The role of music in adolescents' mood regulation
Suvi Saarikallio and Jaakko Erkkilä
Psychology of Music 2007; 35: 88
DOI: 10.1177/0305735607068889

The online version of this article can be found at:
http://pom.sagepub.com/cgi/content/abstract/35/1/88
The role of music in adolescents’ mood regulation

SUVI SAARIKALLIO AND JAAKKO ERKKILÄ
UNIVERSITY OF JYVÄSKYLÄ, FINLAND

ABSTRACT The aim of this study was the exploration and theoretical clarification of the role of music in adolescents’ mood regulation. The phenomenon was approached through an inductive theory construction. The data were gathered from eight adolescents by means of group interviews and follow-up forms, and were then analysed using constructive grounded theory methods. The analysis resulted in a theoretical model, which describes mood regulation by music as a process of satisfying personal mood-related goals through various musical activities. The general nature of the mood regulation is described, the goals and strategies of mood regulation are examined, and finally the specific role of music in mood regulation is discussed.

KEYWORDS: adolescence, emotion regulation, grounded theory, mood, mood regulation, music

Aim and approach of the study

Affective experiences are shown to be central reasons for music consumption and musical activities (DeNora, 1999; Laiho, 2004; North et al., 2000; Roe, 1985; Sloboda and O’Neill, 2001; Wells and Hakanen, 1991; Zillmann and Gan, 1997). However, the study of emotion has not been central to music psychology. Despite the recent growth of interest in the area, our understanding of the psychological functions of the emotional experiences of music is still conceptually diverse and theoretically unstructured. Researchers have engaged in investigating emotional functions of music in everyday life but there is a serious lack of theoretical grounding of the empirical results. Sloboda and Juslin (2001) argue that theoretical development on emotional experiences of music has been hindered by the complexity of the phenomenon, and the reluctance of music psychologists to turn to emotion psychology for theoretical guidance.
The purpose of the present study was to rise to the challenge of theory development, and deepen the theoretical and conceptual understanding of the emotional functions of music. Mood regulation, a central psychological process related to emotions, was chosen as the main focus of the study, and the aim was to find a theoretical clarification of the mood regulatory processes. Adolescence was considered an important age period for studying music in mood regulation. Music has a strong relevance, particularly for young people: adolescents consume music to a great extent and consider music an important part of their lives (Christenson and Roberts, 1998; Christenson et al., 1985; North et al., 2000; Zillmann and Gan, 1997), and most of the Strong Experiences Related to Music (SEM) occur in adolescence and early adulthood (Gabrielsson and Lindström Wik, 2003). Youth is also a transitional period with many developmental challenges, which may cause emotional unrest and increased demands for mood regulation (Halle, 2003).

The approach of the study was fundamentally psychological in the sense that the aim was to discover internal explanations for human behaviour. The underlying assumption was that engagement in music is a goal-oriented activity of the psyche, whether or not individuals are consciously aware of it. The study aimed at understanding the role of music as a part of the psychological functioning of the individual. This perspective reflects the ideas of John Blacking (1973), who stressed that music must always be understood in relation to the individual and the social environment. Similarly, Sloboda and Justlin (2001) have argued that there is an urgent need in the field of music and emotion to focus on the interaction between the person, the music and the context. Considering music as a resource for satisfying personal needs in everyday life is also one of the current interests of music sociology (DeNora, 2001), and this perspective is comparable to the ‘uses and gratifications’ approach, which studies individuals as active agents who use media for their personal needs (Arnett, 1995; Arnett et al., 1995; DeNora, 2001).

**Defining issues of mood regulation**

Mood regulation refers to processes directed towards modifying or maintaining the occurrence, duration and intensity of both negative and positive moods (Cole et al., 2004; Eisenberg and Spinrad, 2004; Gross, 1998; Parkinson et al., 1996). There is a wide range of various behaviours that can be applied to regulating mood. For instance, Parkinson et al. (1996) identified over 200 different regulatory strategies. Regulation of moods and emotions may or may not be conscious, and may be targeted at different aspects of emotions: behavioural expression, subjective experience, or physiological responses (Gross, 1998).

Moods are generally differentiated from emotions by their longer duration and lack of specific cause (Gross, 1998; Oatley and Jenkins, 1996; Parkinson...
et al., 1996). In addition, moods are considered to be indicators of internal states and bias cognition, whereas emotions are thought to reflect environmental states and bias action (Gross, 1998; Larsen, 2000a). Gross (1998) differentiates mood regulation from emotion regulation as being more about experience than behaviour. In the current study, the term ‘mood regulation’ was chosen rather than ‘emotion regulation’ because the data were more relevant to regulating undifferentiated mood states and subjective experiences rather than regulating behaviour, or specific emotional responses to specific events.

Music has been acknowledged to be a mood-regulatory behaviour. Some studies on general mood regulation have identified listening to music as a regulatory strategy (Parker and Brown, 1982; Rippere, 1977; Silk et al., 2003; Thayer et al., 1994), and many studies on music have reported mood regulation to be among the most important reasons for music consumption (Christenson and Roberts, 1998: 47–9; DeNora, 1999; Laiho, 2002, 2004; North et al., 2000; Roe, 1985; Sloboda and O’Neill, 2001; Wells and Hakanen, 1991). The use of music in emotional management is acknowledged in much empirical research. However, there is little research that has tried to theorize these findings and specifically identify all the different regulatory processes. Also, general theories of mood regulation have received little attention in music research.

