

중학생 대상 집단 타악기 연주 활용 학교폭력 예방 프로그램

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본 연구는 집단 타악기를 활용한 중재가 중학생의 학교 폭력예방에 어떠한 작용을 하였는지 살펴보고자 하였다. 중학교 음악 교사와 음악치료사의 협업을 통해 프로그램이 진행되었고 사회정서학습 이론을 바탕으로 타악기의 일대일 짝연주, 동시적 연주, 즉흥연주 등이 사용되었다. 대상자는 대구시의 한 중학교 3학년 학생으로, 프로그램에 참여한 학생 65명 중 10명은 인터뷰, 그 외 55명은 개방형 설문 조사에 참여하였다. 내용 분석 결과 총 492개의 의미 있는 진술에서 타악연주의 신체화 반응, 정서적 작업, 집단 공동체성, 공감능력, 친구 관계, 자존감, 자기 조절과 같은 7개의 범주와 22개의 하위범주가 도출되었다. 이 결과 학교 음악교사와 음악치료사의 협업을 통한 타악기의 일대일 짝연주, 동시적 연주, 즉흥연주가 대상자의 친사회적 행동을 유발하는 것으로 나타났다. 저자는 집단 타악기 연주를 통한 신체화 반응이 대상자의 정서를 규명하고, 대상자 자신 및 타인을 공감하게 하는 경험을 하게 한다는 논의를 하였다. 이 결과를 바탕으로 음악교사와 음악치료사의 협업을 통한 타악기 연주가 친사회적인 행동을 촉진하여 학교폭력예방에 긍정적인 역할을 할 수 있다는 방향성을 제시하였다.

핵심어 : 집단 타악연주, 학교폭력예방, 친사회적 행동, 협업, 내용 분석

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I . Introduction

School violence has become a serious social issue and one of the major problems in schools in Korea (Lee & Oh, 2012; Ministry of Education, 2016). School violence refers to aggressive and antisocial behaviors among students that result in physical harm or emotional harm (Juvonen, 2001; Sheehan, Kim, & Galvin, 2004). Students who experience school violence manifest a number of psychological and physical symptoms such as low self-esteem, school avoidance, low educational achievement, post traumatic stress disorder, dropping out of school, and suicide (Esbensen & Carson, 2009; Hammond, Whitaker, Jutzker, Mercy, & Chin, 2006; Peguero, 2011; Peguero & Popp, 2011).

According to Barnes, Smith, and Miller's meta analysis (2014), cognitive-behavioral school-based interventions are widely used for school violence prevention, and research is currently examining the effectiveness of this approach. Another prevention approach based on social-emotional learning (SEL) is used for school violence prevention approach (Jones, Doces, Swearer, & Collier, 2013). The program is based on Bandura's (1986) social learning theory that teaches self-regulation and communication skills to students (Shafer & Silverman, 2013). Based on this theory, teaching social skills such as empathy, anger management, impulse control, and listening skills is effective in reducing middle school students' aggression (Espelage, Low, Polanin, & Brown, 2013). This theory posits that individuals have the capacity to engage in self-directed behaviors and cognitive changes through vicarious social learning experiences, such as observing the behavior of others and its consequences, and by experiencing continuous feedback on their behavior through reciprocal interactions with people in certain situations (Bandura, 1986). Arts-based interventions for school violence prevention have included dance and movement (Beardall, 2008; Hervey & Kornblum, 2006; Koshland & Wittaker, 2004), art (Zivin, et al., 2001) and music (Nöcker-Ribaupierre & Wöfl, 2010; Shafer & Silverman, 2013), and have attracted growing interest.

The use of group drumming has been shown to reduce stress and anger related to aggression (Bittman, Bruhn, Stevens, Westengard, & Umbach, 2003; Bittman, Dickson, & Coddington, 2009), improve the social-emotional functioning of students (Ho, Tsao, Bloch, & Zeltzer, 2011), enhance communication (Bittman et al., 2003; Camilleri, 2002), serve as a pathway for emotional expression (Laukka & Gabrielsson, 2000), assist in the rehabilitation of psychiatric patients (Longhofer & Floersch, 1993), and alleviate post-traumatic stress (Bensimon, Amir, & Wolf, 2008). Drumming has also been used for therapeutic purposes

such as anger management (Slotoroff, 1994), substance abuse recovery (Blackett & Payne, 2005), increasing self-esteem, developing leadership skills (Sharma & Jagdev, 2012), and for rehabilitation in forensic settings (Watson, 2002).

