Music as Mood Regulatory Strategy among Adults and Adolescents<br>* Dr. Summaira Naz<br>Department of Psychology, Hazara University, Pakistan<br>\section*{Dr. Mussarat Jabeen Khan}<br>Department of Psychology, International Islamic University, Islamabad<br>Dr. Farhana Kazmi and Ms. Humaira Bibi<br>Department of Psychology, Hazara University, Pakistan

The present study aimed to discover prevalence rate of 29 mood regulatory strategies and demographic differences in mood regulation strategies through music. Selfregulating Strategies of Mood Questionnaire (Thayer, Newman \& McClain, 1994), and Music in Mood Regulation Scale (Saarikallio \& Erkkila, 2007) were administered ( $N=600$ ) on adolescents ( $n=300$; age range 13-20 years) and aduts ( $n=300$; age range 21-35 years). The results indicated music listening and watching TV as most preferred mood regulatory strategy; the most preferred mood regulatory strategies through music were entertainment, revival, and strong sensation. The findings also indicated a significant age, gender, education, and socioeconomic status difference based on music as mood regulation strategies. The findings of the current study can be used for developing different mood regulatory strategies.

Keywords: Music, mood, mood regulation strategy, adults, adolescents

[^0]During the last several decades, the researches on interconnection of emotion with music listening has been widely overlooked due to the difficulty in studying musical emotions, and because of an emphasis on cognitive approaches (Juslin \& Sloboda, 2001; Miranda, Blais-Rochette, Vaugon, Osman \& AriasValenzuela, 2015). Humans use music as an instrument for processing and regulating emotions. This description of music as an instrument for emotional regulation has been found in almost every culture, whether the culture is Western, Asian, Islamic, or Middle Eastern. Music has also been used as a therapeutic technique cross-culturally for alleviating the negative emotions or for producing positive emotions (Boer \& Fischer, 2010; ChamorroPremuzic et al., 2009).

Mood regulation is explained as a process leading towards maintaining or modifying the occurrence, intensity, and duration of both unpleasant/negative and pleasant/positive moods (Eisenberg \& Spenrad, 2004; Garrido \& Schubert, 2015). A large number of behaviors have been studied for regulating mood; Parkinson, Toterdell, Briner and Reynolds (1996) identified more than 200 different mood regulatory strategies, where they found that music listening is an important behavior to regulate bad mood. Both behavioral and cognitive strategies are basic methods of mood regulation, out of which most classical method is music listening which falls into behavioral mood regulatory strategies (Parkinson \& Toterdell, 1999; Swaminathan \& Schellenberg, 2015). The term mood regulation was first used by Saarikallio and Erkkila (2007) in order to describe the relationship of music with mood regulation among adolescents. Moods and emotions are differentiated by their duration; mood exists for long duration without having any specific reason where as emotion is more short term and specific to some event (Barrett \& Bond, 2015; Parkinson, Toterdell, Briner, \& Reynolds, 1996). Regulation through music listening contains aspects of both concepts but the present research uses the term of mood regulation, not emotion regulation. It is because mood regulation through music is more involved in the regulation of undifferentiated states of mood and personal experiences and least involved in regulating particular emotional and behavioral
reactions in response to the particular events. Music listening for the sake of mood regulation is not necessarily done consciously (Anyanwu, 2015; Gross, 1998). Thayer, Newman and McClain (1994) found a large number of mood regulation strategies and concluded that based on self-ratings, music listening was the second most thriving approach at altering unpleasant mood, enhancing liveliness, and ultimately reducing stress.

Most people listen to music for altering their bad mood throughout their lives: in pre-adolescence (Ashley \& Durbin, 2006; Kuntsche, Le Mével, \& Berson, 2016), in adulthood (Hanser, Bogt, Tol, Mark, \& Vingerhoets, 2016; Greasley \& Lamont, 2006), and in old age (Blais-Rochette \& Miranda, 2016; Hays \& Minishiello, 2005). Literature have explored music as most preferred regulatory stratey across diverse situations and in different social circumstances (Juslin \& Laukka, 2004; McFerran, 2016). Seven most popular mood regulatory strategies to control and improve mood are; 1) entertainment, 2) revival, 3) strong sensation, 4) diversion, 5) discharge, 6) mental work, and 7) solace (Saarikallio \& Erkkila, 2007).

The individuals listening to music are active agents because they can construct their own psychological interpretation of music (McFerran, Garrido, \& Saarikallio, 2016; Saarikallio, 2007). Consequently, the present study also deals with listners as active subjects who engaged in music related behavior due to some particular personal causes. This study also investigates the experiences of music listening as the wholeness perspective of any person's goal oriented psychological functioning (Baltazar \& Saarikallio, 2016).