**Description of the research process**

Exploration of a complex and conceptually vague phenomenon required an inductive approach. The data were gathered by means of group interviews and follow-up forms, and analysed using constructive grounded theory methods. The concept of mood regulation provided a theoretical framework and a point of comparison for the empirically constructed theory.

**INFORMANTS**

Eight Finnish adolescents participated in the study. The selection of the informants was based on purposive sampling (Saunders et al., 2003: 175), with the aim of finding informative cases and enabling a selection of heterogeneous informants in terms of age, sex and musical background. The informants were divided into two age groups: a group of 14-year-olds, and a group of 17-year-olds. Both groups consisted of two girls and two boys. The sample included adolescents who were active music makers as well as those who just liked to listen to music.

**DATA COLLECTION PROCEDURES**

Both groups had two interview sessions, which lasted about one and a half hours each. The first sessions focused on musical activities, situations, musical
tastes and experiences. Each adolescent brought along one recording of personal importance, the meanings of which were discussed. There was one week between the sessions, during which the informants completed a follow-up form each time they engaged in a musical activity. In total, 120 forms were completed. The form consisted of three parts: describing the musical situation; describing the affective experience in terms of pleasantness and energy level; and reflecting on the affective experience. The adolescents were instructed to consider possible changes in their mood state. In the second-interview sessions, these kinds of experiences were discussed, and the interviews focused more thoroughly on mood-related experiences, mood-regulation issues and motivational factors.

The study sought to gather rich, extensive data. Semi-structured and in-depth interviews are good methods for finding new insights and reaching subjective experiences and meanings. The group discussions were highly productive, since the atmosphere was confidential, a variety of points of view emerged, and the participants were able to challenge each others’ views (Saunders et al., 2003: 270). Some general topic areas had been devised beforehand, but the nature of the interaction was fundamentally non-directive, and the interviewees were given the opportunity to talk freely about their experiences. The follow-up form was employed to ensure validity through triangulation. It provided a more private way of expressing experiences. Sloboda and O’Neill (2001) argue that the diversity of musical experiences may not be captured in retrospective studies such as interviews. The follow-up form was used to reach the mundane unfolding situations of daily occurrences with music. Retrospective data are also vulnerable to memory loss. However, that was not a problem in the current study. A deliberate concentration on those issues that were memorized actually served the purpose of tracking significant personal meanings.

GROUNDED THEORY AS ANALYSIS METHOD

Grounded theory was chosen as the analysis method since it is specifically designed for inductive theory construction, and helps to achieve an understanding that is highly abstract but also profoundly grounded on the empirical data (Charmaz, 2003a, 2003b). Even though the framework focused the analysis on regulatory processes, the emergent theory was inductively constructed from the experiences of the informants and topics that emerged as significant themes in the data. As part of the grounded theory, the approach of the current study mostly resembles the constructivist approach proposed by Charmaz (2003a, 2003b). Constructivist grounded theory aims at an interpretative understanding of subjects’ meanings. It assumes the relativism of multiple social realities and recognizes the mutual creation of knowledge by the viewer and the viewed. The resulting model of the current study is, thus, a construction of the subjects’ portrayals of their experiences and the researcher’s interpretations of them.
Theory development started with line-by-line coding, and evolved to a selective or focused phase of using the most significant codes to synthesize the data. Axial coding, defined by Charmaz (2003b) as specifying categories and finding links between them, was also used. Making comparisons at each level of analytic work is characteristic to grounded theory (Charmaz, 2003a, 2003b), and the reasons for shared and unequal elements between codes and categories were explored. Each adolescent was also considered as an individual case, and compared to others. The theory development reached the formal analysis through memo-writing (Charmaz, 2003a, 2003b), which moved the analysis beyond individual cases towards defining patterns. The circumstances and preconditions, properties, characteristics and consequences of different mood regulation processes were explored. It was only at this point that the hierarchical structures and causal relationships started to emerge, and the different components started to find their place as a part of the whole. Saturation in grounded theory means saturation of categories. Even though the number of the informants was small, the amount and richness of data appeared to be plentiful. The analysis reached its end when the abstract categories seemed to be able to cover and accurately explain the underlying quality of the empirical data, the properties of the categories had been identified, the categories were situated in larger processes and the theory seemed to fit the data.

Results: a model of mood regulation by music
The analysis resulted in a theoretical model of mood regulation by music in adolescence. The model describes mood regulation as a process of satisfying personal mood-related needs by musical activities. In what follows, the general nature of the process is first discussed and then the regulatory goals and strategies are described in more detail. The whole regulatory process is demonstrated in Figure 1.

