# **ORIGINAL ARTICLE**

# Journal articles on music therapy in Taiwan, 2016 - 2020: an analysis

Chia-Chun WU,<sup>1,2</sup> Shih- Cheng HUANG,<sup>3</sup> Ji-Kuan WANG,<sup>4</sup> Yi-Nuo SHIH<sup>1,5,6</sup>

<sup>1</sup>Department of Occupational Therapy, College of Medicine, Fu Jen Catholic University, <sup>2</sup>Division of Psychiatry, Fu Jen Catholic University Hospital, <sup>3</sup>Department of Graduate Institute of Applied Science and Engineering, College of Science and Engineering, Fu Jen Catholic University, <sup>4</sup>Department of Occupational Therapy, Kaohsiung Municipal Kai-Syuan Psychiatric Hospital, <sup>5</sup>Department of Chinese Music, National Taiwan University of Arts, <sup>6</sup>Psychiatric Research Center, Wan Fang Hospital, Taipei Medical University

*Correspondence*: Yi-Nuo Shih, 510 Chung Cheng Road, Hsinchuang, New Taipei City 24205, Taiwan. E-mail: 062161@mail.fju.edu.tw

*Disclosure*: The authors declare no potential conflicts of interest in writing this report.

*Key words:* rehabilitation, therapeutic music, health care, columns of article

#### Abstract

**Background:** Music therapy has been used more frequently as a rehabilitation intervention in Taiwan. While facing the various physical and mental issues in the elderly, we need to use music therapy more than just a medical treatment. Hence, music therapy in the care for the elderly has become an important topic.

**Method:** We reviewed published papers in music therapy in Taiwan during the past five years (2016 - 2020), and categorized those journal articles.

**Results:** From 2016 to 2020, we identified 20 papers that were published from Taiwan. According to corresponding authors' backgrounds, 11 (55%) papers were from the discipline of nursing, 3 (15%) that of occupational therapy, 3 (15%) that of special education, 2 (10%) that of psychological counseling, 1 (5%) and that other field. We also found that those papers included 8 reviews, 4 case reports, and 8 original articles.

**Conclusion:** We would like to see more published original articles, so that the development of music therapy in Taiwan can be demonstrated with more data with empirical significance.

#### INTRODUCTION

In the field of health care, many articles exist proving music therapy's curative effects on patients and clinic behavior in Taiwan. For instance, some investigators have combined music activities with physical rehabilitation, so that senior patients get to rehabilitate themselves while taking part in music activities (Liao, 2021). Also, many other scholars have suggested the intervention of background music to nursing homes and rehabilitation centers, for the purpose of reducing patients' inappropriate behaviors which are associated with or secondary dementia (Liao, 2021; Sang, 2020). Some investigators studying the influence of background music on attention performance in employees with schizophrenia indicated that background music is beneficial in a work environment involving patients with schizophrenia (Shih, 2015; Shih, 2020). Other investigators suggested that the intervention of music can help increase speed of nurses in work performance, and that fast-tempo music is more effective than slow-tempo music (Chiu, 2020).

Some investigators studying effects of music intervention to reduce pre-radiotherapy anxiety in patients with malignancy found that music therapy can decrease state anxiety levels, trait anxiety levels, and systolic blood pressure in those patients who received the intervention before radiotherapy (Chen, 2013). Group music therapy has been widely used on psychiatric wards, showing that music can influence a patient's physio-psychological condition (Liao, 2020). Music can effectively reduce negative symptoms of schizophrenia, and it is also low-cost and non-intrusive (Wu, 2017).

Existing medical laws or regulations in Taiwan do not include "music therapy." However, this key term has already been used by clinical professionals of various fields in their journal articles and promoted as one music intervention approach. The study of music therapy includes rehabilitation therapy, early intervention, hospice care, and long-term care (Chen, 2013; Liao, 2021; Sang, 2020; Shih, 2020). In this paper, we intended to survey journal articles on music therapy written by Taiwanese authors during the past five years, to understand the fields and directions of their research in music therapy. Hopefully, we can have better understanding in direction of study of music therapy in all fields, as well as in designing the scope and development of clinical music therapy in Taiwan.

## METHODS

In this study, we used key word "music therapy" to search Airiti Library online, and found 20 journal

articles on music therapy during the past five years (2016 - 2020). We categorized them according to background of authors, types of articles, and fields of application:

### Author's background

We collected information based on the background of the article's corresponding authors.

## Article types

Journal articles' types included reviews, case reports, and original articles.