The present study focused on the central psychological process linked with emotions in mood regulation and to explore theoretical explanation of the mood regulatory practices. Music has a strong significance, especially for young people; adolescents immensely use music and consider it as a vital part of their life (Saarikallio \& Erkkila, 2007; Thomson, Reece, \& Benedetto,
2014) and a variety of experiences related to music take place in adolescence and adulthood (Saarikallio, Nieminen, \& Brattico, 2013). This approach of the present research is essentially psychological in nature because it discovers the internal explanations for human behavior and its main focus is on understanding the role of music as the part of the psychology of a person (Franco et al., 2014; Swaine, 2014).

Nowadays use of music has become more common in almost all the significant events, either it is weddings, birthday parties, graduation ceremonies or formal inaugurations. Many studies reveal that music has strong and deep effect on different brain areas which ultimately creates strong feelings and emotional states. This effect of music on emotions becomes more apparent specifically in adolescents and adults stages of life because these stages are transitional stages of life. Keeping in mind this significant role of music in developing and maintaining emotional states, many therapists have developed different music therapies to alter the negative and extreme emotional states into positive andless sever states. It's a strong observation that now in Pakistan too, music usage has exceeded rapidly, specifically in young individuals who mostly use music to regulate their both euphoric and depressive emotions.

So, keeping in mind all the observations and theoretical information provided by different previous researchers who worked on the significant role of music in different fields of life, particularly its role for mood regulation, the present research was conceptualized. The major goals of the current research were to investige the role of music as one of the most preffered mood regulatory strategy opted by youth of Pakistani soceity. In Europe, a lot of work has been done on music and its significance in different fields of life, but in Pakistan very less research work has been done on music. As Pakistan is an Islamic country so researchers are reluctant to work on significance of music in society. The current research is unique in this way that it boldly explores that now a days music is an integeral part of almost every event of life and people actually choose music according to their
mood to get a stable and relaxed emotional state. Music listening is very helpful and acts as a therapy to heal souls. The current research had three major goals:

1. To find out the prevalence of different mood regulatory strategies among adolescents and adults
2. To explore the role of music as mood regulatory strategy among adolescents and adults
3. To explore differences in the use of music as mood regulatory strategy based on some demographic variables like age, gender, socioeconomic status, and education

## Method

## Research Design

Quantitative survey design was used in the current study in which the prevalence of self-regulating mood strategies were found out and they were compared between adolescents and adults.

## Participants

In the present research, convenient sampling technique was used to approach 600 University students comprising of both adolescents ( $n=300$; age range 13-20 years) and adults, ( $n=300$; age range 21-35 years). Moreover, $n=300$ students were of below BA/BSC educational level and $n=220$ students were of Masters or above Maters level. Socioeconomic status reported by Subohi (2006) was also kept in consideration while approaching the participants; $n=235$ students having high socioeconomic status (family income above Rs. 100,000 and $n=285$ students having low socioeconomic status (family income between Rs. 4000 - less than Rs. 20,000 ) were taken for study. From 600 respondents, 520 respondents used music for mood regulation so the final analyses were done on 520 respondents.

## Measures

Following measures were used in the current study:
Self-Regulating Strategies of Mood Questionnaire. It has 29-strategies identified by Thayer, Newman and McClain (1994). Participants were asked to nominate a strategy (IEs) from the list of 29 .

Music as Mood Regulation Scale (MMR). Music on Mood Regulation scale (Saarikallio \& Erkkila, 2007) comprising of 40 items with scoring on 5-point Likert scale was used. It measures 7 subscales (Entertainment, Revival, Strong Sensation, Diversion, Discharge, Mental Work, \& Solace). The scale has above average level of construct validity. The results of the current research revealed that both item-total and inter-scale correlation analyses are significantly positive, which in return provide above average level of construct validity of MMR. The results of the current study indicated that Music in Mood Regulation Scale (MMR) was internally consistent on the current sample with alpha reliability coefficient .89 and for its subscales from .71 to .88 . Item-total and inter-scale correlation indicated that all items has a significant positive association with total scores of MMR. For current study the alpha coefficient for the MMR Scale was .87, while for its subscales it was ranging from .71 to .79 and MMR and its subscales also had good construct validities.

Demographic Information Sheet. It included items regarding the age, educational level and Socio economic status of the respondents.

## Procedure

For the purpose of the present research, $N=600$ participants were approached within the premises of Peshawar University, Quaid-i-Azam University, Islamic International University, and Punjab University.. Self-Regulating Strategies of Mood Questionnaire and Music in Mood Regulation Scale (MMR) along with the Informed Consent Form and Demographic

Information Sheet were distributed among the students. $N=520$ respondents used music for mood regulation so final statistical analyses were done on data of their responses.

## Results

The data of 520 respondents was analysed in the current research. Frequency distribution analysis and independent sample t -test were used for data analysis.