PERSONAL NEEDS DETERMINING THE CHOICE OF MUSIC
The use of music in mood regulation was determined by specific needs that stem from various personal factors, including mood. The adolescents said that they did not usually choose to play, sing, or listen to music in order to achieve specific goals. However, they did have a sense of what kind of music they thought they needed at a given moment. Thus, on the whole the choices of music were not consciously intentional but still strongly based on specific mood-related needs. An excerpt of one of the discussions illustrates this:

Eric: I have never thought why I really listen to a certain kind of music at a particular moment . . . I think it happens regardless of a conscious decision about what music to play, so it doesn’t go: now I’m depressed, now I will choose a really positive song . . . You just do it like . . . I just choose something that reflects how I feel.

Alice: But somehow in your head it’s clear that this is the kind of music you need right now.

Adolescents’ personal need for music was based on their mood, attitudes and experiences concerning the situation and activities taking place around them and the company of other people. For example, the adolescents chose different music for relaxing in their room, sporting activities, or for dancing at parties. They might always listen to a specific band when they felt depressed. The most important mood-related goals seemed to differ between individuals according to their personalities and the life events they had encountered. Thus, the mood-regulatory goals seemed to reflect not only situational and mood-related demands, but also personality, life history and gender-specific or age-related needs.

CHARACTERISTICS OF REGULATORY MUSIC
All kinds of musical activities, from listening to music to writing songs, were employed for achieving mood-related goals. It is important to note that listening seemed to fit all the regulative purposes, which implies that music may also be an important means for mood regulation for those adolescents who just listen to music. There were, however, some essential requirements for the activity to be able to satisfy adolescents’ needs. First, the musical activity had to be voluntary. Since the endeavour to regulate mood was based on personal goals, the satisfaction of these goals was guaranteed only by personally pursuing them in self-selected ways. The adolescents appreciated
freedom in their choice of playing, wanted to make their own decisions about the kind of music and volume levels of the music they listened to, and aimed to engage with music because they felt like doing so, not because they should. Second, the music somehow had to fit the current mood state and energy level. The adolescents preferred different kinds of music for different moods, and one criterion for good music, according to them, was that the music should fit several different moods and situations. The emotional fit of the music was partly defined by the prevailing subjective experience: current feelings, previous experiences and situations had an impact on how the music was interpreted. Thus, the ambiguity of music provided possibilities for using the same music to satisfy different needs.

REGULATED ELEMENTS OF A MOOD STATE

The data were mostly about regulating subjective feeling experiences. Music had a strong impact on the adolescents through atmosphere creation. They repeatedly mentioned how background music created the desired feeling either in solitude or in social situations. In addition, music was able to create particularly strong affective experiences, and deeply touch their inner feelings. Musical activities seemed to regulate at least three elements of subjective experiences: valence, intensity and clarity. Music had a profound impact on valence mainly by strengthening positive feelings and helping to move away from negative feelings. Music also regulated the intensity of the affect, the experience of how strongly and intensely the mood was felt. Music typically increased the intensity. The adolescents often wanted to listen to mood-congruent music and to become immersed with their feelings and sensations created by music. Music also affected the clarity of the experience by giving form to different feelings. The adolescents felt that sometimes music helped them to clarify their thoughts, and somehow made their feelings more comprehensible.

The regulatory processes in the data were not limited to subjective feelings, and many implications for music’s influence on physiological processes also emerged. Music was an effective means for changing energy levels, providing thrills, and inspiring dancing and movement. The adolescents also sometimes preferred to listen to music at a high volume in order to feel it strongly in their bodies. The physiological components of musical experiences were an inseparable part of mood regulation. For example, lifting spirits and getting energy from music were typically blended as a single regulatory act. Music could also be considered as a way of regulating behavioural emotional expression in the sense that it provided an optional means for it. Music promoted self-expression of feelings, and gave form to emotions varying from anger to elation.
MAIN GOALS FOR REGULATION: CONTROLLING MOOD AND FEELING GOOD

Music proved to be an extremely multifaceted means for mood regulation. Two main goals and seven subgoals for regulation emerged from the analysis. The goals were hierarchically ordered since all the subgoals seemed to promote the attainment of the main goals. In a sense, the subgoals served as strategies for reaching the main goals. The two main goals identified in the analysis were the need for controlling one’s own feelings, and the desire to feel good or better, and they were labelled ‘mood control’ and ‘mood improvement’, respectively. Music seemed to have an outstandingly strong effect on mood improvement: as long as the musical activity was self-selected, it always seemed to make the adolescents feel better and change their mood in a positive direction. The effect of music on mood improvement was clearly expressed by all the informants. Here is a comment from Betty:

Betty: In my opinion, music is never lousy. So that at least I always get really happy because of it.

There were some temporary exceptions to this pattern. When the adolescents were using music to reflect on or vent negative feelings, the music temporarily strengthened the existing negative feeling and sometimes made the adolescents feel even worse. However, eventually, these processes helped the adolescents to get rid of their negative moods, and made them feel better.