Nöcker-Ribaupierre and Wöfl (2010) researched an improvisational group drumming approach for children and adolescents, especially immigrants, to prevent school violence in Germany. Structured body percussion and playing percussive instruments in prevention and intervention programs for bullies and victims of bullying were suggested as possible approaches for middle school students (Shafer & Silverman, 2013). It allows everyone to participate concurrently in a success-oriented activity that utilizes approaches from conceptual to experiential music (Shafer & Silverman, 2013). Other researchers concluded that group drumming as a school-based activity promoted social skills and decreased behavioral incidents in at-risk adolescents (Wood, Ivery, Donovan, & Lambin, 2013). Group drumming can also provide children and adolescents a safe and supportive environment for developing social and emotional competencies (Kalani, 2005).

Music therapists often work with school music teachers in school settings, and music teachers familiar with school systems and school violence policies have longitudinal relationships with students (Carter, 2011). Therefore, collaborative work between music therapists and music teachers in school settings may be beneficial for reducing and preventing school violence (Rickson, 2012; Rickson & McFerran, 2014; Shafer & Silverman, 2013, Twyford & Rickson, 2013). There was a dearth of current literature on music therapy and adolescents, and only a handful of studies related to music interventions used to prevent school violence (McFerran & Wöfl, 2015). As such, the goal of this study was to examine how students experienced the therapeutic group drumming intervention program implemented based on the collaborative work of the music teacher and the music therapist.

II. Methods

1. Design

This study comprised the part of the qualitative data analysis from the mixed-methods dissertation (Suh, 2017). In the original dissertation, a pre- and post-test non-equivalent group design was first utilized for quantitative data collection and then qualitative data from

interviews and open-ended question surveys were gathered and analyzed. Content analysis—specifically, a modified version of Tesch’s (1990) method— was then used to analyze the data.

2. Participants

This study was conducted following written approval by the Institutional Review Board of Lesley University, in Cambridge, Massachusetts. Participants were recruited from the middle school located close to downtown and in a lower and middle class residence region in Daegu, Korea. Parental consent forms and student assents were obtained from 65 (100%) students. In the original dissertation, K-AQ: The Korean version of the Aggression Questionnaire (Kwon & Suh, 2002) was utilized for the collection of participants’ quantitative data. The class teachers were asked to recommend three to four participants from the high, moderate, and low aggression behavior status from the K-AQ scores and to select students who had sufficient ability to express their thoughts and feelings verbally in response to open-ended questions. For the interview, ten participants were initially recommended by the class teachers, and all of them agreed to do the interview. Rest of the 55 out of 65 participants were given an open-ended written survey.

3. Procedure

The intervention was implemented in the music classroom. This space was chosen because drumming is noisy, and the 45-minute intervention took place weekly for 10 consecutive weeks. The music teacher led the group, with the music therapist as a consultant. The music teacher had 13 years of teaching experience. Prior to the beginning of the intervention, the music teacher participated in 21 hours of music therapy group sessions. These sessions were led by a music therapist who was both a US board-certified and Korean certified music therapist. These sessions gave the music teacher an opportunity to experience a group music therapy program and to learn about music interventions that can be used with middle school students in Korea. The group music therapy program took place over 15 hours (three hours per week for five consecutive weeks). The program for middle school teachers took place over six hours (three hours per week over two consecutive weeks). It was presented as a workshop where teachers were taught how to use drumming to lead the students’ drumming

group. The program for this study was developed by the researcher, who is a US board-certified music therapist, and the program was discussed with the school music teacher who implemented the program. Sessions were video recorded, and the music teacher and the music therapist met every week for one hour prior to the session; during these meetings they watched a video of the previous session, discussed the interventions, and provided feedback for the upcoming session. The questions used in the interviews and on the survey were the same. Participants were reassured that there were no right or wrong answers and that all responses were confidential. The survey was completed in the classroom, and interviews were conducted in separate and quiet classrooms. Ten participants were individually interviewed by the researcher. The semi-structured interviews lasted about 30 to 40 minutes and were audio taped and transcribed. The open-ended survey and interview questions are listed in <Table 1>.