Table 1
Percentages of mood regulatory strategies of participants ( $N=600$ ).

| Strategies | $\%$ | Strategies | $\%$ |
| :--- | :--- | :--- | :--- |
| Analyze the situation | 40 | Put feelings in perspective | 23 |
| Avoid the cause | 33 | Listen to music | 81 |
| Call, talk to, or be with someone | 52 | Use relaxation techniques | 34 |
| Change location | 26 | Use humor | 64 |
| Control thoughts | 48 | Take a shower | 72 |
| Drink alcohol | 05 | Watch TV | 81 |
| Drink coffee or other caffeinated | 58 | Read books | 55 |
| beverage | 62 | Sleep | 68 |
| Eat something | 69 | Engage in emotional <br> activity | 23 |
| Engage in a hobby | 57 | Try to be alone | 71 |
| Engage in pleasant activities | 33 | Splash water on face | 66 |
| Engage in self-gratification | 28 | Take a nap | 21 |
| Engage in stress management | 49 | Rest | 74 |
| Exercise | 47 |  |  |
| Go shopping |  |  |  |

Table 1 shows the percentages of different mood regulation strategies and declares Music Listening and Watching TV as most used mood regulatory strategies.

Table 2
Mean Comparison of Music in Mood Regulation between
Adolescents and Adults ( $N=520$ ).

| Subscales | Adolescent$(\mathrm{n}=275)$ |  | $\begin{gathered} \hline \text { Adults } \\ (\mathrm{n}=245) \end{gathered}$ |  | t | P | CI 95\% |  | d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | SD | M | SD |  |  |  |  |  |
| Ent | 50.82 | 6.94 | 53.40 | 11.36 | 3.16 | . 002 | $4.18$ | -0.98 | 0.27 |
| Rev | 65.99 | 7.88 | 62.56 | 9.88 | 4.40 | . 001 | 1.90 | 4.96 | 0.39 |
| St. Se. | 54.98 | 8.26 | 56.55 | 8.67 | 2.13 | . 034 | $3.04$ | -0.12 | 0.19 |
| Div. | 49.26 | 9.26 | 50.98 | 9.65 | 2.07 | . 039 | $3.35$ | -0.10 | 0.18 |
| Dis. | 55.66 | 6.88 | 55.36 | 7.14 | 0.49 | . 063 | $\begin{gathered} - \\ 0.91 \end{gathered}$ | 1.51 | 0.04 |
| Me.Wo. | 41.28 | 7.26 | 40.98 | 7.38 | 0.47 | . 641 | $0.96$ | 1.56 | 0.04 |
| Sol. | 48.95 | 8.46 | 51.19 | 8.97 | 2.93 | . 004 | $3.74$ | -0.74 | 0.26 |

Note. $d f=518$, Ent. =Entertainment, Rev. = Revival, St.Se. $=$ Strong Sensation, Div. $=$ Diversion, Dis. $=$ Discharge, Me.Wo. $=$ Mental Work, Sol. $=$ Solace

Table 2 describes significant age differences on Entertainment, Revival, Strong Sensation, Diversion, and Solace and non-significant differences on Discharge and Mental Work. These results indicate that adolescents use music for revival while adults use music for entertainment, strong sensation, diversion and solace.

Table 3
Mean Comparison of Music in Mood Regulation between
Adolescents and Adult Men ( $N=232$ )

| Subscales | Adolescent$(\mathrm{n}=123)$ |  | $\begin{gathered} \text { Adults } \\ (\mathrm{n}=109) \end{gathered}$ |  | t | p | CI 95\% |  | d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LL | UL |  |  |  |
|  | M | SD |  |  | M |  | SD |  |  |  |
| Ent. | 56.12 | 8.32 | 57.12 | 9.35 |  | 0.86 | . 39 | -3.28 | 1.28 | 0.11 |
| Rev. | 55.76 | 8.58 | 59.42 | 9.31 | 3.12 | . 002 | -5.97 | -1.34 | 0.41 |
| St. Se. | 52.03 | 9.58 | 51.38 | 8.92 | 0.53 | . 595 | -1.75 | 3.05 | 0.07 |
| Div. | 54.46 | 6.33 | 54.23 | 7.02 | 0.26 | . 79 | -1.48 | 1.96 | 0.03 |
| Dis. | 49.02 | 8.23 | 52.16 | 9.66 | 2.67 | . 008 | -5.45 | -0.82 | 0.35 |
| Me.Wo. | 41.25 | 9.34 | 44.85 | 8.46 | 3.06 | . 002 | -5.92 | -1.28 | 0.40 |
| Sol. | 55.03 | 8.05 | 58.15 | 9.31 | 2.74 | . 007 | -5.36 | -0.87 | 0.36 |

Note. $d f=230$, Ent. $=$ Entertainment, Rev. $=$ Revival, St.Se. $=$ Strong Sensation, Div. $=$ Diversion, Dis. $=$ Discharge, Me.Wo. $=$ Mental Work, Sol. $=$ Solace

Table 3 describes significant age differences of men on Discharge, Revival, Solace, and Mental Work and non-significant differences on Entertainment, Strong Sensation, and Diversion. It shows that adult men use music more for the purpose of discharge, revival, mental work and solace in comparison to adolescents.

