

## Music and Emotions of Teenagers in Benin

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### Abstract

Music is an essential communication channel with each age group and each period with its type and style of music.

**Objective:** To analyze emotions associated with the influence of music on teenagers in order to ameliorate their mental healthcare using this channel.

**Method:** It was a prospective cross-sectional study with a descriptive and analytical scope which involved 269 teenagers of secondary and university schools and professional training centers in southern Benin. The sampling was based on a self-questionnaire administered within two months (May and June) 2011. Data were processed and analyzed using SPSS. The threshold of significance was fixed at 5%.

**Results:** 49.4% of the respondents listened to music several times a day, either individually (27.5%); in groups (4.8%); or both (67.7%). Listening sounded a positive emotional note (49.2%) and a negative emotional note in times of anxiety, anger, sadness, hopelessness and loneliness (46.4%). Music procured "pleasure or joyous moments", gave "a sensation of wellbeing, relief and relaxation", stimulated a sense of "motivation", "inspiration", and enabled "distraction and liberation"; it "gave life". Traditional music enabled re-inspiration. Zouk was said to be good for sexual arousal, religious music and slows help to dispel sadness, stress and anxiety. The brands that are mostly listened to in groups included "coupé-décalé", rap, hip-hop, reggae, R and B, techno, salsa, jazz, rumba and raga. Lullabies are hummed during moments of hopelessness, lack of affection, sadness, anger and anxiety. Personal experiences of listening to music are influenced by sex ( $p=0.004$ ).

**Conclusion:** Music was a privileged language for teenagers as they waded through this tumultuous period of their lives, a period full of emotions that were difficult to express and to manage. It is an efficient tool that requires consideration as far as care is concerned.

**Keywords:** Music; Emotion; Mental health; Teenager

### Introduction

Music refers to the art of blending sounds in such a manner that it is pleasing to listen to; it is an "organized sound" [1]. Bloom wrote that "we are in the era of music and the state of mind which accompanies it". Youths and teenagers in the age group of 10-20 years are attracted to music which constitutes to them a passion, a primordial object of enthusiasm and their reason for existence at the moment [2]. Each era and each age group have their preferences in terms of types and brands of music. The objective of this study is to analyze the effect of music or song on the emotions of teenagers in Benin in order to ameliorate their mental healthcare using this channel.

### Materials and Methods

The study was prospective, cross-sectional with a descriptive and analytical scope. It lasted for two months (May-June 2011) and was

carried out in two secondary schools (one public, one private), two faculties, two university institutes and ten vocational training centers, all found in Cotonou and Abomey-Calavi, two towns situated in the South of Benin. The vocational training centers (informal training) concerned the following trades: hairdressing, dressmaking, electronics, installation/maintenance and general repairs, electrical wiring, refrigeration, mechanics and fitting.

The sampling procedure was chosen to be of convenience to the respondents.

All adolescents and young adults available who met the inclusion criteria were considered: aged 10-18 years, trained and present at the time of the survey, having freely given their consent. We received authorization from the departmental direction of primary and secondary education before the survey.

Those who are in informal skills training or at university have received a consent form that they have read, approved and signed prior to administering the questionnaire.

Data collection instrument was a self-administered questionnaire with questions on:

- The social situation of the respondents (age, sex, ethnicity, nationality, level of education, city, nationality, level of education),
- Music preferences (sort, genre/type),
- Music consumption characteristics (frequency of listening, preferences of listening conditions, listening time, listening channel, music themes listened and link of each theme with the mood of the moment),
- The favorite singers or stars and the descriptive elements to which the choice relates (look history, music, and choreography),
- The role and function of each type of music
- Results found after listening,

Explanations are provided on each question before the questionnaire is submitted.

We had initially 290 teenagers who freely accepted to respond to the self-administered questionnaire; 21 poorly answered questionnaires were rejected, thus limiting the study to the remaining, correctly answered 269 questionnaires. For data processing and analysis, the SPSS software was used. The threshold of significance retained was  $\alpha=5\%$ .

As ethical dispositions, the respect for human dignity and family intimacy were strictly adhered to, and anonymity was strict throughout the study. All the respondents had earlier given their consent, verbally.