<Table 1> Open-Ended Survey and Interview Questions

Subjects	Questions
Experience of drumming	<ul style="list-style-type: none"> • How do you feel when you are playing the percussive instruments? • When is the best moment in this class and why? • When are you having a hard time and not feeling good during the music class?
Aggression management	<ul style="list-style-type: none"> • How does the program help you or your classmates to manage anger? • How does the program help you or your classmates to manage aggressive behavior?
Relationship with peers	<ul style="list-style-type: none"> • How does the program help you or your classmates to know each other? • How does the program help you or your classmates to get closer?
Relation to school violence	<ul style="list-style-type: none"> • Do you think this program helps to prevent school violence? If yes/no, why?

4. Intervention

The program was based on Bandura's (1986) Social-Emotional Learning (SEL) that was the effective bullying and aggression prevention approach (Jones at al., 2013; Shafer & Silverman, 2013). Based on this theory, teaching social skills such as empathy, anger management, impulse control, and listening reduced middle school students' aggression (Espelage et al., 2013). The intervention was outlined in Table 2, and basic examples of the intervention techniques used were described below.

<Table 2> Outlines of Therapeutic Drumming Intervention

Session	Components of SEL	Goal	Activity	Reference
1-2	Self awareness	Self-expression, Emotional awareness	<ul style="list-style-type: none"> Express that day's emotion by drumming improvisation then identifying the emotion. Drumming improvisation, freely playing 	Watson, 2002; Currie, 2004
3-4	Self management	Anger management, Behavior management	<ul style="list-style-type: none"> Dyads drumming in synchrony Drumming fast/slow, loud/soft according to a peer's instructions. 	Koka et al., 2011; Wood et al., 2013
5-6	Social awareness	Awareness of others, Listening skills	<ul style="list-style-type: none"> Call & response imitating drumming Team drumming following the loudness-level signals. 	Moore & Ryan, 2006
7-8	Relationship skills	Empathy, Building community	<ul style="list-style-type: none"> Dyad drum playing reflecting partner's emotional expression. Group call & response drumming, reflecting the leader's tempo and volume. 	Koka et al., 2011; Hervervy & Korbulun, 2006
9-10	Responsible decision-making	Assertiveness, Cooperation skills	<ul style="list-style-type: none"> Being a leader (conductor) of the group drumming. Playing percussive instruments, each one takes turns playing their role. 	Maschi & Bradley, 2010

To improve self-awareness: Each student was asked to select and play Latin, African, and Korean percussion instruments—djembes, hand drums, sound shape drums, paddle drums, cowbells, agogo bells, wood blocks, and *buks* (Korean traditional stick drums). The teacher gave hand directions to make the sound softer or louder, to stop, to play the drum with a beat, or to rumble (i.e., to play without a beat). The group was asked to improvise, expressing their emotions and stress without facilitation by the teacher. Then the students were asked to play the resonator bells freely, expressing their emotion that day.

To improve self-management: The teacher selected one student to be a leader and asked him or her to stop the group using hand signals, then selected a few more students to take turns being the leader. Rest of the students play the drum fast/slow, loud/soft according to a peer's instructions.

To improve responsible decision-making: The students were divided into dyads, so each student had a partner. One of the students held drumsticks while the other student held the

drum. In Kornblum's (Hervey & Kornblum, 2006) body-based violence prevention curriculum, a student walked towards his or her partner until the partner said "stop." Adapting this activity, a student who had a drumstick stood some distance away from his or her partner and then walked to the partner until the partner said, "stop." The students who had drumsticks played their drums until their partners said "stop." Partners then exchanged roles. The group was asked how they felt when each one was leading and responding.

To improve social awareness: One student was selected as a leader and asked to play his or her improvised rhythm, which the rest of the group members echoed back (a call-and-response type activity). The leader, who was selected by the teacher, then improvised without a structured beat, and the rest of the group played their drums with a matching beat and reflected the leader's expression. The students were divided into dyads. One partner expressed the physical tension of his or her hands and arms, and the other partner played the drum, reflecting the tension by controlling the volume and tempo. Partners then exchanged the roles. The group was asked how they felt when each one was the leader and the responder.

