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The Effect of Group Music Therapy on High School Students' Self-Efficacy in Coping with Negative Emotions and Emotion Regulation Ability

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Abstract. Negative emotions have become common among high school students, and many studies in behavioral psychology and neuroscience confirm that music can shift how people feel. Group music therapy combines structured musical activities with group interactions, holding promise for school-based mental health work. However, a systematic review that synthesizes evidence on how group music therapy affects high school students' confidence in handling negative emotions and their actual emotion regulation ability remains missing. The present review brings together empirical studies from the last ten years, focusing on intervention outcomes, mechanisms, and practical constraints in high school settings. Findings indicate that group music therapy boosts students' self-efficacy when facing difficult feelings such as test anxiety or frustration. This pattern has been documented across different cultural contexts Turkey, China, and the United States showing lower exam-related anxiety and stronger perceived capacity to manage negative moods. Adaptive emotion regulation strategies, especially cognitive reappraisal, are strengthened through group participation, with group cohesion and emotional awareness serving as key mediators. Nonetheless, existing studies have shortcomings, including small sample sizes, scarce long-term follow-up data, and narrow intervention formats. The available evidence suggests that group music therapy can be integrated into high school music classes and mental health education frameworks. Future investigations should adopt longitudinal designs, include more diverse samples, and examine how different therapy formats work across cultural settings.

Keywords: Group music therapy, high school students, negative emotion self-efficacy, emotion regulation ability

1. Introduction

High school students stand at a stage of life marked by deep physical and psychological change. Academic demands pile up, social relationships grow more complicated, and questions about identity surface day after day. Not surprisingly, feelings like anxiety and sadness have become quite widespread in this age group [1]. Within the current education landscape, a broad push is underway to weave mental health support directly into subject teaching, and music class offers a natural

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doorway for that effort. Music itself exerts a strong pull on emotional states, with rhythm and melody working together to bring a sense of calm and ease. High school music instruction already carries the mission of cultivating aesthetic sensibility, which makes the classroom an especially fitting place to introduce psychologically informed practices. Some researchers point out that when mental health education is folded into senior secondary music curricula in a thoughtful way, the music classroom can become an important route toward strengthening students' overall psychological wellness [2]. A good amount of new research backs up this view, demonstrating that approaches grounded in music contribute in measurable ways to better emotional control and to a reduction of internal distress among teenagers. Group music therapy takes structured musical activity and embeds it within the flow of interaction that happens between people. Shared emotional resonance springs up, members find social support in one another, and nonverbal channels open up a space for expression that words often cannot reach. Through these pathways, participants gain help in calming and reshaping difficult moods. Studies carried out in clinics as well as in regular schools have confirmed that group music therapy can ease negative emotional states and restore a steadier psychological footing [3]. Even so, the bulk of published work restricts itself to a single type of upset test anxiety stands out as a frequent example while very little research has tackled the combined influence of group music therapy on high school students' confidence in facing negative feelings and on their actual skill in regulating those feelings. The confidence a student brings to handling emotional trouble can shape how persistently the student copes, and the capacity to regulate emotion stands as a central pillar of mental health. The present review pulls together findings on how group music therapy affects both of these dimensions in high school students and examines just how robust the intervention proves to be. A wider hope is to supply some solid theoretical footing for weaving music class more tightly with mental health education in secondary schools. In a study by Sun, 61 adolescents who fell just below the threshold for clinical depression took part in eight sessions of music psychodrama group counseling. The group that received the music-based counseling wound up with significantly lower scores on the Self-rating Depression Scale compared with a control group that received only standard mental health education lessons ($p < 0.05$) [4]. That result hints strongly that music-centered group work—not limited by any means to formal music therapy carries real potential for addressing the negative emotional currents that run through adolescents in school contexts.

2. Introduction to core psychological variables

2.1. Negative emotion self-efficacy

Negative emotion self-efficacy describes how confident a person feels about spotting negative moods such as anxiety, sadness, anger, or frustration and then steering them in a healthier direction. The idea draws directly from Bandura's broader theory of self-efficacy and extends it squarely into the emotional realm, where it makes up the central piece of what researchers call emotion regulation self-efficacy. Wang Yujie and colleagues took the Self-Regulation of Emotion Self-Efficacy Scale and gave it a careful revision, producing a version that breaks the construct into three sensible and clearly demarcated pieces: the confidence to handle anger or irritation, the confidence to handle frustration or distress, and the confidence to handle guilt or shame [5]. Evidence on hand indicates that when secondary school students report a stronger sense of self-efficacy around negative emotions, they are far more likely to reach for adaptive ways of coping. Cognitive reframing gets tried more often, solution focused actions become a go to response, and as a result the students tend to show healthier scores on various measures of psychological well-being [6]. Boosting negative

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emotion self-efficacy, given this picture, belongs high on the list of priorities for any psychological intervention set inside a school.