There was no conflict of interest concerning this research work.

## Results

### Socio-demographic characteristics

#### Interest declared for listening to music or interpreting a soundtrack

The findings revealed on 69% a positive impact for listening to music (Table 2) Music procures “pleasure or joyous moments”, gives “a sensation of wellbeing, relief and relaxation”, stimulates a sense of “motivation”, gives “inspiration” and enables “distraction and liberation”; it “gives life”. In 23.4% of the considered cases, no specific interest of humming or singing was manifested. 5.9% of the respondents did not at all feel any urge to hum or sing the songs listened to.

The interest to hum or sing, without being a professional singer, is multifaceted. One has “the impression of being in the shoes of the artist, hence experiencing the latter’s emotions”; “one feels a certain wellbeing, appeasement, satisfaction”; “one feels alive”; 61.7% of the respondents do experience a common feeling of joy when listening to music in a group.

253 respondents (94.1%) said that they hum along as they listen to music. Amongst them, 208 (77.3%) gave a justification for this behavior: “we are moved to do so because music touches our emotions, our feelings, our hopes and our spirits at the same time”.

For teenagers, singing is a means of “expressing their emotions” (115 respondents, giving 42.5%) or, of “raising such emotions” (72 respondents, giving 26.9%).

		N	%
Age	≤15 years	36	13.4
	16-18 years	233	86.6
	Average age : 16 ans		
Sex	Male	149	55.4
	Female	120	44.6
Nationality	Beninese	245	91.1
	African non-Beninese	23	8.5
	Non-African (Haitian)	1	0.4
Academic Level	Primary school	31	11.5
	College and Informal training for skills acquisition	158	58.8
	University	80	29.7
Total		269	100

**Table 1:** Socio-demographic characteristics of the teenagers.

### Music listening parameters

**Frequency and duration of listening:** We had 65.5% of the respondents who listen to music at least once a day. It was noted that 49.4% listened to music several times within the day. The average listening duration varies: especially for teenagers in the formal sector: ≤ 01 hour (68%) and ≤30 minutes (35.5%); and 1 to 2 hours for those in the informal sector (chi-square=13.014; df=4; p=0.011).

**Music listening channels:** Several channels through which teenagers listen to music were identified, including mobile phones. Others were: mobile players (73.2%), audio and video CD players (52.4%), television (48%), concerts (20.8%) and internet (16%).

### Types and options for listening to music either individually or in groups

The study revealed that 27.5% of the respondents listen to music individually, 4.8% almost always in groups while 67.7% listen both individually and in groups. They mostly listened to certain types of music when by themselves, especially religious music (17% of the music listened to by individuals), and slows (42.6%). They also listened to slows and zouk in pairs (23.4% and 51.1% respectively). 13.8% of the respondents listened to traditional music from their countries of origin.

Percussion music listened to in groups mainly consisted of authentic rhythms from the country of origin and/or the sub-region or elsewhere. Such include “coupé-décalé”, rap, hip-hop, reggae, R and B, techno, salsa, jazz, rumba and raga.

	n	%
Frequency of listening to music		
Listening at least once a day	176	65.5
Multiple listening times within the day	133	49.4
Positive impact of listening music	186	69.1
Using soothing sounds of music in order to go to sleep	53	19.7
Common feeling experience of joy when listening to music in a group	166	61.7
Any urge to hum or sing the songs listened to	16	5.9
Hum along as listen to music or song	253	94.1
Because music touches their own emotions, feelings, our hopes and spirits at the same time: 208 (77.3%)		
Singing is a mean of expressing (115; 42.7%) or raising the same emotions expressed by the singer (72; 26.8%)		
Creation of the environment within which listened to music (Resteful: 86.8%; lifted spirits: 13.2%)		
Doors and windows closed	138	51.4
Lights turned off	91	33.8
Places to listen to music		
Room	179	66.5
Elsewhere in the house	126	46.8
At any place	80	29.7
Out of the house and away from the workplace or training center	53	19.7
Workplace or training center	21	7.8
Lullabies and ditties of childhood		
Memory of the lullabies and ditties of childhood	116	43.1
Mother as the person who had done singing of such lullabies and ditties	239	88.8

**Table 2:** Conditions of listening music.

### Feelings and sensations found or sought for, moments and parameters influencing the choice of music

Twelve of the respondents (4.1%) showed a feeling of indifference upon listening to certain songs and rhythms. 32.7% listened repeatedly each time they found a song whose rhythm was interesting to them or one whose wordings suited their current emotional state.