To increase relationship skills: The group was asked to play boom whackers (percussive instruments) and each student had two notes. The group was divided into three sub-groups, each with a different chord. The sub-groups played different parts of a 12-measure blues piece. While playing the boom whackers, the group was asked to express their stress and anger. Then the group was asked to play while trying to listen to others' playing. After playing, the group was asked how they felt when they played expressing their stress and anger, and when listening to others and synchronized playing.

5. Data Analysis

The qualitative data were analyzed by modifying Tesch's (1990) method. The researcher focused on the words that the participants chose to describe their experiences and used an inductive approach to identify emerging themes and an iterative coding process. The procedure of the data analysis is as follows:

- 1) Read the transcriptions carefully and write down the sentences if some ideas come to mind.
- 2) Pick one interview transcription and write thoughts about the underlying meaning.

- 3) Complete step 2 for several participants then make a list of the themes to cluster together with similar themes.
- 4) Abbreviate the clusters as codes then write the codes.
- 5) Find the most appropriate words for the codes and turn them into categories.
- 6) Make a final decision on the abbreviation for each category.
- 7) Assemble the data descriptions belonging to the category in one place.

6. Trustworthiness

The written surveys and interviews were given in the Korean language and the participants were asked to answer in Korean. The transcription of the data was shown to the participants individually for member checking and none of the interviewees asked to change the transcriptions. All qualitative data were transcribed and analyzed in Korean, and then seven categories and 22 subcategories written in Korean were translated into English by the researcher. A doctoral student with a master's degree in music therapy from the US who had both Korean and English proficiency participated in the peer debriefing for the translation reliability. During the peer debriefing for the translation, the doctoral student read data from categories, subcategories, and participants' example statements in both English and Korean. Any discrepancies of the researcher and the peer's translation in English were discussed and then agreed upon.

III. Results

Ten participants (Female = 4, Male = 6) out of 65 were selected from the participants for interviews to obtain qualitative data, to examine how they experienced the program by varied aggression status. A total of 332 meaningful statements were derived from the interviews with 10 members of the therapeutic drumming group. The number of meaningful statements for each interviewee is displayed in <Table 3>.

<Table 3> Information on Interviewees and the Number of Meaningful Statements ($n = 10$)

Interviewee	Gender	K-AQ score	Meaningful statements
A	F	37	32
B	F	93	25
C	M	38	26
D	M	40	35
E	M	82	31
F	M	53	32
G	M	52	24
H	M	80	49
I	F	52	37
J	F	53	41
Total			332

Since the participants answered with short written responses, only 160 meaningful statements were yielded from the written survey comprising open-ended questions given to the members of the therapeutic drumming group ($n = 55$). A total of 492 meaningful statements were yielded from the survey and interviews, and these statements were categorized into seven themes: somatic responses to drumming, emotional processing, group cohesion, empathy, relationship with peers, self-esteem, and self-regulation. Each category had three to four subcategories and the percentage of the statements in each category in relation to the total number of statements was calculated (See <Table 4>).

<Table 4> Coded Categories and Subcategories via Qualitative Data Analysis

Category	Subcategory	Number of statements		
		Survey	Interview	Sum
Emotional processing	Bring physical responses	2	13	15 (3.0%)
	Enjoyment	17	34	51(10.3%)
	Being relieved	10	15	25 (5.1%)
	Esthetic feeling	2	5	7 (1.4%)
	Expressing anger or repressed feelings	22	46	68(13.8%)
	Subtotal			151(30.7%)
Relationship with peers	Get to know peers better	27	38	65(13.2%)
	Increasing communication between peers	4	7	11 (2.2%)
	Enhancing relationships with peers	3	8	11 (2.2%)
	Subtotal			87(17.7%)
Group cohesion	Harmonization	8	29	37 (7.5%)
	No one excluded	6	12	18 (3.7%)
	Listening or paying attention to others	6	13	19 (3.9%)
	Subtotal			74(15.0%)
Empathy	Understanding others' situations	18	30	38 (7.7%)
	Experiencing empathy from peers	4	17	21 (4.2%)
	Awareness of others	2	6	8 (1.6%)
	Subtotal			67(13.6%)
Somatic responses to drumming	Bring physical responses	2	13	15 (3.0%)
	Providing auditory feedback	3	8	11 (2.2%)
	Experiencing noise	5	7	12 (2.4%)
	Subtotal			38 (7.7%)
Self-regulation	Managing emotions	3	5	8 (1.6%)
	Managing behaviors	7	14	21 (4.3%)
	Accepting differences of others	3	6	9 (1.8%)
	Subtotal			38 (7.7%)
Self-esteem	Feeling of accomplishment	2	16	18 (3.7%)
	Assertiveness	4	8	12 (2.4%)
	Leadership	2	4	7 (1.4%)
	Subtotal			37 (7.5%)
	Total	160	332	492(100%)