Another main goal appeared to be a need to control and self-determine one’s mood. Mood control was implicit in the experiences of the informants but this was only discovered after a deeper analysis and interpretation of the tacit meanings behind the statements. It was reflected, for example, in attempts to take control over one’s own emotional reactions when trying to calm down by listening peaceful music, by attempts to make sense of one’s own thoughts and feelings through mental processes, and by attempting to fit mood and energy levels to situational demands. In fact, all actions of mood regulation could be considered as attempts to control and self-determine current mood to suit different personal and contextual needs. Eric talked about how he chose music:

Eric: I think you can select in a way for different moods and stuff when you listen to certain kinds of music. So that, I have kind of an ‘evening playing list’ that I put on a computer and let it play, and then, well, there are some ‘lifting up lists’ [laughs] . . . No, but in principle on this basis . . . You can in a way control it by yourself.

REGULATORY STRATEGIES

The seven emergent regulatory strategies reflect patterns of employing music to satisfy mood-regulatory goals and needs. The characteristics of each strategy are now examined and are also summarized in Table 1.
Bill: I have a habit of listening to music whenever I’m in my room, and it’s nice to let the music play in the background while doing chores.

Music surrounded the adolescents almost all the time, creating the desired atmosphere and offering leisure and amusement. The adolescents often played or sung just for their own pleasure. They used background music to accompany almost all activities, such as reading, travelling, playing sports, visiting friends, chatting on a computer, doing housework or homework, and even sleeping. Preferred music created positive feelings, and made uninteresting and irritating chores, such as doing the dishes, homework, or vacuum-cleaning, much more tolerable and less boring. Helen commented:

Helen: If I’m cooking or something like that, then I listen to music, or sing or . . . It somehow gives you a better feeling because you don’t necessarily like to do the dishes or something, which is a quite brainless task as such, so it’s much nicer if you listen to music.

### Table 1: The characteristics of the regulatory strategies

<table>
<thead>
<tr>
<th>Regulatory strategy</th>
<th>Typical mood before</th>
<th>Typical musical activity</th>
<th>Typical social situation</th>
<th>Typical changes in mood</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTERTAINMENT</td>
<td>No specific moods, sometimes boredom</td>
<td>Mainly listening, music is usually in the background</td>
<td>Mostly alone but also with others</td>
<td>Lifting up spirits, maintaining positive mood</td>
</tr>
<tr>
<td>REVIVAL</td>
<td>Stress and treadmill, need for relaxation, need for energy</td>
<td>Mainly listening, but also singing, playing, writing songs ...</td>
<td>Mostly alone but also with others</td>
<td>Feelings of reviving, relaxing, and getting energy</td>
</tr>
<tr>
<td>STRONG SENSATION</td>
<td>No specific moods</td>
<td>Any kind of musical activity, involvement is strong</td>
<td>Both alone and with others</td>
<td>Intensity and attention become stronger, sometimes thrills</td>
</tr>
<tr>
<td>DIVERSION</td>
<td>Anger, sadness, ‘depression’, stress, disruptive and annoying thoughts</td>
<td>Listening, singing, playing, music is happy and pleasant</td>
<td>Both alone and with others</td>
<td>Forgetting about current negative mood</td>
</tr>
<tr>
<td>DISCHARGE</td>
<td>Anger, sadness, and ‘depression’</td>
<td>Mainly listening, sometimes playing, music is aggressive or sad</td>
<td>Alone</td>
<td>Music gives form to the expression of current negative mood</td>
</tr>
<tr>
<td>MENTAL WORK</td>
<td>Issues that require thinking, like personal conflicts, on mind</td>
<td>Listening, writing songs</td>
<td>Alone</td>
<td>Music promotes imagery, insights, clarification and reappraisal of experiences</td>
</tr>
<tr>
<td>SOLACE</td>
<td>Sad and troubled</td>
<td>Listening, attention to lyrics</td>
<td>Alone</td>
<td>Feeling understood and comforted</td>
</tr>
</tbody>
</table>
The role of music as entertainment and pastime was especially important when the adolescents were alone. It offered them variety and stimuli. The adolescents felt that they needed music almost constantly in the background to prevent silence and boredom. Often, listening to music helped the adolescents to achieve a more energetic and happier mood when they were preparing to leave for school or for an evening out. Music also had an important role in creating atmosphere in different social situations by providing background, creating a relaxed mood, or stimulating dancing. Jeff described:

Jeff: If you listen to some jazz, like background music . . . It’s just fun in some bar if there’s a lot of dust, and jazz on in the background, it’s cool.

REVIVAL
Sarah: After school, it’s fun and energizing to listen to music [after a long day at school] and to relax one’s neck muscles.

Music provided the adolescents with relaxing, energizing and revitalizing experiences. Music was often used for relaxation in the evenings and providing energy in the mornings. Some of the adolescents even felt that they could not get to sleep without the help of relaxing and sedating music. Very often, music helped to relax and provide energy simultaneously. In essence, music served as a recreational activity, as a means of personal renewal. It helped the adolescents to get new energy after a tough school day or some kind of dynamic activity. It often offered a reviving break from homework. A typical way of relaxing was to listen to favourite music while lying alone in bed:

Helen: I had been shopping for six hours and then I came home and wanted to relax, so I put the music on and went to lie in my bed.