Listening often had a particular emotional consonance: positive emotions (exaltation, rest) for 49.2%, negative emotions (anxiety, anger, sadness, hopelessness, loneliness).

Traditional music enabled re-inspiration, “certain traditional songs carried a lot of meaning in terms of the philosophy of life, and one cannot but listen to such”. Zouk was said to be a suitable rhythm for sexual arousal. 13 boys, in a direct and firm manner, said they listen to it during intimate moments. Nine (9) girls who made the same affirmation did so in a rather indirect, discrete manner.

Religious music and slows helped to dispel sadness, stress and anxiety. The choice depended on the melody and the message put across by the composer (28.6%), the artistic look of the singer (28.6%), the voice (18.2%), their appearance when on stage (11.9%), their popularity within the country, region or throughout the world (56.9%). Sometimes however, the decor played an important role in heightening the emotions and feelings experienced when listening to music.

### Decors used while listening to music, the place and type of music

The respondents themselves sometimes created the environment within which they listened to music: 138 (51.4%) with all outlets (doors and windows) closed, 33.8 % with lights turned off. For girls, listening in a secluded unlit area was of help in times of loneliness, anxiety and depression. Listening in the same circumstances for boys was a means of dealing with anger; it also helps them to reach a state of pleasure in a certain intimacy.

Some of the places where the respondents listened to music were: their rooms (66.5%), elsewhere in the house (46.8%), at the workplace or training center (7.8%), out of the house and away from the workplace or training center (19.7%), at any place (29.7%). The 7.8% who mostly listened to music while at the training centers were made up of trainees of the informal sector (26.8%) and trainees of the formal sector (4.4%). (with chi-square=24.321; df=1; p=0.000).

Teenagers claimed that listening to music in particular decors enabled them to better free their emotions, relax, lift up their spirits and release themselves in order to renew their strength, while 19.7% used the soothing sounds of music in order to go to sleep. In the case of positive emotions, 86.8% rested when they listened to music with lights off and/or behind closed doors, while 13.2% felt their spirits lifted.

### Place of lullabies and childhood ditties

The study revealed 43.1% of the respondents who had memories of the lullabies and ditties which their parents and other guardians used during their early childhood. The mothers were the ones who had done the singing of such lullabies in 88.8% of the cases (Table 2). The correlation between the personal experience of listening to childhood lullabies and ditties and the sex of the respondent gave a degree of significance of p=0.048 (chi-square=22.480; df=13; p=0.048).

## Discussion

### Importance of music in the life of teenagers

**Positive echoes:** A majority of the respondents (Table 2) sang along as they listened to music, since music plays on their emotions and on their spirits. As the music plays, they fit themselves in the shoes of the artist and get a feeling of importance even if it is only for a while.

**Listening frequency:** All the respondents admitted listening to music (Table 2). This is in accordance with the results obtained by Donnat who found that 57% of teenagers and youths in France, aged between 15 and 19, listen to music daily on the radio while 74% use other channels, just like 65% in the 20-24 years age bracket [3]. These figures showed how music played a key role in the daily lives of teenagers throughout the world.

**Average duration of listening:** The average duration of listening to music, each time they did so, for more than 2/3 of the teenagers considered in this study was less than or equal to one hour. This duration consecrated to each listening session can lead to an important cumulative daily listening time, especially if those concerned listen to music several times a day. Listening to music is thus an activity into which teenagers put a lot of time.

We found a statistically significant difference between the average duration of listening for teenagers of the formal sector and those of the informal sector with p=0.011.