The seven categories and example meaningful statements are described below:

Theme 1: Somatic response to drumming

The first category was somatic experiences of drumming (7.7%), for which the subcategories were: bringing physical responses (3.0%), providing auditory feedback (2.2%), and experiencing noise (2.4%). The interviewees reported that playing the instruments helped to arouse physical responses. Tactile and audio feedback of the vibrations was activated directly from striking the instruments. These experiences enhanced motivation to move forward and focus on the activities. Below are some examples of interviewee statements:

“I played the drum without any intention, but my body knew what I am supposed to do” (Interviewee H)

“I played whatever I want to do and I could hear the sound that I played. It was awesome. I wanted to keep playing” (Interviewee B)

“I could touch and feel the instruments using my hands, which made me more connected with me” (Interviewee C)

Some female interviewees complained about *experiencing noise* (2.4%), while male interviewees seemed to enjoy playing the instrument.

Theme 2: Emotional processing

The second category emotional processing (30.7%) comprised the highest percentage of the statements. It was made up of the four subcategories: enjoyment (10.3%), being relieved (5.0%), esthetic feeling (1.4%), and expressing anger or expressing repressed feelings (11.1%). For the subcategory of enjoyment, interviewees reported that making music through drumming activities was more like playing than like studying or learning, and that this playing type of experiential activity helped the interviewees understand school violence prevention better:

“I feel like what we did was more like playing than studying because it was so fun [...] but it was interesting that I could understand and learn more about school violence prevention” (Interviewee B)

Being relieved implied that the interviewees felt relaxed during drumming. One interviewee described the power of drumming experiences:

“I could play whatever I wanted during free drumming activity. It was so fun and I felt much better after striking the drum. At first my stress came up in my mind during drumming but gradually changed [...] I felt comfort and calmed down” (Interviewee C)

“I usually feel something block me, but I felt the block fade away with the sound when I hit the drum” (Interviewee A)

The opportunity to play and stop drumming simultaneously brought the interviewees esthetic feelings. Here are some example statements of this feeling:

“I had goose bumps when we stopped and played the drum all together” (Interviewee A)

“Especially the sound when all our classmates matched the rhythm was so special” (Interviewee B)

All interviewees who were interviewed agreed that there was a benefit from expressing anger or repressed feelings. 78 statements (13.7%) supported the theme, and all participants reported that this happened unintentionally. The stressors that the interviewees brought into drumming were relationship problems with peers or teacher, stress related to tests, and stressors that were not identified by the interviewees. The following statements support this theme:

“I did not even think about my stress, but I could express my stress unintentionally while playing the drum. I just hit the drum following the rhythm. And I realized that I was expressing my stress in spite of myself” (Interviewee E)

“I could express negative memories with my previous teachers, repressed feeling from relations with my friend and stress from tests” (Interviewee G)

“I did not intend to, but suddenly an angry feeling came up and I felt like my anger was transferred to hitting the drum” (Interviewee H)

Theme 3: Group cohesion

All of the interviewees who were interviewed, and many of the interviewees who completed the written survey, reported the benefits of group drumming, as it offered the opportunity to contribute to group cohesion. 82 (16.6%) statements were under this category. Harmonization (7.5%) was the highest subcategory among group cohesion, as the interviewees

recognized that group drumming contributes to building healthy community. During the process of group drumming, the interviewees experienced becoming unified as a group. A well-matched sound seemed to be recognized as a sign of well-matched minds by interviewees:

“When someone led the group, we all followed the leader’s direction or rhythm. We were unified, it was amazing experience because we were all playing and making the same rhythm” (Interviewee A)

“Wow, we matched well! I felt like we were one and well harmonized. I think it was possible because we all tried to be considerate and accept others’ mistakes” (Interviewee J)

“Because we tried to match the sound, our minds also matched well” (Interviewee I)

For no one excluded, statements indicated that the interviewees who were alienated and timid all had equal opportunity to participate. Those experiences offered them the chance to express their personalities, which usually were not represented:

“I was surprised, when one of the classmates participated actively and played the drum loudly when it was her turn to play because she was usually shy and quiet. We all contributed our parts equally” (Interviewee J)

“No one [was] left out and we all were having fun and laughing” (Interviewee G)

For listening or paying attention to others (3.8%), statements indicated that the interviewees experienced and observed, that they tried to listen, even to classmates towards whom they had hostility, because motivation for listening to others occurred to get successful auditory feedback. Some groups practiced drumming voluntarily when they got free time from the teacher. During that time interviewees reported that the group paid attention to each other’s sound. The following statements support this theme:

“It was interesting watching the classmate who usually has a hard time concentrating on others had made an effort to concentrate to match the sound with other classmates” (Interviewee E)

“When the teacher gave us free time, even though the teacher did not ask us to practice, we practiced voluntarily to match the rhythms. We tried to listen to each others’ sound to hear the sounds matched” (Interviewee I)

“I tried to listen to the classmate who I did not like. I felt like I had to listen and match the rhythms with him” (Interviewee F)

Theme 4: Relationship with peers

The fourth category, relationship with peers (17.6%) was made up of three subcategories: get to know peers better, communication between peers, and enhancing relationships with peers. Overall, the majority of interviewees described improvement in peer relationships and community through group drumming.

For getting to know peers better, the statements implied that the interviewees had opportunities to listen to unfamiliar peers’ stories, followed by leading the drumming group based on the peers’ stories. The example statements were described as follows:

“I could have a chance to listen to the classmate’s story that I did not know well. When I played the drum following his directions based on the stories, I got to know a different side of him” (Interviewee J)

“The fun activity with rhythms and music helped us to get to know each other.” (Interviewee B)

For communication between peers, the interviewees reported increasing communication with peers during and after the group drumming activities. The communication appeared verbally while exchanging the instruments between peers, as well as playing the drum non-verbally. After the group drumming class, some interviewees reported that they initiated communication more:

“I usually do not talk to people that I am not close to, but during the drumming activities I realized that I was talking to classmates who were not close to me” (Interviewee I)

“After the class was done, I talked to the classmate who presented his story followed by the drum playing. I became curious and wanted to have a conversation with him” (Interviewee J)

For enhancing relationships with peers, the interviewees indicated that their relationships became closer and that they recognized different sides of their peers through music making.

Theme 5: Empathy

Empathy (13.8%) was the next category, made up of understanding others' situations (7.7%), experiencing empathy from peers (4.2%), and awareness of others (1.6%). The interviewees reported they had chances to empathize with others and to receive empathy from classmates. Both experiences were important in terms of increasing empathy. For understanding others, the meaningful statements were as follows:

“When my classmates expressed their anger and stress by drumming and explained why they played that way, I could understand more of them [...]. I thought I was the only who suffered from something, but I realized that they also had hard times with the same issues as me. I felt the same” (Interviewee D)

“One time, a classmate who I did not like was a leader. I could hear her stress by her sound and explanations. It was about her parents' divorce. At first, I didn't like to follow her playing, but as I know she has similar stress issues as mine, following her direction was not bad” (Interviewee G)

“Experiencing empathy from peers” was indicated as a therapeutic experience, even when the interviewees only listened and followed an individual's direction or playing. The feeling of being empathized with occurred in non-verbal situations. Two interviewees who had experienced being bullied expressed that it was the first time that all of their classmates were listening to him:

“Everyone looked at me and I felt they were all ready to listen me. I already felt safe to do anything I want and be understood” (Interviewee F)

“When my classmates imitated and followed my sound, I felt they listened to my story and empathized. I think that was the first moment that everybody listened to me” (Interviewee H)

Theme 6: Self-esteem

The sixth category was self-esteem. This category was made up of feelings of accomplishment, assertiveness, and building leadership. Although the intervention was group-centered activities, the interviewees indicated they experienced feelings of accomplishment, as if they had made individual accomplishments through well-matched playing. The example statements are below:

“When our group matched the rhythm playing successfully, I felt so much accomplishment for myself” (Interviewee F)

“Even if the classmates did not follow my direction exactly, I felt satisfaction because I know they tried to follow me” (Interviewee H)