Playing and singing were also considered to be strongly reviving activities. They served as a refreshing counterbalance for schoolwork, and helped the adolescents to enjoy themselves. Musical activities lifted spirits, cheered up the adolescents, made them feel better, and gave them energy and strength for continuing their tasks. Here is an excerpt from Alice:

Alice: It was wonderful, after a long time, to sing the songs I used to sing every day some years ago. My feelings improved adequately so that I got the energy to go somewhere. [Musical activity: I sung Killer’s songs with all my heart. I hope the neighbours weren’t at home.]

STRONG SENSATION
Toni: It [music] is life . . . you start living when there’s music. Because to live without music, there would be nothing . . . without music there would be no feelings in life, in a way . . . It is so that . . . you like visit this world, and it’s the sugar on the top.
The adolescents seemed to search for strong emotional experiences from music. They really enjoyed surrendering to the feelings, thrilling sensations and feeling deep emotions. Music was a way of reaching powerful enjoyment, excitement and pleasure; to live life to the fullest. Sometimes the strong sensations were evoked by aesthetic enjoyment, by listening to music that sounded really good. Favourite songs and the voice of a singer seemed to affect the adolescents most strongly. Intensely pleasurable experiences were also reached by singing or playing. Sometimes, when everything went right, playing could be a really enjoyable, flowing experience of effortless and concentrated involvement, as in Eric’s description:

\[ \text{Eric: We played Faith No More's famous song ‘Easy Like a Sunday Morning’, and we made a bit different version of it, and it was a really enjoyable and exciting experience. It started right away, it started to roll on from the beginning, the song, you did not have to make the song roll, it just started by itself.} \]

The adolescents talked about moments when they were so concentrated on the music that they didn’t hear if someone called them. While listening, playing, or singing they could fling themselves into the music, put their soul into it. Deep concentration and inhibited expression was easiest alone. Some strong experiences from parties and concerts also came up, and there the aesthetic pleasure was mixed with the atmosphere created by the context, location, and crowd. One way of getting powerful sensations was performing. Those who liked performing said that they enjoyed not only the success and positive feedback, but also the excitement, the surge of adrenalin before the performance. Performing was important to Helen, and she tried to describe why:

\[ \text{Helen: It is the feeling. Although you sometimes screw it up totally, I'm sure that I'll screw up tomorrow . . . but it is just the feeling. Somehow just the excitement before it, and then, when you get to the stage, you just forget the anxiety, and then it's somehow . . . You can’t explain it.} \]

DIVERSION

\[ \text{Jeff: I listen to peaceful music when I’m angry.} \]

Pleasurable music and enjoyable musical activities helped the adolescents to forget about undesired states of mind. The adolescents said that they played, sung, or listened to music when they wanted to distract themselves from school work and stress. Music also facilitated a detachment from emotional preoccupations and worries. Some of the adolescents said that they preferred listening to peaceful or cheerful music when they felt angry, irritated or sad, and the music helped them to calm down, or lift their spirits. Sarah commented:
Sarah: If you’re in a terribly depressed mood, then, in my view, it’s much nicer to start listening to something uplifting.

The adolescents said that when there was silence their minds easily started straying. Music filled the silence, and helped the adolescents to forget about disturbing feelings and thoughts that kept going round and round in their heads. Betty described:

Betty: I listen specifically to the music, so that I never ponder on some other stuff. And that is the very point of it, why I listen to music at night, because then, like, all other thoughts kind of get away from me, so that I can get to sleep better.

DISCHARGE
Alice: Somehow you like discharge the aggression to it [aggressive music], so that you don’t have to do anything aggressive yourself.

Music was a way of expressing and releasing emotions. The adolescents reflected that their emotions to music somehow represented their inner state. Listening to heavy metal or other aggressive music at a high volume seemed well suited to venting anger. Betty said that in solitude she might accompany listening with shouting. Emotions could also be released through playing. Drumming, for example, was considered a releasing activity for discharging emotional pressure. Music gave form to negative emotions, helped the adolescents to release them and made them feel better. Sarah commented:

Sarah: You always get, when you’re depressed, a strong need to listen to even more, so that you start feeling even worse, kind of amazingly, so that you can release it then, so that it gets released in the end. But then, on the other hand, in the end I put on something really uplifting, like, kind of as a joke, I can put some Gimmel or Tiktak on.

Music was an effective way of releasing anger, but also sadness and depression. Music worked as a reflective surface through which sad emotions could be expressed. After this release, the adolescents could turn to listening to something more uplifting. In addition to helping to expel negative feelings, music was also a way of expressing them to others. For example, the adolescents could express their annoyance with their parents by playing, at a high volume, some aggressive music their parents hated.

MENTAL WORK
Sarah: I calm down in the evenings, before going to sleep, by listening to music, and at the same time, I think about stuff that has happened during the day because after I’ve thought that through, then, I can get to sleep, that now these are worked out.
Music encouraged and facilitated mental imagery and contemplation. In addition to the music, the lyrics also seemed to be of importance in arousing thoughts, ideas and feelings. The adolescents appreciated songs that concerned issues they considered meaningful. Songs could give them new ideas and insights into different issues. Music often aroused affective memories of past experiences. Certain songs brought back memories of certain times, places and people. Music also promoted daydreaming, such as imagining being the singer of the song, a great star, performing to an audience. Music also enhanced pondering on desires and expectations for the future. Alice described listening to a disc that included all her favourite songs:

Alice: All the good memories come to my mind when I listen to the songs on that disc. In the evening I listened to it by myself, and in addition to the past also the future came to my mind because on the disc there are songs that reflect the world I hope to enter in one year’s time.