## Table 4

Meann Comparison of Music in Mood Regulation between
Adolescent and Adult Women ( $N=288$ )

| Subscales | Adolescents$(\mathrm{n}=152)$ |  | $\begin{gathered} \text { Adults } \\ (\mathrm{n}=136) \end{gathered}$ |  | t | p | CI 95\% |  | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LL | UL |  |  |  |
|  | M | SD |  |  | M |  | SD |  |  |  |
| Ent. | 55.17 | 9.12 | 54.31 | 9.27 |  | 0.79 | . 43 | -1.28 | 3.00 | 0.09 |
| Rev. | 59.32 | 7.38 | 62.58 | 8.13 | 3.57 | . 001 | -5.06 | -1.46 | 0.42 |
| St. Se. | 52.12 | 8.35 | 51.98 | 7.85 | 0.15 | . 884 | -1.75 | 2.03 | 0.02 |
| Div. | 52.35 | 8.95 | 54.01 | 8.36 | 1.62 | . 106 | -3.68 | 0.36 | 0.19 |
| Dis. | 48.32 | 9.75 | 51.19 | 9.23 | 2.56 | . 011 | -5.08 | -0.66 | 0.30 |
| Me.Wo. | 42.33 | 7.35 | 45.12 | 8.36 | 3.01 | . 003 | -4.61 | -0.97 | 0.36 |
| Sol. | 56.31 | 8.37 | 59.05 | 9.55 | 2.59 | . 010 | -4.82 | -0.66 | 0.31 |

Note. $d f=286$, Ent. =Entertainment, Rev. $=$ Revival, St.Se. $=$ Strong Sensation, Div. $=$ Diversion, Dis. $=$ Discharge, Me.Wo. $=$ Mental Work, Sol. $=$ Solace

Table 4 describes significant differences of women on Discharge, Revival, Solace, and Mental Work and non-significant differences on Entertainment, Strong Sensation, and Diversion. It indicates that adult women prefer music more for the sake of Discharge, Revival, Solace and Mental Work as compared to adolescent women.

Table 5
Mean Comparison of Music in Mood Regulation between Men and Women ( $N=520$ )

| Subscales | $\begin{gathered} \text { Men } \\ (\mathrm{n}=232) \end{gathered}$ |  | $\begin{gathered} \text { Women } \\ (\mathrm{n}=288) \end{gathered}$ |  | t | P | CI 95\% |  | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LL | UL |  |  |  |
|  | M | SD |  |  | M |  | SD |  |  |  |
| Ent. | 50.82 | 6.94 | 52.96 | 10.36 |  | 2.70 | . 007 | -3.70 | -0.58 | 0.24 |
| Rev. | 65.99 | 7.88 | 68.56 | 9.88 | 3.22 | . 001 | -4.14 | -1.00 | 0.28 |
| St. Se. | 54.98 | 8.26 | 56.55 | 8.67 | 2.10 | . 036 | -3.04 | -0.10 | 0.18 |
| Div. | 49.36 | 9.26 | 51.36 | 9.65 | 2.39 | . 017 | -3.64 | -0.36 | 0.21 |
| Dis. | 55.66 | 6.88 | 57.36 | 7.13 | 2.75 | . 006 | -2.92 | -0.48 | 0.24 |
| Me.Wo. | 41.28 | 7.26 | 42.08 | 7.38 | 3.09 | . 002 | -3.27 | -0.73 | 0.27 |
| Sol. | 48.95 | 8.46 | 51.19 | 8.97 | 2.90 | . 004 | -3.76 | -0.72 | 0.25 |

Note. $d f=518$, Ent. =Entertainment, Rev. = Revival, St.Se. $=$ Strong Sensation, Div. $=$ Diversion, Dis. $=$ Discharge, Me.Wo. $=$ Mental Work, Sol. $=$ Solace

Table 5 describes significant gender differences on all subscales of MMR scale. It shows that women of all age group use music more for mood regulation than men.

Table 6
Mean Comparison of Music in Mood Regulation between Men and Women Adolescents ( $N=275$ )

| Subscales | $\begin{gathered} \text { Men } \\ (\mathrm{n}=123) \end{gathered}$ |  | $\begin{gathered} \text { Women } \\ (\mathrm{n}=152) \end{gathered}$ |  | t | p | CI 95\% |  | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LL | UL |  |  |  |
|  | M | SD |  |  | M |  | SD |  |  |  |
| Ent. | 48.63 | 9.32 | 52.78 | 8.98 |  | 2.84 | . 005 | -5.33 | -0.97 | 0.34 |
| Rev. | 45.89 | 8.32 | 50.16 | 9.31 | 3.96 | . 001 | -6.39 | -2.15 | 0.48 |
| St. Se. | 54.32 | 7.21 | 56.45 | 8.68 | 2.18 | . 030 | -4.05 | -0.21 | 0.26 |
| Div. | 49.98 | 9.34 | 50.63 | 8.23 | 0.61 | . 54 | -2.74 | 1.44 | 0.07 |
| Dis. | 45.33 | 8.56 | 44.35 | 9.24 | 0.90 | . 37 | -1.16 | 3.12 | 0.11 |
| Me.Wo. | 41.32 | 9.16 | 40.36 | 8.45 | 1.06 | . 368 | -1.14 | 3.06 | 0.13 |
| Sol. | 58.25 | 7.46 | 61.25 | 8.75 | 3.02 | . 003 | -4.96 | -1.04 | 0.36 |