Teenagers in the informal training centers often work in groups. Almost all the apprentices participate in the different tasks undertaken. Music thus becomes a useful element for creating a stimulating environment and/or accompanying them through such tasks. As long as the electrical energy supply allows for it, music is played for a long time almost on a daily basis. This suggests that music does not constitute a distraction from the execution of the major tasks; it instead creates an enabling environment and gives the proper background for welcoming customers and visitors.

Within the confines of formal training centers on the contrary, teenagers cannot listen to music while at the same time, effectively following the lessons being delivered by their teachers. It can thus be understood that the listening time in this case is limited to free time, making it less than that for their counterparts in the informal sector.

**Listening channels:** Portable devices were revealed by our studies as being the main music listening channel. Such devices were used by about ¾ of the respondents, unlike the case in France where other means are used by those who listen to music. About one out of every five persons in France (19%) listens to music using mobile devices (mobile players or mobile phones, 15% and 5% respectively); 43% of persons in the 15-34 years age bracket in France prefer mobile music players against 13% for those aged 35-59 years and 3% for those aged 60 and above [4]. These results show that teenagers and youths turn towards more practical and comfortable channels which can render the music handy to them. They seek for means by which they can freely access the music of their choice, get easy mobility and listen individually.

**Places of listening:** We have 65.5% of the respondents in our study mostly listened to music in their rooms (Table 2). These figures are somewhat close to those of a similar study conducted in France where it was seen that 69% of teenagers aged 15-19 and 73% of young adults aged 20-24 years mostly listen to music at home. This difference can be understood from the fact that, above 18 years, few youths in France continue living in the family house. They are free to choose and play the music they like, whereas parental approval is not accorded for certain types of music preferred by teenagers, in Benin, who still live with the parents. It is still possible for families in Benin and even in Africa as a whole, to get the teenagers, or even youths, to respect certain prohibitions, be they implicit or explicit. Also, we still encounter households in which the extended family members exercise some authority over them. There are equally homes in which several occupants cohabit, what restricts personal freedoms. Under such conditions, it becomes difficult for teenagers to feel free with their choice of music, especially if it is a percussion (loud) rhythm. The adults in the families often prefer the percussion rhythms of their time to those of modern days. Worthy of note is the fact that the courtyards and surroundings of the various houses are the most important meeting places for teenagers, especially as there exists no winter-like period in Benin when the climate is too harsh to be outdoors. These encounters are often made possible by music which either leads to the formation or the sustenance of circles of friends.

The observations drawn from these two studies suggest the presence of music in all the living spaces of teenagers, be it in the family milieu which is their place of nurture or out of the house, their rallying place.

**Options of listening to music individually or as a group:** Listening to music has as much a prominent place in the personal life of individuals as in their life in various groups. For the teenagers, the group represents a new point of attachment; therein, they find friendship, solidarity and understanding [5]. In this framework, music appears like a centerpiece around which they build their bonds within the new circle. The musical links shared with the group becomes a means of affirming one's identity and social integration, what gradually leads to the highlighting of one's identity as an individual. As such, music is seen to be quite important for the teenager, occupies an important place in his daily life and is present in all the key areas of his growth and becoming autonomous. It enables him to affirm his place in the group and thus, construct a social identity which in turn helps him to realize his personal identity [6].

### Musical choices of teenagers as a means of emotional expression

The results of our study do not enable us to establish a clear link between the emotional state and choice of music. Globally, we noticed that slows were most listened to in times of negative emotions, while the choices varied in times of positive emotions. While resting, teenagers equally listen to slows, but when happy or excited, they mostly turn to rap.

Tempo and mode are two characteristics of music which can either evoke sadness or joy. Tempo corresponds to the number of beats/min, while the major and minor modes correspond to subsets of modes used in a given musical segment [7]. Joy is accompanied by a rapid Tempo and major mode, and sadness by a slow Tempo and a minor mode beginning from the age of 5 years [8].

Slows have a slow Tempo while rap has a fast Tempo. Music with a slow Tempo is often chosen when teenagers experience negative emotions and or when they wish to rest, while rapid Tempo music is chosen when they wish to express joyful feelings. Despite this observation, we cannot claim that in circumstances of a negative emotional load, teenagers necessarily listen to music which carries a sad note, nor that in circumstances of a positive emotional load, they listen exclusively to music which carries a joyful note, because Tempo alone does not suffice to give a sad or joyous connotation to music [9].

