

NOVEMBER 13, 2012 | 4 MIN READ

Pop Music Became More Moody in Past 50 Years

Number crunching decades of top 40 music for psychological insight

BY HELEN LEE LIN

We blast the upbeat tunes for parties and workouts at the gym, and we save the low-key ballads for romantic or pensive moments. It's hardly a new idea that music is intertwined with our emotions. But how have our favorites changed over the decades, and what do these changes say about America's shifting emotional landscape?

Music is a form of naturalistic data that, much like popular television, literature, and sales of consumer goods, scientists can sample for insight into our minds and values. Researchers E. Glenn Schellenberg and Christian von Scheve set out to examine songs popular in America during the last five decades, using a selection culled from Billboard Magazine's Hot 100 charts. Schellenberg and von Scheve wanted to learn how emotional cues in music, such as tempo (slow to fast) and mode (major or minor key), have changed since 1960.

The most striking finding is the change in key. Songs composed in a major key tend to sound warm and effervescent (think "We Can Work it Out" by the Beatles, released in 1965), whereas songs in a minor key can sound darker and more melancholic (think "Boulevard of Broken Dreams" by Green Day, released in 2005). Over the last few decades, popular songs have switched

from major to minor keys: In the 1960s, 85 percent of the songs were written in a major key, compared with only about 40 percent of them now. Broadly speaking, the sound has shifted from bright and happy to something more complicated. It's important to note, though, that although older songs were frequently in a major key, this didn't necessarily mean the lyrics were cheerful (e.g., The Fifth Dimension's 1969 "Wedding Bell Blues" tells the tale of a woman longing for her wedding day, despite being in major key). Similarly, Shakira's "Hips Don't Lie" hit from 2006 is in minor key, but it relates the tension and fiery lust between two potential lovers.

America's popular songs have also become slower and longer. When the researchers analyzed the beats per minutes (BPM) of each song, they found a decrease from an average 116 BPM in the 1960s to approximately 100 BPM in the 2000s. Songs in the 1960s tended to run under three minutes, whereas more recent hits are longer, around four minutes on average.

Even more interesting, perhaps, is that our current favorites are more likely to be emotionally ambiguous (such as sad-sounding songs being fast or happy-sounding songs being slow – compare "Disturbia," Rihanna's fast-paced dance song, which is in a minor key, to Alicia Keys' emotional ballad "No One," which is in a major key but clocks in at a relatively slow 90 BPM). Perhaps, the researchers suggest, today's listeners are more musically sophisticated. Other studies in the past have linked music preferences to personality traits, such as a preference for sadder music being tied to more empathy, openness to experience, and less extroversion.

Other research by C. Nathan DeWall and his colleagues used linguistic analysis to show that popular song lyrics became more self-focused and antisocial (i.e., violent, more profanity) between 1980 and 2007, a

psychological shift that may have translated into changes for musical elements of songs. Brooding, introspective songs are unlikely to be party anthems, for example, so they may be more down-tempo. Schellenberg and von Scheve also suggest that artists may employ minor keys and compose slower songs to give them an air of maturity. After all, it's children's music that is usually happy, and many musicians known for bubbly, feel-good tunes (e.g., Jonas Brothers) are relegated to the pre-teen shelves at the store.

Another possible explanation for the changes in popular music is that the more contemporary music reflects the hardships and tragedies that our society has endured. For example, Terry F. Pettijohn II and his colleagues have shown that popular songs tend to be longer and slower during times of economic or social difficulties. However, Schellenberg and von Scheve believe that the steady increase in duration and decrease in tempo that they found in their study doesn't support the idea of growing difficulties fully because it would mean our problems have increased steadily over the last fifty years.

Perhaps popular songs have become more complex over time because Americans are becoming more diverse and individualized in their musical tastes. For example, as globalization increases exposure to foreign artists who might not have entered American awareness years ago, we absorb and are inspired by their new sounds.

Though we can only speculate on the specific causes of this evolution in music, we can still view society's preferences as a metric of the public consciousness. Maybe the reason South Korean rapper PSY's infectious "Gangnam Style" went viral in 2012 is because we needed a little light-heartedness and a dose of fun in the face of disturbing world events beyond

our immediate control (economic crisis, that means you). Schellenberg and von Scheve stress that their initial observations have only opened the door to inquiries on the link between emotion and music consumption. Perhaps someday we'll learn more of [the secrets](#) behind the music we love and the times we live in.

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