Note. $d f=273$, Ent. =Entertainment, Rev. = Revival, St.Se. $=$ Strong Sensation, Div. $=$ Diversion, Dis. $=$ Discharge, Me.Wo. $=$ Mental Work, Sol. $=$ Solace

Table 6 describes significant differences on Entertainment, Revival, Strong Sensation, and Solace and non-significant differences on Discharge, Mental Work, and Diversion which indicates that among adolescent women use more music than men.

Table 7
Mean Comparison of Music in Mood Regulation between Men and Women Adults ( $N=245$ )

| Subscales | $\begin{gathered} \text { Men } \\ (\mathrm{n}=109) \end{gathered}$ |  | $\begin{gathered} \text { Women } \\ (\mathrm{n}=136) \end{gathered}$ |  | t | p | CI 95\% |  | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LL | UL |  |  |  |
|  | M | SD |  |  | M |  | SD |  |  |  |
| Ent. | 46.23 | 8.12 | 50.14 | 8.26 |  | 3.71 | . 001 | -5.99 | -1.83 | 0.48 |
| Rev. | 50.45 | 9.45 | 55.23 | 9.32 | 3.96 | . 001 | -7.15 | -2.41 | 0.51 |
| St. Se. | 41.32 | 9.16 | 40.36 | 8.45 | 0.85 | . 40 | -1.26 | 3.18 | 0.11 |
| Div. | 51.32 | 9.31 | 52.03 | 9.44 | 0.59 | . 557 | -3.09 | 1.66 | 0.07 |
| Dis. | 46.55 | 7.55 | 48.13 | 8.45 | 1.52 | . 129 | -3.62 | 0.46 | 0.20 |
| Me.Wo. | 53.15 | 8.32 | 56.34 | 7.32 | 3.19 | . 002 | -5.16 | -1.22 | 0.41 |
| Sol. | 48.25 | 8.23 | 51.30 | 9.13 | 2.70 | . 007 | -5.27 | -0.83 | 0.35 |

Note. $d f=243$ Ent. $=$ Entertainment, Rev. $=$ Revival, St.Se. $=$ Strong Sensation, Div. $=$ Diversion, Dis. $=$ Discharge, Me.Wo. $=$ Mental Work, Sol. $=$ Solace

Table 7 shows significant gender differences on Entertainment, Revival, Mental Work, and Solace, while nonsignificant differences on Discharge, Diversion, and Strong Sensation. It shows that adult women use more music than adult men.

Table 8
Mean Comparison of Music in Mood regulation between Different Levels of Education ( $N=520$ )

| Subscales | $\begin{gathered} H E \\ (\mathrm{n}=220) \end{gathered}$ |  | $\begin{gathered} L E \\ (\mathrm{n}=300) \end{gathered}$ |  | t | p | CI 95\% |  | d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LL | UL |  |  |  |
|  | M | SD |  |  | M |  | SD |  |  |  |
| Ent. | 52.56 | 9.23 | 53.04 | 8.98 |  | 0.60 | . 552 | -2.06 | 1.10 | 0.05 |
| Rev. | 55.45 | 8.52 | 53.23 | 8.33 | 2.99 | . 003 | 0.76 | 3.70 | 0.26 |
| St. Se. | 51.02 | 7.32 | 50.23 | 8.04 | 1.15 | . 251 | -0.56 | 2.14 | 0.10 |
| Div. | 50.98 | 7.11 | 53.98 | 8.34 | 4.31 | . 001 | -4.37 | -1.63 | 0.38 |
| Dis. | 50.55 | 9.40 | 53.23 | 9.30 | 3.23 | . 001 | -4.31 | -1.05 | 0.28 |
| Me.Wo. | 52.15 | 8.12 | 54.04 | 7.36 | 2.77 | . 006 | -3.23 | -0.55 | 0.24 |


| Sol. | 49.05 | 7.36 | 51.13 | 7.35 | 3.19 | .002 | -3.36 | -0.80 | 0.28 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Note. $d f=518$, Ent. =Entertainment, Rev. = Revival, St.Se. $=$ Strong Sensation, Div. $=$ Diversion, Dis. $=$ Discharge, Me.Wo. $=$ Mental Work, Sol. =Solace, HE = Higher educational level, LE = Lowe educational level

Table 8 indicates significant education differences on Diversion, Mental Work, Discharge, Solace, and Revival and nonsignificant differences on Entertainment and Strong Sensation. These results indicate that people of lower education level use more music to regulate mood than people of higher education level.