Music not only aroused thoughts and feelings, but also provided a framework for reflecting on them. Music served as a surface onto which personal experiences could be projected. While listening to music, the adolescents contemplated on issues like falling in love, things that had happened during the day, or some major events in their lives. For example, when we discussed lyrics that the adolescents felt were good or memorable, Sarah, who had recently lost her friend, mentioned a song that metaphorically described the death of a young girl. Music helped the adolescents to confront and clarify their thoughts and feelings, and to work through personal problems and inner conflicts. This reflective mental work provided the adolescents with a deeper understanding of their unsettling thoughts, and improved their self-knowledge. One effective way of dealing with personal issues was writing one’s own songs. Helen, for example, said:

Helen: If I write lyrics, I have really a lot of personal stuff in it. Sometimes they become such that you couldn’t possibly publish them because they are too, like, private. But they often do speak at least in some way about my own life.

Interviewer: What kind of topics do you have in them?
Helen: Well, especially, if I have some terrible problem, I just have to make a song about it. Otherwise, I can’t get over it, or something like that.

SOLACE
Alice: They are the singer’s personal stuff, what he has written there. Even though the whole song is not like completeness or you don’t understand the words, but then there is one sentence you do understand. And then when you feel that I have experienced so much the same as him, then they kind of fit into my life, too, and then like comfort in some way.
Music seemed to offer comfort in times of sorrow and trouble. The adolescents often felt they could identify with the lyrics. They felt that the songwriter had faced up to feelings, worries and experiences similar to their own, and that made them feel understood and comforted. The music told them that their worries were not their burden alone: the experience was shared with the songwriter. Identification with the lyrics was often due to the adolescents’ own interpretations of them; they found what they needed to find from the lyrics. Music could also offer consolidation by arousing memories of happy situations and close friends. It provided the adolescents with a feeling of connection to significant things. Sarah, for example, found solace by listening to songs that brought back happy memories of her lost friend:

**Sarah:** Basically it [a CD] is the one that we played as replay all summer. When we were out somewhere, we always had the player with us.

**Interviewer:** Has it helped you to listen to that disc?

**Sarah:** Yeah, it has, in a way. It brings back all the good memories to my mind basically, what we had, and all that.

**Discussion**

The strength of qualitative research lies in its ability to explore relationships, processes and overall impressions. This study succeeded in providing a theoretical clarification of the complex mood-regulatory functions of music. The regulatory goals and strategies were identified, and music’s role in individuals’ self-regulatory behaviour was clarified. Many similarities exist between the processes of the constructed model and the processes found in previous literature. The model seems to gain support from studies of both music research and mood regulation research.

**Evaluating the Main Goals**

Mood improvement emerged as an important regulatory goal. The need for mood improvement and positive affect is comparable to hedonic motivation, which has been recognized as a major goal for mood regulation (Larsen, 2000a, 2000b; Tice and Bratlawsky, 2000; Tice and Wallace, 2000; Zillmann, 1988a, 1988b). The data also included instances where negative mood was temporarily maintained or even increased. Larsen’s (2000a) discussion of delayed hedonic gratifications may have explanatory value for these processes. He proposes that some activities that do not improve mood immediately may still be considered to promote happiness in the long run. Reflecting on a sorrowful experience when listening to sad music may increase melancholy in the short term but increase happiness and well-being in the long term by helping the listener to gain understanding and clarification of the experience. The apparent discrepancy between hedonism and
maintaining bad moods has also been considered just to reflect the fact that hedonism is not an exclusive goal for self-regulation (Larsen, 2000b; Tice and Wallace, 2000). Sometimes, other personal goals may dominate behaviour or situational factors may change standards for the desired mood. For example, after the death of a pet, it is quite appropriate to experience negative moods for a while.

Another main goal for mood regulation by music was mood control, which reflects the need for self-determination of personal mood states, the ability to voluntarily experience preferred moods and aim to achieve them. This process is fundamentally related to the whole framework of self-regulation. It has parallels with the control or system theory model of mood regulation, which considers mood regulation as an attempt to minimize discrepancies between the current state and the desired state (Hoeksma et al., 2004; Larsen, 2000a). Mood control also resembles the concept of self-determination. Vuorinen (1990: 141–50) argues that the need to experience one’s own emotions as voluntary and unforced is an essential part of self-determination and self-regulation. This aspect also relates mood control to the experiences of power and personal control (Peterson and Stunkard, 1992). Hochschild’s (1983) discussion of ‘emotional work’ considers mood management as deliberate efforts to adjust feelings and expressions for social and situational purposes. The current model also acknowledges the influence of contextual demands to personal mood-regulatory needs.