However, our study enables us to affirm that listening to slow Tempo music could be indicative of a negative emotional state or of the wish to take a rest, while listening to music of a fast Tempo could be indicative of a positive emotional state. Two factors help to shed light on how slow Tempo music like Slows can be able to induce emotions with positive valence on teenagers: musical taste and the role of projection. The feelings generated in response to the emotion induced by music could very easily be confused with those related to an aesthetic appreciation of the music. The aesthetic quality of a musical piece could thus have an effect on the feelings of teenagers, independently of the emotions the piece itself carries along. On the role of projection, the teenagers attribute their own emotions to the music which they choose to listen to. All the emotions that are difficult to contain are thus transferred to music. From thence, it is no longer the music itself which is the source of emotions of a positive valence, but the ability to project, and the content of the projection. By relieving the teenager of some kind of load, the projection becomes a starting point for his wellbeing.

Each culture has its music, which most of the time is linked to acts of adoration, invocation and procession [10]. Popular traditional music often draws its inspiration from the realities of life and the personal experiences of the composer; it is at the same time a reservoir and an outlet for the composer and the committed listener.

### Music and self-psychotherapy for teenagers

The reasons advanced by teenagers to justify their choice to listen to music are directed mainly towards a search for physical, psychic or social wellbeing. They listen to music under circumstances which carry either a positive or a negative emotional load. Through it, they are able to calm down their anxiety, sadness, stress, loneliness, anger and boredom; by escaping, albeit temporarily, from the suffering due to certain emotional states. With its extraordinary capacity to raise powerful emotions, music becomes an instrument for the desire to "feel good". It has an enormous capacity of influencing and

manipulating both feelings and the brain [11]. Music with a sad rhythm or a piece whose wordings recount sad and negative events becomes that which confers resentment or negative feelings. Upon listening to music in particular decors, teenagers aim at creating the appropriate environment for their particular state (rest, spending some time by oneself, discomfort).

At some difficult moments, they attempt to escape by making use of the decor. We could think that by shutting the doors and/or putting off the lights, our respondents obtain greater isolation. However, this environment becomes like a closed space which music then fills, the concerned person is thus completely submerged therein and feels nothing other than music. Levitin intimated that active music has the power of bringing back memories; with the circumvolution of the temporal lobe of the brain being the center of musical memory, of souvenirs of musical experiences and their context [12]. Such souvenirs can also become a refuge or an element of liberation for the teenager. In his décor (closed doors and/or lights off) he makes sure that no other reality retains his attention apart from that which he has chosen to live at that moment. Consciously or unconsciously, the volume of the music may thus be raised in order to enhance the effect.

More than boys, girls encountered during our study listen to music behind closed doors and with lights off when they feel lonely, anxious or depressed. Unlike the girls, the boys mostly do so in moments of anger, of intimacy or of pleasure. So doing, do the boys not then hide their moments of weakness, which the girls could easily notice? The African school of life does not allow men to be weak, talk less of showing it. African male teenager, even if he idealizes the adult he hopes to be, does not have the courage to act or behave in a manner which attracts the contempt of the society (showing signs of weakness for example). He would be seriously reproached for behaving like a woman, which constitutes an insult an insult to his masculine force, even to his manhood. This force which is attributed to the man and which he is expected to display, is a society dogma, from which teenagers cannot escape. We think that, more than what we can see, by closing up the doors and turning off the lights, the boy hides to reveal his weaknesses such that music can help to regenerate him.

We went away with the impression that the boys who in the course of our study, affirmed that they listened to music in their intimate moments somehow challenged us to deny them that right. They have a sexual life and want to show that they assume it. The girls on their part were much more modest. But beyond these considerations pertaining mainly to sex and adolescence, the excitation capacity of music needs to be underlined here. As already indicated by Levitin and McGill, music has the capacity to unite a couple in tender and passionate moments [13].