For assertiveness, statements indicated that the group drumming intervention provided opportunities for interviewees who lacked confidence to express themselves assertively. Interviewee H, who had experienced being bullied, expressed that it was the first time in his life that he was able to express his thoughts in front of the class:

“I haven’t expressed my thoughts in front of my class. It was the first time I was able to express my real thoughts to the class assertively. I felt safe enough when I talked about my anxiety to my class” (Interviewee H)

“It was awesome that everybody followed my direction saying ‘stop.’ I could say several times ‘stop’ with confidence” (Interviewee I)

Theme 7: Self-regulation

Self-regulation is the last category. This category involved managing emotion and managing behaviors. Through the group drumming intervention, the interviewees indicated improvements in identifying emotions, which helped them to manage their emotions and behaviors. Almost all interviewees reported building self-regulation at the end of the intervention. Here is an example statement of managing emotion:

“Almost the end of the semester, when I played the drum loudly and softly, I started to realize how much I got stressed or angry. It helped me to manage my emotions” (Interviewee J)

For “managing behaviors,” statements indicated that the interviewees who demonstrated aggressive behaviors found controlling their behaviors in response to others’ directions were sometimes difficult:

“I did not want to stop playing and follow the direction. I wanted to play more. I thought, ‘Why I should follow the classmates’ directions?’ [...] However, I tried hard to stop whenever I needed stopping” (Interviewee F)

“I felt my aggressive behavior reduced because I felt much better after hitting the

drum as much as I could” (Interviewee B)

The qualitative data indicated that therapeutic group drumming may enhance emotional processing, group cohesion, empathy, relationships with peers, self-esteem, and self-regulation; these enhancements may contribute to reducing violence in a middle school in Korea. The participant who was identified as an aggressive student (Interviewee H) identified drumming as an emotional pathway, and the participant who was identified as being at risk of being bullied expressed feelings of assertiveness and self-esteem (Interviewee F). Therefore, depending on the participants’ specific needs and feelings, the experiences of therapeutic drumming varied.

IV. Discussion

This study investigated how therapeutic group drumming affected school violence prevention. The data from the present study showed that the highest percentage of participants’ meaningful statements were about emotional processing, mainly expressing anger or repressed feeling. Participants reported that they had opportunities to express negative emotions, including anger and repressed feelings, which relieved their negative emotions. Most of the interviewees indicated that they expressed their anger and repressed feelings unintentionally while drumming, as the anger was transferred while hitting the drum. The data showed that some participants reported that the drumming activities helped them to identify their emotions, which helped them to manage their emotions and behaviors. As previous studies have shown the positive effects of drumming intervention for adolescents to reduce stress (Bittman et al., 2003; Bittman et al., 2009), group drumming was shown to be a tool to express anger and stress in this study. According to the interviewees’ reports in this study, emotional changes occurred. This finding demonstrates that group drumming helps the students in experiencing how to adequately manage their anger, which may influence controlling aggressive behaviors. This finding has been supported in Hakvoort’s (2002) and Sotoroff’s (1994) study that drumming provides an opportunity to practice adolescents’ anger management. Drumming could be a pathway of emotional expression (Laukka & Gabriellson, 2000). The participants could express their emotions, especially their anger, which changed to calmness as they progressed during the drumming session, even though they just hit the drum

without intending to express their emotions.

During the intervention, participants had at least one chance to get individual attention from the whole group (e.g., each student had to play the drum in synchrony with his or her partner during the dyadic playing activity, and each student had the opportunity to explain his or her reasons and thoughts after playing). This finding supported Kokal, Engel, Kirschner, and Keyser's (2011) study, in which fMRI results showed that dyadic and synchronized drum playing activated the part of the brain associated with prosocial behaviors. In the present study, dyadic and synchronized drum playing gave individuals the opportunity to get individual attention from others. Active listening is required for dyadic synchronizing drumming, thereby enhancing prosocial behaviors and activating the portion of the brain associated with prosocial behaviors. As school violence affected by a lack of prosocial behaviors in middle school students (Espelage et al., 2013), the participants in the present study experienced empathy from peers, as well as better understanding of others. Several participants reported that when their classmates imitated and followed individuals' sounds, they felt like all of their classmates listened to and empathized with individuals' stories, even if those individuals were unpopular or disliked.