The main goals of mood regulation by music are highly abstract level constructs. It may be that the grounded analysis of the informants’ experiences could not reach all the abstract processes that motivate mood regulation. Factors like homeostatic processes, as proposed by some researchers (Forgas and Ciarrochi, 2002; Zillmann, 1988a, 1988b), may very well play a part in it. However, the task was not to engage in theorizing about all the factors proposed in mood regulation research, but to present the ones that emerged from the data.

EVALUATING THE REGULATORY STRATEGIES

Seven processes with distinctive characteristics emerged as regulatory strategies. The strategies are related in a complex way to each other and different musical activities. For example, several different musical activities could be used to realize one regulatory strategy. Conversely, one musical activity could serve as a means for realizing multiple regulatory strategies, even at the same time. Listening to energetic party music could simultaneously be a means for distracting oneself from worries or schoolwork, creating an entertaining atmosphere for a forthcoming party or even gaining strong emotional sensations. Shah and Kruglanski (2000) argue that individuals often choose means that simultaneously attain the satisfaction of as many goals as possible. The importance and power of music in mood regulation may be founded on its versatility in satisfying multiple goals.
Music was an effective means of discharging negative emotions. Similar findings have also been reported in previous research (Lacourse et al., 2001; Ruud, 1997b; Schwartz and Fouts, 2003; Sloboda, 1992; Sloboda and O’Neill, 2001). Emotional disclosure has been considered to be an adaptive functioning which helps to restructure thoughts and feelings (Salovey et al., 1999, 2000; Sloboda and O’Neill, 2001). However, ventilation of anger has also been found to correlate with health risk behaviours and depression (Galaif et al., 2003; McCubbin et al., 1985). Therefore, is ventilation of feelings through music harmful or salutary? Studies that have linked ventilation to negative outcomes usually define it in terms of verbal aggression, yelling, blaming and complaining – behaviours that impact negatively on other people. Music, for its part, does not suffer in this way. As a symbolic object it enables acceptable and non-destructive expression of violent thoughts and feelings (Ahonen, 1993: 139; DeNora, 1999; Small, 1998). Anger ventilation by music resembles modulated emotion expression, which is defined by Izard (2002) as a dual-step process of first directing anger into harmless activity, and then redirecting the modulated anger to constructive activity such as negotiation. Thus, music may help to let anger out and calm emotions down before any engagement in verbal confrontation.

Distraction using pleasant activities to lighten moods is considered to be one of the most advanced and effective ways of mood regulation (Salovey et al., 1999). The adolescents appeared to employ music effectively and successfully in diverting themselves from stress, worries and disturbances. Also previous research has demonstrated that pleasant musical activities may help to distance thoughts and feelings from personal burdens (Behne, 1997; Christenson and Roberts, 1998: 203; Christenson et al., 1985; Lull, 1987; Schwartz and Fouts, 2003; Sloboda, 1992). Confidence in being able to influence mood, concentration on distraction, and absorption of the distraction have been reported to be among factors that influence the effectiveness of distraction (Erber and Erber, 2000, Oikawa, 2002). The distractive power of music may be due to the fact that the adolescents were motivated by musical activities; they considered them interesting and focused on them. Music promoted mental imagery and reflection. Several researchers have also previously proposed that music may serve as a kind of self-therapy and help people to identify feelings, work through conflicts, and regain control over psychic processes (Behne, 1997; DeNora, 1999; Laiho, 2002; Larson, 1995; Lehtonen, 1986; Ruud, 1997b; Sloboda, 1992; Small, 1998: 160–71; Ziv, 2004). Larson (1995) argues that, in early adolescence, solitude becomes a constructive domain of self-reflection, emotional discharge and personal renewal, and music is used to construct this domain. It is important to differentiate reflective mental work from rumination, which is considered a maladaptive coping strategy (Garnefski et al., 2004). Ruminative people are constantly monitoring their feelings and get confused in their attempt to make sense of them, whereas the ability to identify and understand one’s
emotions prevents rumination (Salovey et al., 1999, 2000.) It is possible that listening to sad music increases rumination through concentration on worries, but the results of the current study suggest the opposite. Music actually seemed to promote the clarification and understanding of feelings.

Music also provided the adolescents with experiences of solace and consolation. The strategies of mental work and solace are very similar in the sense that both include experiences of dealing with worries and starting to feel better in the process. The difference between them is that mental work is more about understanding something with the aid of music, while solace is more about feeling understood through the music. Previous research has shown that music is often felt to be an understanding and valued friend (Laiho, 2002: 71; Sloboda, 1992; Small, 1998: 202). According to Schwartz and Fouts (2003), music provides validation for the emotions of the adolescents by assuring them that they are not emotionally alone, and that their feelings are real. Ruud (1997a) argues that the first musical memories often include feelings of ‘being held’ by parents, and songs are links to these experiences of being in a safe, accepting and trustworthy relationship. Music offered adolescents strong emotional experiences and entertainment, and served as a resource for personal renewal and recovery. Even though these qualities have distinct functions, they are quite similar to each other from the viewpoint of mood regulation: all are processes of lifting up spirits through enjoyable activity. The problem of finding some correlation between these strategies and strategies of general mood regulation is that theories of mood regulation have widely neglected the role of positive emotions. However, some research has been carried and recent studies imply that positive emotions have important consequences for health and well-being over and above negative emotions (Gable et al., 2004). Positive emotions are thought to broaden individuals’ thought–action repertoire and build resources (Fredrickson, 2001), and to enhance well-being and regulate and mitigate negative feelings and their ill-effects on self-control (Izard, 2002). It has been shown that positive moods make it easier to feel good about oneself (Keltikangas-Järvinen, 1994).

