

- 특별기고 -

Harmonica Music Therapy and Its Potential Healing Program for School Health

SungHee Victor Yun[†]

School of Public Health, The Johns Hopkins University, USA

< 국 문 초 록 >

1821년 독일에서 발명된 하모니카는 유럽, 아시아, 미대륙으로 확산되면서 각 나라와 지역의 기호 및 전통에 따라 수용, 변화되었으며 현재는 약 150여종의 서로 다른 모습으로 그 장점을 따라 활용되고 있다.

하모니카는 인간의 생활에 여러가지 유익을 주는데 다만 심폐기능을 중심으로 하는 신체적 건강뿐만 아니라 정신적, 정서적 건강에 유익한 영향을 미친다. 특히 이러한 하모니카를 활용한 여가생활과 인간관계의 형성은 학령기 어린이와 청소년들에게 더 없이 유익하다. 학령기 어린이와 청소년들의 건강증진과 삶의 질에 미치는 유익한 영향은 구체적으로 학교 자퇴율의 감소, 학습능력의 향상, 수업집중도의 향상, 정신건강수준 향상, 사회관계 형성, 음주, 흡연, 폭력 등 건강위험행위 예방, 신체적, 정서적 안정 등을 들 수 있다. 따라서 하모니카 불기와 감상하기를 학교 재량수업시간에 도입하는 것은 위와 같은 다양한 유익을 확대하는데 의미있는 방법이므로 신중하게 검토할 필요가 있다.

Key Words: School health, Harmonica, Music therapy

[†] 교신저자: SungHee Victor Yun(Retired Professor, School of Public Health, The Johns Hopkins University) E-mail: sungheeyun@yahoo.com

I. Background

“When blowing your harmonica, you will blow your health problems out; When drawing your harmonica, you will draw your health power in, so that start now, stop never playing the harmonica until your last breath on earth!”

The harmonica was first invented by Buschmann in Germany in 1821. The first bulk of 650 harmonicas were manufactured by Hohner in 1857 and dispersed throughout the world, mainly to Europe, Asia and America. Each region adopted and modified them to fit their local taste and traditions. Now there are 150 different kinds of harmonicas available in the market, but this variety can be collectively narrowed down into three basic types: Chromatic harmonica (mostly played in Europe), Tremolo harmonica (mostly in Asia) and Diatonic harmonica (most in America), apart from Chord and Bass harmonicas which accompany those three types of the melody harmonicas.

The harmonica creates beautiful sound with vibration of its inside free metal reeds by blowing (inhaling) and drawing (exhaling) the air through the mouth in consciously forcing manner of breathing almost on an equal basis of breathing in-and-out. To play one full octave scale the harmonica needs its four holes with drawing four notes and blowing three notes (note: more drawing notes than blowing notes) unlike any other wind

musical instrument which takes entirely blowing only with no drawing. Most diatonic and chromatic harmonicas have the numerical numbers (i.e., hole #1 through #10 or up to #16) engraved on one side of the harmonica covers, so that people can easily learn to play by simply following the numbers on the scale. Past experience suggests that any “harmonica ignorant” in any age or gender may take only five minutes to learn to play a simple song like “Twinkle, Twinkle, Little Star” or “Mary Had a Little Lamb.” As far as the sound of the harmonica is concerned, it is similar to those of more elaborated or sophisticated musical instrument like piano, violin, guitar, harp, accordion, clarinet, organ, trumpet, bagpipe or alike, but the harmonica is much smaller, simpler, handy and inexpensive.

II. General benefits of harmonicas

Ever since invented in Germany some 150 years ago, the harmonica has been loved by millions of people around the world among all walks of life--young and old, men and women, the poor and the rich, the sick and the healthy. Its ever increasing popularity and deep penetration into the global society are inherently imbedded in its unique built and handsome sound. Because of its simplicity, accessibility, affordability and musicality, anybody can easily own it, quickly learn it and richly enjoy it. It is a much humble musical instrument so

anybody can play in any place at any time for any occasion. It can be played at home, schools, senior centers, hospital beds, military camps, prisons, worksite, camp fire, church, homeless shelters, street corner, market place, cemetery or even in the outer space. One harmonica went into the Gemini 6A spacecraft with captain Wally Schirra on December 15, 1965. He played "Jingle Bells" with his four-hole mini harmonica and it was aired world-wide on TV via satellite. Every viewer on earth was much delighted with his harmonica music.