The therapeutic drumming group provided a safe and positive climate, as there were no right or wrong answers (Maschi & Bradley, 2010). When a classmate had a turn to play, the rest of the classmates had to react following the individual's playing. As one of the participants (Interviewee F) who had experience of being bullied reported to the school teacher, he felt safe to play the drum and express his thoughts and feeling because the group was ready to listen and concentrated on him. He also expressed that it was a first time that he could speak his thoughts in front of his class in his life.

The music therapist collaborated with the music teacher over both the planning and the evaluation of the interventions, and the music teacher led the group. This dual approach may help provide students with a safe and positive climate in school. A safe school environment may well reduce students' aggressive behavior (Lopez, Perez, Ochoa, & Ruiz, 2008; Nixon & Werner, 2010). Carter (2011) pointed out the importance of the role of school teachers and stressed that teachers have longitudinal relationships with students that foster familiarity. If the school music teacher becomes familiar with school violence policies and musical intervention, the students might greatly benefit for the purpose of school violence prevention. In these aspects, the collaboration between music therapists and music teachers in school settings might bring a synergetic effect for preventing school violence (Rickson, 2012; Rickson &

McFerran, 2014; Shafer & Silverman, 2013, Twyford & Rickson, 2013).

The participants reported that group drumming enhanced group cohesion and relationships with peers. As with Wyatt's (2000) exploration of using group drumming to improve peer relationships, the participants in the present study reported that they got to know peers better, and enhanced both relationships and communication with peers. The participants paid attention to their classmates' sounds and stories, even if they disliked them; this allowed the participants to get to know and understand their peers better. This finding provides additional evidence for the earlier finding that group drumming promotes group cohesion in school settings (Moore & Ryan, 2006). Because each student had an equal chance to be a leader and make their own sounds, participants agreed that no one was excluded from the activities. Increasing non-verbal and verbal communication during and after the intervention made connections, and created a healthy community in a non-threatening way, as found by Camilleri (2002).

Although only a few participants complained about the intervention, their complaints were often rooted in gender differences. For example, one participant complained that he did not want to follow the females' direction because their energy level was too low and different, while some female students complained about how noisy male students' drumming was.

The findings of this study indicated that this group drumming intervention was associated with school violence prevention, especially by enhancing peer relationships. As adolescents who had aggressive behaviors tended to be identified as perpetrators of school violence, they had difficulties expressing their emotions verbally (Currie, 2004). However, drumming may have offered a pathway for the participants to express inner experiences, identify emotions, and manage their negative emotions. As found by Bittman et al. (2009) and Cammilleri (2002), therapeutic drumming created healthy group cohesion in a non-threatening way, thereby improving students' self-esteem, assertiveness, and empathy, and allowing them to focus on themselves and others. This, in turn, reduced students' stress and repressed feelings.

The results of the present study suggest that collaborative work between school music teachers and music therapists may mitigate school violence in middle school students in Korea. The strength of this intervention was that it was held in a realistic school context, with the familiar music teacher facilitating the intervention (rather than a music therapist who came from outside of the school). As few experimental studies have been conducted on musical approaches for school violence prevention, the results of this study offer a crucial starting point for work in this area.

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The Use of Group Drumming With Korean Middle School Students in School Violence Prevention

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The purpose of this study was to examine how a therapeutic drumming intervention would impact middle school students with regard to school violence prevention. Participants were all in the third-year class of a middle school in Korea. A school music teacher and a music therapist designed and implemented the program collaboratively, and mainly used dyadic, synchronized, and improvisational drumming based on the Social Emotional Learning core competencies. A total of 65 students participated in a weekly 45-minute program for 10 weeks. Ten participants out of 65 were selected for interviews and the rest of the 55 participants were asked to fill out an open-ended survey. Content analysis of the survey and interviews produced 492 meaningful statements, which were categorized into seven themes: somatic responses to drumming, emotional processing, group cohesion, empathy, relationship with peers, self-esteem, and self-regulation. The findings indicated that dyadic, synchronized, and improvisational drumming may promote prosocial behaviors in students of this age. The author discussed that drumming produces physical input directly from the instruments, which prompts students to identify and empathize with their own or others' emotions. This study therefore suggests that collaborative work between school music teachers and music therapists may positively impact middle school students' prosocial behaviors, as they pertain to school violence in Korea.

Keywords : *group drumming, school violence prevention, prosocial behaviors, collaborative work, content analysis*

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