Table 9
Mean Comparison of Music in Mood Regulation between Different Socio-Economic Status ( $N=520$ )

| Subscales | $\begin{gathered} \operatorname{HSES}(\mathrm{n}= \\ 235) \\ \mathrm{M} \\ \mathrm{SD} \end{gathered}$ |  | $\begin{gathered} \text { LSES (n }= \\ 285) \end{gathered}$ |  | t | p | CI 95\% |  | d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\mathrm{M}^{28}$ | SD |  |  | LL | UL |  |
| Ent. | 40.45 | 9.20 | 44.01 | 9.82 | 4.23 | . 001 | - | - | 0.37 |
|  |  |  |  |  |  |  | 5.21 | 1.91 |  |
| Rev. | 52.65 | 8.23 | 53.63 | 7.98 | 1.37 | . 171 | - | 0.42 | 0.12 |
|  |  |  |  |  |  |  | 2.38 |  |  |
| St. Se. | 59.63 | 8.12 | 57.92 | 7.98 | 2.41 | . 016 | 0.32 | 3.10 | 0.21 |
| Div. | 50.55 | 7.32 | 51.35 | 8.22 | 1.17 | . 241 | - | 0.54 | 0.10 |
|  |  |  |  |  |  |  | 2.14 |  |  |
| Dis. | 52.50 | 9.23 | 53.04 | 8.98 | 0.67 | . 501 | - | 1.03 | 0.06 |
|  |  |  |  |  | 0.67 | . 501 | 2.11 |  |  |
| Me.Wo. | 51.03 | 8.34 | 53.12 | 8.05 | 2.90 | . 004 | - | - | 0.25 |
|  |  |  |  |  |  |  | 3.51 | 0.67 |  |
| Sol. | 56.15 | 8.26 | 54.21 | 7.12 | 3.01 | . 003 | 0.70 | 3.36 | 0.26 |

Note. $d f=518$ Ent. =Entertainment, Rev. $=$ Revival, St.Se. $=$ Strong Sensation, Div. = Diversion, Dis. =Discharge, Me.Wo. = Mental Work, Sol. =Solace, HSES = Higher socioeconomic status, LSES= Lower socioeconomic status.

Table 9 indicates significant SES differences on Entertainment, Mental Work, Solace, and Strong Sensation and non-significant differences on Diversion, Discharge, and Revival. It shows that people with low socioeconomic status use music for entertainment, mental work, and strong sensations, while people with higher socioeconomic status use music for solace.

## Discussion

The present research aimed at exploring the most preferred strategies of mood regulation from 29 categories; the most preferred ways of mood regulation being music listening; and to measure demographic differences on music in mood regulation strategies. The alpha coefficient for the MMR Scale was .879 , while for its subscales it was ranging from .71 to .79 and MMR and its subscales also had good construct validities.

The data analyses revealed through percentages of responses that the most preferred mood regulatory strategies were Music Listening and Watching TV; while least preferred mood regulatory strategy was Drinking Alcohol, which supported the first hypothesis of the current study. These results were consistent with the findings of previous researchers (Karageorghis \& Terry, 1997; Stevens \& Lane, 2001) who found that among athletes, music listening for the regulation of mood is placed in top three mood regulatory strategies.

Music plays an important role in triggering emotions because many listeners use music to regulate their present emotional state. A study conducted by Gallup and Castelli (1989) on the sample of 1007 Americans found that $77 \%$ of the participants used music listening to release themselves from depressed state of mood. Similarly, another study revealed that music not only regulated the emotional state of the individuals but was also helpful in reducing nervousness, stress, fear, and bad mood (Thayer, Newman \& McClain, 1994).

The findings of the present study suggest that people choose music in a very specific way in different emotional situations. Different individuals select different type of music to regulate their emotions. Many studies of neuroscience field have suggested that music is strongly associated with those brain areas that are involved in emotional processing. The selection of different type of music by different people depends on the characteristics of their emotional situation. So, the selection of
different types of music by individuals in different emotional situations is a clear indicator of listeners' attempt to use music to change the state of mood.

The results of the analyses showed that the most preferred strategies of mood regulations through music were Entertainment, Revival, Diversion and Strong Sensation; which proves the second supposition of the current research. These results are consistent with Saarikallio's (2008) findings that people use music mostly for entertainment which alter their bad mood. Both adults and adolescents use music more frequently in their life, specifically for creating desired atmosphere for amusement and entertainment. Most of the people also have skill to play any musical instrument for their own pleasure. Other than that they also use background music to perform their many daily activities, such as during travelling, reading books, playing sports, working on computer, for sleeping, and during doing both, their homework and house chores. In these conditions, preferred music creates positive and happy emotions in individual due to which he/she can perform all those activites easily without getting bored or irritated.

Analysis showed that adults use music more to regulate their mood as compared to the adolescents, which support our third hypothesis of the study. These findings are consistent with the results of Sarikallio and Erkilla (2007) that listening music for mood regulation is increased with age of listener in both genders. A strong association exists between music and age of the listeners, particularly in case of young listeners. In early adulthood, people consume music more because most of their strong experiences of life are related to music; either it reminds them of their marriage, first date, enjoyable traveling tours with friends or amusement with long drive in a pleasant weather.