2.2. Emotion regulation ability

Emotion regulation ability captures a person's capacity to keep an eye on, size up, and reshape his or her own emotional experiences and emotional expressions, and people lean on strategies such as cognitive reappraisal, expressive suppression, and emotional catharsis to do this work. Gross's emotion regulation model lays out a natural and fitting way to understand why this matters: effective regulation helps individuals settle into their surroundings and hold on to a steady psychological center. Evidence from daily life clear and solid tells researchers that when adolescents take part in music regularly, their emotional awareness grows sharper, a shift that tends to lift positive feelings and ease negative ones. Musical engagement, these patterns suggest, can act as a kind of training ground where teenagers build up their capacity to manage emotions and then keep refining it [7]. How well a student regulates emotion also leaves a sizable mark on academic performance and on relationships with others, and the ties that bind emotion regulation to the unfolding of many psychological disorders are just as tight.

3. Topic 1: the effect of group music therapy on high school students' negative emotion self-efficacy

The literature already provides some clear and honest early evidence that group music therapy can lift high school students' confidence in dealing with negative feelings. A Turkish research team recruited 49 twelfth-graders and split them randomly into two groups. Eight weeks of group music therapy were given to the experimental group, while the control group took nothing more than an elective music class. Both groups were measured with the Westside Test Anxiety Scale, and independent samples t-tests, chi-square tests, and mixed analysis of variance were applied alongside semi-structured interviews. The analysis yielded a consistent pattern: compared with their peers, the students who had music therapy managed test-related anxiety better, reported a stronger inner drive, and made visible gains in how they interacted with peers and expressed themselves musically. In contrast, the control group watched their anxiety climb as exams drew nearer and found much of the course content hard to follow [8]. The authors themselves, quite frankly, noted limitations that deserve attention: the sample size stayed small, and no follow-up data existed to check how long the effects held.

A well organized study from China took a similar line of questioning. The participants were first year high school students drawn from a middle school in Fujian Province. A stratified survey of 384 students was first carried out to look rigorously at how variables such as gender, class leadership role, and home location played into test anxiety. Scores from students with a rural background came out a little higher than those from urban families, but the gap never reached statistical significance, so residential origin was not seen as a meaningful confound when interpreting the intervention results. Out of that larger pool, 52 students were selected and placed, in a fair way, into an experimental group and a control group, each with 26 students. Once a week for eight weeks, the experimental group participated in a 45-minute group music therapy session, while the control group simply continued with its usual school routine. The Test Anxiety Inventory was administered before and after the intervention, differences were examined with t-tests, and a music therapy feedback questionnaire added further texture to the data. A sharp intervention effect emerged: the experimental group's post intervention anxiety scores were brought down well below their own pre-

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test levels and stood out as significantly lower than the post-test scores of the control group. The drop from pre-test to post-test in the experimental group was substantially larger than the shift in the control group, and anxiety actually crept upward a little inside the control group as time passed [9]. A strong point of this work is its methodical design and how smoothly the procedures were carried out in practice. On the flip side, pulling participants from just a single school limits how widely the findings can be applied, and the absence of any blinding means subjective bias cannot be ruled out: students aware that they were in the music therapy condition might have shown improvement at least partly because of positive expectations or a placebo response rather than because of the specific therapy components themselves.

In addition, the group based self-efficacy intervention that Li Hong and colleagues ran with high school students even though it did not put music therapy techniques into direct use demonstrated in a clear and forceful way that structured group activities can strengthen general self-efficacy and do real good for mental health [6]. This makes it reasonable to think that group music therapy, through activities such as improvisation, group music games, and choral singing, gives students repeated chances to succeed in the face of emotional difficulty and, in doing so, builds up their confidence in handling negative emotions.

4. Topic 2: the effect of group music therapy on high school students' emotion regulation ability

Leung and Cheung gathered data from 482 Chinese adolescents through a cross-sectional survey, asking them to report how often they took part in music, how well they could tune into their own emotions, and how intensely they experienced positive and negative feelings. The connections among these variables were then put to the test with structural equation modeling. What emerged was that greater music participation did not pump up positive emotions or push down negative ones directly; instead, the path ran entirely through emotional awareness. Music activities sharpened emotional awareness, and that fuller awareness, in turn, lifted pleasant feelings and soothed unpleasant ones; emotional awareness took on a complete mediating role [7]. The cross-sectional snapshot, of course, stops short of allowing causal claims, and the sample was made up of ordinary teenagers rather than young people already struggling with high levels of negative emotion limits that the authors themselves pointed out.