The harmonica is portable so it can be readily carried with you in a small pocket or purse. A typical ten-hole diatonic harmonica weighs 56gm or 2ounces with 10cm or 4inches in length. The beautiful sound of the harmonica can reach and touch the hearts and minds of the ordinary people in an extraordinary way. It embraces the salubrious, nostalgic, mnemonic and healing effects to all ages and genders. Preventive, promotive and remedial aspects of health benefits of playing the harmonica were well documented with its prevailing anecdotal evidences and wide-spread personal testimonies. A number of rigorous scientific studies are currently being carried out in many parts of the world, including US, Canada, Japan and China. The harmonica can help people to live a healthy, happy and long quality of life.

In the past the harmonica was grossly regarded as a child's toy or for cowboys

in the West to calm restless herds and soothe their horses to keep themselves company. However, the harmonica was officially recognized as a bona fide and "legitimate" musical instrument by the American Federation of Musicians (AFM) in 1948. Since then, the base of harmonica population has been tremendously widened and the number of harmonica players in the world have been exponentially increased over the years. There are estimated five millions harmonica players in Korea alone. The harmonica can play all genres of music-- folk, blues, country, rock, jazz and classic even in concert halls with full symphony orchestras. The harmonica is so flexible and versatile in its design and functionality that it can encompass any style of music.

III. Health benefits of harmonicas

Inhalation (inspiration) of the air in particular through the mouth in abdominal deep breathing with the harmonica has a lot to do with improving not only breathing related physical health but also emotional and mental health. Playing the harmonica expands your lungs in volume and power and their millions of air sacs (alveoli) can be activated to give an increased supply of the needed oxygen to blood and brain which in turn gives healing power to our body. Our normal daily breathing requires use of one third of our lungs, but the harmonica can help use more air sacs for good health. When playing the harmonica: (i) the diaphragm

below the lungs vigorously moves up and down; (ii) the lung function and volume expand; (iii) an accelerated gas exchange between oxygen and carbon dioxide takes place in the 300 millions of alveoli of the lungs; (iv) the vibrating reeds inside the harmonica with musical sound stimulate secretion of certain mood-enhancing hormones, like endorphins. Its oscillating components may help bring massage effects to the chest, ribs, bones and teeth, muscles, tissues and cells, and various other internal organs. Some dental offices use the harmonica for pain management while recuperating or rehabilitating patients right after surgery are suggested to use the harmonica music to play or listening. Certain resulting lower rate of heart beating and blood pressure from the harmonica may help relax your body and reduce stress. The harmonica also helps strengthen our body immune system and increase defense mechanism to fight disease onset or susceptibility.

Health benefits from both playing and listening with the harmonica were reported and well received by the participants of the recent three world-class professional meetings in 2008: (i) the 45th Anniversary Harmonica Convention of the American Society of the Preservation and Advancement for Harmonica (SPAHA) held in St. Louis, Missouri; (ii) the 7th Asia Pacific World Harmonica Festival held in Hangzhou, China; and (c) the 10th American Music Therapy Association's (AMTA) annual conference held in St. Louis, Missouri. Three major "harmonica health surveys"

were undertaken during these international gatherings. Data show 100% of the surveyed respondents, including medical specialists, music therapists and professional harmonica players, unanimously agreed that the harmonica can and should help improve cardiovascular and respiratory health, and in particular for those who suffer asthma, chronic obstructive pulmonary diseases (COPD), night snoring and sleep apnea, depression, anxiety, short-term memory loss, indigestion, emotional disorder, learning disability, Alzheimer's disease or Parkinson's disease. According to a historical record, US President Abraham Lincoln, Dwight D. Eisenhower and Ronald Reagan used the harmonica not only for their amusement but also for quick recovery from their experiencing physical exhaustion, body weakness, stress or emotional distress.

The multitude of potential health benefits depends by and large on a compounding variables of playing habits (e.g., playing frequency, intensity and duration), player's lifestyle, general hygienic attitude and practice, health outlook and behavior, current health status, disease history, harmonica playing styles and techniques, the type of harmonica playing, music genre, the harmonica maintenance and cleanliness, and the material composition of the harmonica-made such as its covers, combs and reeds. However, regardless of these variables, one thing is made for sure that playing a harmonica for 5 minutes a day for 5 days a week for consecutive 5 weeks without failure ("Four 5 Rules"), one can reasonably expect a healthier breathing

and a happier life.