These findings revealed that a wide variety of moods can be regulated by music. No doubt that most people try to change their negative mood into a positive mood; but sometimes many people decide to produce, continue, and increase the intensity of their negative mood. These people introspect about their feeling by
listening to music that helps them recall their past life events. This downward mood regulation process also has some important functions. It seems that this downward mood regulation is sometimes necessary to communicate their feelings by being sad. In many cases, participants simply reported to enjoy being sad with music. In general observation, it is noticed that people enjoy listening to sad music in order to evoke their old memories. So, music is very useful in mood regulation using different mood regulation strategies, though it is not necessary that we are always aware about of the strategy we use for mood regulation.

Statistical analysis showed that compared to men, women use music more to regulate their mood in all age groups. These results are supported by some previous researchers (North, Hargreaves \& O’Neill, 2000; Sloboda \& O'Neill, 2001) that women prefer music more for regulating their mood than men. A study conducted by Saarikallio (2008a) found that girls use music more for the regulation of their bad mood than boys. Youth's need for music to regulate their mood does not solely depend upon the situation or environmental demands; infact it is also based on the personality factors, family and life history, and attitudes moods and gender.

Current study found that highly educated people use music more for Diversion, Discharge, Solace, and Revival to regulate their mood than people with low education. People with higher education have more mental stress in their life than others, so they use pleasurable music and enjoyable musical activities as a Diversion mood regulation strategy because such music help people forget about the undesired states of tension and stress. In an article, Dolan (2019) claimed that intellectual and educated people always try to deal with new/unfamiliar things for the satisfaction of their intellectual thirst. So, on the basis of this belief, it was assumed that more intelligent and educated people prefer some specific style of music. Researches proved that the most preferred style of music of intelligent people is instrumental music. These
individuals use music cognitively and enjoy after analysing the compositions, lyrics, or admiring musical technique.

Statistical analysis of current study found that people with high socioeconomic status use music more for Entertainment, Mental Work, Solace, and Strong Sensation than people with low socioeconomic status. The role of music as entertainment and pastime activity was especially important when the people were alone and had no activity to pass time in an enjoyable manner.

## Conclusion

The current study found watching TV and listening to music as the most preferred mood regulatory strategies; and explored that the most preferred form of mood regulatory strategy through music were Entertainment, Revival, Diversion and Strong Sensation among both the genders of adults and adolescents. In addition, gender, age, socioeconomic status, and educational level of the listeners was also found to have a significant role in selecting music for the regulation of their mood. The findings of the current study can be used for developing different mood regulatory strategies.

## Limitations and Implications

The present study was conducted only on adolescents and adults while neglected other age groups and studied only age, gender, socioeconomic, and educational differences in music preference for mood regulation while other demographic variables were not studied. Another limitation of the current research is that it did not give information on interaction effect of demographic variables; it only gave comparative differences on the basis of demographics. So, next researcher may also try to find out the interaction effect.

The findings of the present study have direct implications for the social functions of music. Individuals use their music preferences as a badge to convey information about themselves to others. This way of self-expression allows individuals to connect
with others and get their needs met by enabling them to bring others to see them as they see themselves.

## References

Anyanwu, E. G. (2015). Background music in the dissection laboratory: Impact on stress associated with the dissection experience. Advances in Physiology Education, 39, 96-101.
Ashley, R. \& Durbin, E. (2006). Music preferences, music listening, and mood regulation in pre-adolescence. Proceedings of the $9^{\text {th }}$ International Conference on Music Perception and Cognition, August, 22-26, Bologna, Italy.
Baltazar, M., \& Saarikallio, S. (2016). Toward a better understanding and conceptualization of affect selfregulation through music: A critical, integrative literature review. Psychology of Music. $0305735616663313 \mathrm{v1}-$ 305735616663313
Barrett, M. S., \& Bond, N. (2015). Connecting through music: The contribution of a music programme to fostering positive youth development. Research Studies in Music Education, 37, 37-54.
Blais-Rochette, C., \& Miranda, D. (2016). Music-evoked autobiographical memories, emotion regulation, time perspective, and mental health. Musicae Scientiae, 20, 2652.

Boer, D., \& Fischer, R. (2012). Towards a holistic model of functions of music listening across cultures: A culturally decentred qualitative approach. Psychology of Music, 40(2), 179-200
Chamorro-Premuzic, T., Swami, V., Furnham, A., \& Maakip, I. (2009). The Big Five personality traits and uses of music: A replication in Malaysia using structural equation modeling. Journal of Individual Differences, 30(1), 20-27

Dolan, E. W. (2019). More intelligent individuals are more likely to enjoy instrumental music, study finds. Retrievd from https://psypost.org/2019/05/more-intelligent-individuals-are-more-likely-to-enjoy-instrumental-music-study-finds53723

Eisenberg, N. \& Spinrad, T. L. (2004). Emotion-related regulation: Sharpening the definition. Child Development, 75 (2), 334339.