In summary, the search for wellbeing through music is fruitful most of the time. Elsewhere, for certain teenagers, there are certain kinds of music which procure negative feelings for them either during, or after listening. However, we did not register any cases in which all kinds of music procured negative feelings when listened to. We can thus conclude that teenagers deliberately use music either to maintain their wellbeing or to regain it when facing situations which generate or convey suffering.

Traditional music traditionally inspired modern music or typically modern music itself constitutes a way of expression for those things which cannot be voiced out using spoken language. The positive effects of music on health, immunity and cognition have been demonstrated [14] and observed in persons suffering from chronic pathologies.

Feelings that are somewhat difficult to voice out, like loneliness, nostalgia and the fear of the unknown, are better expressed through music, leaving aside words. Ready stressed that “music has the intrinsic capacity to construct and contain emotions” [14].

Listening to any music which procures pleasure has a positive effect on cognition. The use of music to improve on memory has been explored by other authors: musical recitation improves information coding by activating networks of neurons in the most unanimous and thus, the most optimal manner [15]. It thus has therapeutic aims.

### Childhood, singing, adolescence and the person

Adolescence is an “integrative and maturing step with an evolutionary and reorganizational aim, resulting in an affective and structural modification”. Adolescence is not a crisis, but rather an “odyssey going through emotional storms, whirlwinds of passion, outbursts of identification hurricanes and narcissistic breakers” [16]. An opening for appeasement in this odyssey and an outlet from the storms resides in music which is listened to, played or produced. Music enables broad communication; it calls out to everybody and rallies in an extraordinary way, children, teenagers, young adults and persons in the 3rd and 4th age groups around their experiences, feelings and expectations. Music gives to teenagers, the joy of being part of groups where they have a sense of belonging, feel recognized, exchange with and support one another.

Several behavioral characteristics in listening to music are closely linked to affection. Less than half of the respondents (Table 2) remembered childhood songs (lullabies and ditties). The deep wordings and tonal height of lullabies send a reassuring message to the baby. He is entirely conscious of this mutual complicity which connects him to the mother and enables him to be confident [17].

“It is not the musical arrangements themselves which invoke emotions; instead, it is the connotations attached to them by the listeners” [11].

At 3 years of age, the child can feel the joy from a musical piece elaborated within its culture and around 6 years, it can identify sadness, fear and anger. At 5 years, the child uses the lively or slow character of the Tempo to implant his emotional judgments in the distinction of joyful and sad musical extracts and at 6 years, the child, like an adult, uses at the same time the Tempo and mode (major-happy, minor-sad) to attribute an emotional value to a musical extract [8]. There is thus at the same time a constancy and a precocity as concerns emotional recognition in music by humans. Music plays social roles in the life of the individual; the context (geopolitical, historical, socio-cultural, economic and spiritual) very much influences the emotional reactions. The teenager who is afraid of confronting the external world alone can for example, find cover through, or in music. Music is a unifying factor [18]; due to its communicative ability, it has the capacity to create an emotional link between those who listen to or improvise it together [19]. When teenagers accompany the music with their voices, they trigger an outlet for their feelings. As such, a chain of solidarity, emotional life and identification is created and maintained by means of music, and enables individual identity.

### Conclusion

Thanks to music, teenagers can affirm their belonging to a peer group and thus, adhere to a value system, to behavioral norms and to a

philosophy. The group confers a status on them; they feel a sense of belonging and in that space, can share their anxieties and their passions. It is a frame for their emancipation moves and a learning place for social skills. Music raises and/or maintains an emotional state which brings good feelings. The musical choices made by teenagers are thus not neutral. In choosing to listen to a particular musical piece, they do not only opt for a sense of wellbeing, they also open up a bit on their emotional state and their actual needs. Music thus constitutes a means of expression, communication, exploration, modification and/or reorganization of the emotional state. Better than spoken language, music voices out sentiments, emotions, experiences and feelings; it expresses the state of the mind. It is a privileged language for teenagers as they wade through this tumultuous period of their lives, a period full of emotions that are difficult for them to express and manage.

Music can thus be a means of better understanding teenagers, but also of helping them. From an analysis of the parameters influencing the musical choices of teenagers, we can better listen to them and offer them a better therapeutic strategy in pedopsychiatric practice.

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