The data of the current study implied that the importance of music is intrinsically related to enjoyment and positive experiences. Also previous research on music has demonstrated that people frequently engage in musical activities simply for increasing positive moods, and favourite music is often associated with positive emotions (Lull, 1987; Wells and Hakanen, 1991). It is proposed that pleasures of musical experiences may produce a sense of well-being, stability, wholeness and purpose in life (Larson, 1995; Ruud, 1997b). Understanding the functions of positive emotions appears to be central for understanding the role of music in mood regulation. It is essential to move beyond the traditional conceptions and not to limit the exploration of mood regulation by music just to dealing with negative mood. The strategies of strong sensation, entertainment and revival provide the
possibility for considering positive emotional experiences as actions of mood regulation. These three strategies all have in common the employment of music for creating resources for well-being rather than preserving well-being in times of trouble. The line between the goals that regulate negative moods, and goals that further positive moods, however, is faint. Many of the regulatory strategies include characteristics of both kinds of processes. Diversion, for example, is a process of dealing with negative feelings by focusing on pleasurable activities. All the strategies ultimately aim towards the common ends of mood improvement and emotional self-control.

Concluding comments

Theory development lays the foundations for further empirical investigations. Theoretical clarification of the existing mood-regulatory processes provides the basis for studying personal and contextual differences in these processes. The model may also prove to be applicable in studying mood regulation by music in other age groups. It would be reasonable to presume the main goals of mood regulation are quite similar regardless of factors like age or gender. However, the model is based on the experiences of adolescents, and some regulatory strategies, such as strong mood sensations and discharge, seem to fit especially well with the strong intensity and unrest of emotional experience in adolescence. Furthermore, in general, there may be a stronger need for an additional medium for mood regulation in adolescence due to the incomplete acquisition of sophisticated regulatory strategies. The music itself, as a typical feature of adolescent life, may be an easily approachable medium especially for the young. It seems important to be cautious in generalizing the findings too far beyond Finnish adolescents.

Music proved to be a versatile means for mood regulation. It offered the adolescents resources for increasing and restoring well-being, and made their emotional life more varied and colourful. The underlying motivation for the study was to clarify one piece of the puzzle in exploring the meaning of music. The study succeeded in demonstrating the impressive capability of music for promoting emotional self-regulation. The constructed model specified the different regulatory processes and provided a useful theoretical framework for the psychological inquiry of our musical behaviour.

ACKNOWLEDGEMENTS

The authors wish to express their gratitude to the Pythagoras Graduate School, Ministry of Education Finland, and Academy of Finland for funding the research.

REFERENCES


SUVI SAARIKALLIO is a doctoral student at the Pythagoras Graduate School for Music and Sound Research. She is currently finishing her doctoral studies on the emotional and psychological meanings of music in adolescence. She received her master’s degree from the University of Jyväskylä in 2002, with music education as major, and psychology and education as minor subjects.

Address: Department of Music, PO Box 35 (M), 40014 University of Jyväskylä, Finland. [email: suvila@campus.jyu.fi]

JAÄKKÖ ERKKILÄ is a certified music therapist and psychotherapist who received his doctorate in music therapy from the University of Jyväskylä, Finland. He is currently working as a Professor of Music Therapy at the Department of Music, University of Jyväskylä, where he is running a music therapy master’s programme. Before his current post, he worked for years as a music therapist, mainly in the field of psychiatry as well as with children with neurological disorders. His research activities are concerned mainly with theoretical works on psychodynamic music therapy and improvisation in music therapy.

Address: as Suvi Saarikallio. [jerkkila@campus.jyu.fi]

Conference Announcement and Call for Papers

Composition & Computer-assisted Music-making

Recital Hall
Birmingham Conservatoire

Saturday 31 March 2007

This one-day conference will include invited presentations and selected submissions from researchers on the theme of ‘Composition and computer-assisted music-making’. Papers are invited on educational and psychological aspects of composition, and the use of computers or non-acoustic musical resources, including interactive performance. Contributions are welcome from researchers at all levels and are especially encouraged from postgraduate students. In addition to spoken papers, a short lunchtime concert is planned demonstrating interactive performance with technology. Please send abstracts for spoken presentations (200 words) and for posters (100 words) to Peter Johnson (contact details below) by 31 January 2007. For technical details on Birmingham Conservatoire’s Recital Hall, see http://www.conservatoire.uce.ac.uk/research/facilities.

For further information, please contact:

Dr Peter Johnson
Head of Research
Birmingham Conservatoire
University of Central England
Birmingham B3 3HG
Email: Peter.Johnson@uce.ac.uk

Dr Elaine King
SEMPRE Conference Secretary
Department of Drama & Music
University of Hull
Hull HU6 7RX
Email: E.C.King@hull.ac.uk