

Table S4

*Top 20 Highest-Frequency Words per Topic in the Latent Dirichlet Allocation Model*

Topic	Top 20 Words
0	love, heart, baby, fall, dream, always, hold, believe, find, long, everything, leave, cry, wait, nothing, tonight, alone, stay, something, change
1	kill, die, lie, nothing, man, people, head, fight, god, end, f*ck, hate, face, everything, believe, stand, dead, change, inside, war
2	F*ck, man, sh*t, people, n*gga, money, hate, die, put, rock, head, stop, run, kill, talk, face, god, street, gun, start
3	god, soul, die, burn, blood, lord, death, heart, light, lie, fire, dark, end, love, fear, man, dead, fall, pain, word
4	love, baby, heart, long, home, dream, happy, hold, sing, cry, little, find, always, believe, light, wait, everything, song, remember, shine
5	christmas, man, lyrics, shake, good, baby, boy, girl, love, little, run, home, town, gal, rock, play, sing, dance, ride, fun
6	love, baby, good, girl, little, man, nobody, dance, talk, woman, move, everybody, blue, home, work, boy, walk, shake, long, really
7	love, heart, dream, cry, home, find, long, wait, leave, always, hold, baby, good, alone, fall, tonight, lonely, light, stay, shine
8	love, heart, song, sing, friend, little, long, always, word, hold, dream, nothing, hear, find, home, something, fall, wait, alone, walk
9	love, home, walk, man, run, little, long, head, dream, find, light, heart, leave, always, friend, town, sun, place, people, nothing
10	n*gga, sh*t, man, f*ck, rock, stop, b*tch, boy, put, hit, big, money, y'all, girl, baby, ass, real, beat, show, n*ggaz
11	light, heart, love, fall, dream, burn, soul, dark, god, die, sun, fire, sky, face, end, inside, pain, lie, hear, wait
12	love, baby, heart, girl, believe, hold, cry, good, find, always, true, long, little, stay, someone, really, hurt, please, somebody, thing
13	baby, love, girl, little, good, boy, tonight, hot, man, crazy, rock, ready, everybody, dance, talk, alright, body, really, stop, show
14	love, nothing, always, believe, heart, find, dream, something, change, wait, alone, walk, leave, fall, inside, lost, hold, everything, left, end
15	love, everything, heart, long, find, dream, wait, change, fall, run, leave, nothing, always, good, baby, something, walk, believe, move, alone
16	n*gga, f*ck, sh*t, b*tch, man, n*ggaz, y'all, ass, money, hit, put, real, game, big, h*e, f*ckin, check, street, head, boy
17	love, god, heart, dream, die, lord, soul, dead, death, blood, light, burn, fall, end, dark, lie, fire, save, stand, fear
18	love, baby, girl, dance, tonight, good, heart, little, stop, really, shake, boy, hold, move, kiss, true, lover, real, sweet, stay
19	baby, love, little, girl, rock, man, roll, boom, home, good, dance, long, stop, heart, boy, play, bye, tonight, talk, touch
20	head, run, dead, man, die, face, light, heart, dream, fall, end, love, sky, inside, lie, burn, walk, leave, watch, black

Table S3 (continued)

Topic	Top 20 Words
21	love, baby, girl, good, alright, little, tonight, wait, please, heart, long, home, everything, mine, really, man, dance, boy, stay, hold
22	love, run, find, nothing, wait, heart, lie, inside, leave, fall, change, hold, long, everything, something, always, end, face, believe
23	love, heart, fall, light, dream, find, wait, inside, hold, nothing, end, leave, face, breath, die, believe, lie, alone, rain, run
24	love, home, little, man, long, ride, sing, song, good, blue, play, light, rock, girl, roll, boy, town, hear, sun, music
25	man, girl, big, boy, rock, n*gga, sh*t, f*ck, put, ride, roll, head, good, baby, hit, money, play, party, little, people
26	love, heart, baby, always, hold, find, something, believe, leave, nothing, lie, wait, cry, dream, alone, girl, everything, break, wrong, fall
27	god, love, burn, heart, fire, soul, light, lord, die, heaven, dark, jesus, fall, man, holy, blood, sky, dream, beautiful, angel
28	man, dead, head, f*ck, little, kill, die, people, boy, hell, blood, god, city, good, lyrics, black, face, big, love, play
29	man, money, people, f*ck, work, little, good, put, kid, play, run, love, friend, head, sh*t, hit, move, big, beat, boy

*Note.* The 20 most frequent words for each topic of our lyrics-based LDA model. Words occurring in more than 60% of the topics' high-frequency words and meaningless fill words (e.g., "yeah") were removed for better interpretability. The word ranking is based on the word's relative frequency within a certain topic and goes from left (high) to right (low).