J. J. M. (1995). *The ISAC Questionnaire*. Department of Psychology, Tilburg University, The Netherlands.
- Vingerhoets, A. J. J. M. (2013). *Why only humans weep: Unravelling the mysteries of tears*. Oxford University Press.
- Vingerhoets, A. J. J. M., & Cornelius, R. R. (Eds.) (2001). *Adult crying: A biopsychosocial approach*. Taylor & Francis.
- Vuoskoski, J. K., Zickfeld, J. H., Alluri, V., Moorthigari, V., & Seibt, B. (2022). Feeling moved by music: Investigating continuous ratings and acoustic correlates. *PLoS ONE, 17*(1), Article e0261151. <https://doi.org/10.1371/journal.pone.0261151>
- Wróbel, M., Zickfeld, J. H., & Ciesielski, P. (2025). The honesty behind tears: Situational, individual, and cultural influences on the perception of emotional tears as sincere. *PLoS ONE, 20*(7), Article e0324954. <https://doi.org/10.1371/journal.pone.0324954>
- Zeifman, D. M., & Brown, S. A. (2011). Age-related changes in the signal value of tears. *Evolutionary Psychology, 9*(3), 313–324. <https://doi.org/10.1177/147470491100900304>
- Zickfeld, J. H., & Schubert, T. W. (2018). Warm and touching tears: Tearful individuals are perceived as warmer because we assume they feel moved and touched. *Cognition and Emotion, 32*(8), 1691–1699. <https://doi.org/10.1080/02699931.2018.1430556>
- Zickfeld, J. H., Schubert, T. W., Seibt, B., & Fiske, A. P. (2019). Moving through the literature: What is the emotion often denoted being moved?. *Emotion Review, 11*(2), 123–139. <https://doi.org/10.1177/1754073918820126>

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