Shuman and colleagues took a different route, sifting through records of 352 adolescents who had received group music therapy while being treated in a child psychiatric unit. The Facial Affective Children's Evaluation (FACE) was used to track emotional states before and after sessions. After the music therapy sessions, an overall shift in emotional scores turned up in 82% of cases solid evidence that group music therapy can move the emotional needle within a single session's timeframe. Yet age and gender did not line up with those emotional shifts in any reliable way, and neither individual nor overall emotion scores showed statistically significant change when averaged [3]. The participants were hospital-based adolescents facing heavier psychological strain than the typical high school population, so some of what was observed holds relevance for students who struggle with strong emotional ups and downs. Even so, carrying these findings straight over to everyday school settings asks for a good deal of caution, because the pressures and the starting severity of symptoms are just not the same.

Moving closer to a school context, Zhang Min and colleagues ran a carefully built quasi experiment with first year high school students. A 10-week group music therapy program was put in place, and the Emotion Regulation Questionnaire (ERQ) supplied the before and after data. The students who went through the therapy ended up leaning on cognitive reappraisal strategies quite a

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bit more ($p < 0.1$), while their use of expressive suppression hardly budged. From that pattern, a straightforward conclusion can be drawn: group music therapy helps students pick up more adaptive ways of regulating emotion. In a valuable extension, the researchers looked into whether group cohesion might act as a pathway that carries some of the effect, and the analysis backed this up; cohesion functioned as a partial mediator, accounting for a meaningful slice of the therapeutic gains. The research team was honest about a clear shortcoming, though, noting that the intervention window was fairly short and that what happens to these gains over the long haul has not yet been examined [10]. Weaving together what these studies show, a picture comes into focus: group music therapy carves out a safe space for emotional expression, a space that builds up emotional awareness and empathy, and through that route, high school students' capacity to regulate emotion gets a genuine lift.

5. Discussion and recommendations

5.1. Overall conclusion

This review has pulled together the available evidence on what group music therapy does for high school students' confidence in handling negative emotions and their ability to regulate those emotions. The picture that emerges is fairly clear: group music therapy does build up students' belief that they can cope with feelings like anxiety and frustration, and it nudges them toward cognitive reappraisal an adaptive strategy for regulating emotion. What may carry even more weight is that this finding has turned up in three quite different geopolitical and cultural contexts Turkey, China, and the United States. Seeing the same outcome crop up across such varied settings lends some provisional support to the idea that the effect is broadly general. At the same time, that very consistency invites a closer look at whether culture-shaped factors such as prevailing collectivist norms, the way music is taught, and how readily a society turns to psychological intervention might quietly adjust the strength of the effect or the particular routes through which it takes hold.

5.2. Practical recommendations

High school music classes could be nudged beyond the usual focus on traditional knowledge and skills, systematically weaving group music therapy activities improvisation, lyric writing, group singing straight into everyday instruction. A partnership between school mental health centers and music teachers opens up a practical path: together they can shape short-term, eight to ten-week group music therapy programs aimed at managing negative emotions, and teachers of music or psychology who have picked up basic training in music therapy can be placed in charge of running them. Every intervention design also needs to spell out, right from the start, the measurement tools that will be used to track negative emotion self-efficacy and emotion regulation ability scales such as the SRESE and the ERQ so that what works can be seen clearly and adjustments can be made in a targeted way.

5.3. Future research directions

A number of directions remain open for future work. Longitudinal follow-up studies offer one way to track what group music therapy sets in motion and to see whether the gains stick around over time. How different intervention formats shape the outcome also deserves attention: choral singing and instrumental improvisation might well lead down different paths, and the same goes for short-

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term versus longer-term delivery. What carries the effect from the therapy room into real emotional change is another question waiting to be unpacked more fully; the mediating and moderating work done by emotional awareness, group cohesion, and self-expression all needs a closer look. Expanding the samples to include rural and minority populations would, in addition, help test how widely the intervention applies and how well it bends when cultural surroundings shift.

6. Conclusion

Group music therapy is an intervention approach based on the basic framework of artistic expression and group dynamics. Therefore, it naturally helps improve high school students' self-efficacy when facing negative emotions and also supports the development of their emotion regulation ability. Thus, existing empirical studies have clearly and strongly supported integrating group music therapy into school music classes and the mental health education system. While the studies reviewed here do have certain weaknesses most clearly the fairly small number of participants and the lack of longer-term follow-up data the overall picture that emerges so far gives some reason to believe that group music therapy could function as a useful classroom resource and a supportive mental health measure for secondary school students. At the same time, these very limitations make it plain that more work is needed. Investigations with wider participant pools and longer observation windows will be required before any firm statements can be made about how lasting or broadly applicable the observed benefits actually are.

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