Franco, F., Swaine, J. S., Israni, S., Zaborowska, K. A., Kaloko, F., Kesavarajan, I., \& Majek, J. A. (2014). Affect-matching music improves cognitive performance in adults and young children for both positive and negative emotions. Psychology of Music, 42, 869-887.
Gallup, G., Jr., \& Castelli, J. (1989). The people's religion. New York: Macmillan.
Garrido, S., \& Schubert, E. (2015). Moody melodies: Do they cheer us up? A study of the effect of sad music on mood. Psychology of Music, 43, 244-261.
Greasley, A. E. \& Lamont, A. M. (2006). Music preferences in adulthood: Why do we like the music we do? Proceedings of the $9^{\text {th }}$ International Conference on Music Perception and Cognition, August 22-26, Bologna, Italy.
Gross, J. J. (1998). Sharpening the focus: Emotion regulation, arousal, and social competence. Psychological Inquiry, 9(4), 287-290.
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, 122-137.
Hays, T. \& Minichiello, V. (2005). The meanings of music in the lives of older people: A qualitative study. Psychology of Music, 33, 437-451.
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.

Juslin, P. N., \& Sloboda, J. A. (2001). Music and emotion: Theory and research. New York: Oxford University Press.
Karageorghis, C. I., \& Terry, P. C. (1997). Psychophysical effects of music in sport and exercise: A review. Journal of Sport Behavior, 20, 54-68
Kuntsche, E., Le Mével, L., \& Berson, I. (2016). Development of the four-dimensional Motives for Listening to Music Questionnaire (MLMQ) and associations with health and social issues among adolescents. Psychology of Music, 44, 219-233.
McFerran, K. S. (2016). Contextualizing the relationship between music, emotions and the well-being of young people: A critical interpretive synthesis. Musicae Scientiae, 20, 103121.

McFerran, K. S., Garrido, S., \& Saarikallio, S. (2016). A Critical Interpretive Synthesis of the Literature Linking Music and Adolescent Mental Health. Youth \& Society, 48, 521-538.
Miranda, D., Blais-Rochette, C., Vaugon, K., Osman, M., AriasValenzuela, M. (2015). Towards a cultural-developmental psychology of music in adolescence. Psychology of Music, 43, 197-218.
North, A. C., Hargreaves, D. J., \& O’Neill, S. A. (2000). The importance of music to adolescents. British Journal of Education Psychology, 70, 255-72.
Parkinson, B. \& Totterdell, P. (1999). Classifying affect regulation strategies. Cognition \& Emotion, 13, 277-303.
Parkinson, B., Toterdell, P., Briner, R. B. \& Reynolds, S. (1996). Changing moods: The psychology of mood and mood regulation. New York: Addison Wesley.
Saarikallio, S. (2007). Music as mood regulation in adolescence. University of Jyvaskyla.
Saarikallio, S. H. \& Erkkila, J. (2007). The role of music in adolescents' mood regulation. Psychology of Music, 35 (1), 88-109.

Saarikallio, S. H. (2008a). Music in mood regulation: Initial scale development. Musicae Scientiae, 12(2), 291-309.
Saarikallio, S., Nieminen, S., \& Brattico, E. (2013). Affective reactions to musical stimuli reflect emotional use of music in everyday life. Musicae Scientiae, 17, 27-39.
Sarrikalio, S. H. (2008). Mood regulation: Initial scale development. Psychology of Music, 35(1), 175-1189.
Sloboda, J. A. \& Juslin, P. N. (2001). Psychological Perspectives on Music and Emotion. In P. N. Juslin, \& J. A. Sloboda (Eds), Music and emotion: Theory and research, pp. 71104. New York: Oxford University Press.

Sloboda, J. A. \& O’Neill, S. A. (2001). Emotions in everyday listening to music. In P. N. Juslin, \& J. A. Sloboda (Eds), Music and emotion: Theory and research, pp. 71-104. New York: Oxford University Press.
Stevens, M. J. \& Lane A. M. (2001). Mood-regulating strategies used by athletes. Athletic Insight: The Online Journal of Sport Psychology, ISSN 1536-0431.
Subohi, A. (2006, November 20). Defining income groups. The Dawn News. Retrieved from http://www.dawn.com/news/219652/defining-incomegroups
Swaminathan, S. \& Schellenberg, E. G.(2015). Current Emotion Research in Music Psychology. Emotion Review, 7, 189197.

Thayer, R. E., Newman, J. R., \& McClain, T. M. (1994). Selfregulation of mood: Strategies for changing a bad mood, raising energy, and reducing tension. Journal of Personality \& Social Psychology, 67(5), 910.
Thomson, C. J., Reece, J. E., \& Benedetto, M. D.(2014). The relationship between music-related mood regulation and psychopathology in young people. Musicae Scientiae, 18, 150-165.


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