## **Application fields**

We collected the fields such as physiology, children, mental health, seniors, and other types of care.

## RESULTS

For journal articles in music therapy during the past five years in Taiwan, we first summarized corresponding authors' backgrounds: We found 11 (55%) authors in nursing, 3 (15%) in occupational therapy, 3

(15%) in special education, 2 (10%) in psychological counseling, and 1 (5%) in other fields. Nursing back-ground was accounted for the largest number (Table 1). As shown in Figure 1, the types of journal articles were 8 reviews, 4 case reports, and 8 original articles.

As shown in Table 2, we analyzed according to fields of application and found that the care of application included 2 (10%) that in physiology, 4 (20%) in child, 6 (30%) in mental, 3 (15%) in the elderly, 2 (10%) in cancer, and 3 (15%) care in other fields (Table 2).

## DISCUSSION

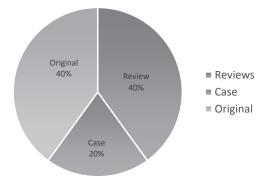
Many professionals in Taiwan use the techniques of music therapy in their fields and have published journal articles. Of corresponding authors of music therapy articles published in Taiwan during the past five years (Figure 1), the writers with nursing background accounted for more than half (55%). This is probably because that the number of nursing personnel is the largest healthcare professional group in Taiwan. But this group as a discipline has not produced any original articles.

**Table 1.** The distribution of corresponding authors' backgrounds (N = 20)

corresponding authors' backgrounds	Number	(%)
Nursing	11	(55)
Occupational therapy	3	(15)
Special education	3	(15)
Psychological counseling	2	(10)
Other fields	1	(5)

tion fields (N = 20) application field (%) number Physiology care 2 (10)Child care 4 (20)Mental care 6 (30)Geriatric care 3 (15)Cancer care 2 (10)Other field 3 (15)

Table 2. The distribution of applica-



**Figure 1.** Types of journal articles (N = 20)

The following are the comprehensive discussions of those published 20 articles in this study:

- Two articles existed in physiology care— using music to help with rehabilitation exercise for patients on respirators (Huang, 2020) and using music intervention to relieve pain and anxiety for burn patients' dressing change of wounds (Chuang, 2020).
- Some articles existed in child care— using music to help reduce premature infant's pain and discomfort.
  Furthermore, music intervention can increase children's interactive behaviors and decrease their inappropriate behaviors, as well as bridging children's exploration of the world (Chen 2017; Tsia, 2019).
- Six articles existed in mental care— using music intervention to relieve stress and anxiety during pregnancy. As group music therapy can lessen patients' mental illness symptoms and disturbances, it can also help reduce caregiver stress (Hsiao, 2020; Hsieh, 2018; Hung, 2017; Liao, 2020; Shen, 2016).
- Three articles existed in senior care the intervention of music can decrease seniors' inappropriate behaviors which are associated with dementia, while improving their cognition, memory, and social life. Music group can also enhance old adult's physical fitness, while improving their quality of life (Chou, 2017; Lin, 2016).
- Two articles existed in cancer care for chemotherapy patients, intervention of music can effectively relieve anxiety and reduce surgery-related pains (Hung, 2018; Liu, 2019).
- Three articles in other fields using music therapy to effectively treat teachers' occupational burnout (Chen, 2016; Lin, 2016; Wang, 2016).

Taipei Association for Medical Humanities, one of the medical groups dedicated to promoting music therapy in Taiwan, considers that many universities in Taiwan have courses in occupational therapy or music departments. But the term "music therapy" does not yet exist in Taiwan's medical laws.

People who do not have the license of Taiwanese medical professionals may lead to legal disputes if they use "therapist" or "therapy" when practicing. Taipei Association for Medical Humanities has launched the certification of "Therapeutic Musical Comforter," emphasizing on musical intervention of non-medical behaviors for people, and using the term "comforter" instead of "therapist." In addition, it has already obtained the trademark license from Ministry of Economic Affairs of Taiwan Government. This is a unique development of music therapy in Taiwan, where differs from other international communities.

# Study limitations

The readers of rehabilitation specialists are cautioned not to over-interpret the results of this analysis because this study has two major limitations:

- This pilot study is only to study journal articles on music therapy published in Taiwan, but we did not analyze those published by Taiwanese authors living in other countries.
- When analyzing the author's background, we only analysis the corresponding author. But a paper may have several authors from different disciplines. Sometimes, the author's background of a paper is equated with the corresponding author's background, which may be in correctively classified.