A combination of the long and deep bending notes, rapidly moving puckering and throat vibratos are among the best harmonica techniques to bring in much benefits to the lungs, heart, brain, body, organs, tissues and cells.

IV. Benefits of harmonicas for students' health and well-being

In summary, a body of current scientific literature and a circle of the concerned professionals around the world strongly suggest that either playing the harmonica or listening to the harmonica music be good for physical and emotional health of school children, adolescents and young adults in particular. Thus the harmonica is highly recommended for the school to seriously consider integrating harmonica lesson class into their regular music classes and/or physical education programs in expecting children to be helped with:

- preventing from school dropout
- enhancing learning ability and capacity
- improving classroom concentration
- reducing stress from the school and the community
- improving human relationship and communication
- broadening the circle of closer friendship
- avoiding drugs, smoking, alcohol and school violence
- improving physical strength and emotional stability
- fostering positive attitude and confidence in music and art
- developing musical skills and talents
- accomplishing a desired level of academic achievement

If a special class for harmonica lesson outside the regular school program is desirable, the school may like to consider a 10-week crash course or otherwise a 5-week condensed program. In Korea there are some 500 qualified harmonica teachers, and active training of trainers programs are under the way at large. The 10-week course with 45-minute session each accompanying 30-minute weekly home work/practice may comprise:

- History of the harmonica
- What is the harmonica?
- How does it work for health?
- How to prepare for learning how to play?
 - How and where to begin to play a simple song?
 - What are basic playing techniques?
 - How to clean and repair broken or out-of-tune harmonicas?
 - How to play together in group-duet, trio, ensemble?
 - How to assess and test the

proficiency of harmonica playing

- Organize a mini harmonica concert at school or community

References

1. Barbara A. Crowe. Music and Soul-Making: Toward a New Theory of Music Therapy. Lanham, Maryland: The Scarecrow Press. 2004.
2. Cheryl D. Music Therapy & Medicine: Theoretical and Clinical Applications. Silver Spring, Maryland: American Music Therapy Association. 1999.
3. Fox SI. Respiratory Physiology, Human Physiology. New York, NY: WBC McGraw-Hill. 1999. 482-519.
4. Gormley MJ. Harmonica for Health and COPD. The proceedings of 2008 SPAH Convention Harmonica Health Seminar in Bloomingdale, Indiana. 2008.
5. Rand T. Harmonicas and Health. Harmonica Happenings: Official SPAH Magazine 2007. 41(1). 19-21.
6. Rand T. One More Reason To Play Harmonica: Its Good for the Pipes - All the Inhaling and Exhaling Has Instrument's Boosters Just a Bit Breathless. The Wall Street Journal 2006. CCXLVIII(93).
7. Schaman J. Harmonica Exercise for Lung Program (H.E.L.P). The proceedings of 2008 SPAH Annual Harmonica Convention 's Harmonica Health Seminar. 2008. Ontario, Canada.
8. Yun SHV. Playing the Harmonica for Fun and Health Promotion Amongst Children and Senior Citizens. The proceedings of the 19th IUHPE World Conference on Health Promotion & Health Education in Vancouver Canada. June, 2007.
9. Yun SHV. Playing the Harmonica for Fun and Health Promotion Amongst Children and Senior Citizens. The proceedings of International Union for Health Promotion and Education (OUHPE) in Vancouver, Canada. June, 2007.
10. Yun SHV. Harmonicas & Health: State of the Art. Harmonica Happenings. Official Quarterly Publication Magazine of the Society for the Preservation and Advancement of the Harmonica (SPAH: Troy, MI) 2007. 41(4). 8-9.
11. Yun SHV. Harmonica Therapy: Music for Life. Harmonica Happenings. (SPAH: Troy, MI), Spring 2008. 42(4). 20-24.
12. Yun SHV. Healing Power of the Harmonica. The proceedings of the 7th Asia Pacific Harmonica Festival in Hangzhou, China. November, 2008.
13. Yun SHV. Harmonica Music Therapy. The proceedings of the American Music Therapy Association (AMTA) Annual Conference in St. Louis, Missouri. November, 2008.