# SUMMARY

Based on an analysis of journal articles on music therapy published in Taiwan from 2016 to 2020, we found that the majority of papers belonged to reviews and case reports, but that the number of original article (n = 8) was rather under-represented. Therefore, we would like to suggest that more journal articles of original article need to be published to enhance the scope of music therapy. Hopefully, we will see more breakthrough and new applications for music therapy. As a complementary therapy, music therapy can help more patients as well as the public to improve their physical health, mental health, and quality of life.

#### ACKNOWLEDGEMENT

We thank Prof. Winston W. Shen for his constructive editing comments in our preparing this manuscript.

#### FUNDING

None.

#### REFERENCES

- Chen LC, Wang TF, et al. Fifteen-minute music intervention reduces pre-radiotherapy anxiety in oncology patients. Eur J Oncol Nurs 17, 436-41, 2013
- Chen SY Effect of music therapy in preventing job burnout of special education teachers at elementary schools in Taipei. Bulletin of Special Education 41, 1-26, 2016
- Chen SY Improving the severe self-injurious behavior of a child with autism spectrum disorder through an integrated music therapy action program. Bulletin of Special Education 42, 63-91, 2017
- Chiu FC, Wu CC, et al. The effect of background music tempo on nurse's work attention performance in nursing homes. Cognition & Rehabilitation 1, 61-66, 2020

- Chou KR, Chung MH The application of music therapy for the elderly with dementia. Yuan-Yuan Nursing (Taipei) 11, 5-11, 2017
- Chuang MJ, Chiu LY, et al. Effects of music therapy during wound care on pain and anxiety in burn patients: A single-centered study in Southern Taiwan. Hospital 53, 29-40, 2020
- Huang CC, Hsu YT, et al. Applying music program to assist the pulmonary rehabilitation exercise on ventilator- dependent patients. Formosan J Med 21, 568-79, 2020
- Hung HM, Chiang HC Non-pharmacological interventions for pregnancy-related sleep disturbances. Journal of Nursing 64, 112-9, 2017
- Hsiao JL, Chen CH, et al. A practical sharing on music therapy based hand-chimes activities for the life-caring of adults with intellectual disabilities. Special Education Quarterly 142, 11-23, 2020
- Hsieh CH, Wu JY The nursing experience of applying music therapy for an older people with Depression. T.S.M.H. Medical and Nursing Journal 24, 77-92, 2018
- Hung TT, Liu YC, et al. The pain-relief efficacy of passive music-based interventions in cancer patients undergoing diagnostic biopsies and surgery: a systematic review and meta-analysis. Journal of Nursing 65, 37-48, 2018
- Liao YH, Lin TY, et al. Can occupational therapy manpower be replaced with social robots in singing group during COVID-19 ? WORK 68, 21-6, 2021
- Liao YH, Wu CC, et al. Therapeutic factors in the group singing therapy by social robot for patients with schizophrenia: a pilot study. Taiwan J Psychiatry 34, 196-8, 2020

Lin HC The impact of group music therapy activities to physical fit-

ness for community elderly. Changhua Nursing 23, 24-31, 2016

- Lin HC, Lin PY The effects of integrate group music therapy activities into gerontological nursing course on students' attitudes and willingness to work with older adults. Changhua Nursing 23, 28-36, 2016
- Liu CL, Chen SC The effectiveness of music therapy on anxiety in cancer patients during chemotherapy: a systematic review. Journal of Oncology Nursing 19, 37-48, 2019
- Sang YC, Hsu JL, et al. Using face recognition to explore the emotional impact of nostalgic Chinese song on the residents in longterm care facility. Fu-Jen J Med 18, 23-30, 2020
- Shen FC, Yu WW A nursing experience of applying music therapy to the chronic schizophrenia patient. J Psychiatric Mental Health Nursing 11, 28-35, 2016
- Shih YN, Chen CS, et al. Influence of background music on work attention in clients with chronic schizophrenia. WORK 51, 153-8, 2015
- Shih YN, Chu KH, et al. The effects of background music tempo on the work attention performance of workers with schizophrenia. WORK 66, 119-23. 2020
- Tsia HY, Yang BN Nursing experience in caring for a premature baby with congenital femoral fracture based on family-centered care. J MacKay Nurs 13, 18-28, 2019
- Wang YT Challenges of music therapy practice and research. Journal of Development and Prospects 11, 53-61, 2016
- Wu CC, Hsu JL, et al. Identifying the therapeutic factors in the group singing therapy on halfway house patients. Chin Group Psychother 23, 5-19, 2017