

Survey on the Demand for Music Therapy in Shandong Province and Research on Product Application

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Abstract: In order to understand the demand for music therapy market centered on Shandong Province, this study conducted relevant surveys and research on different groups of people through questionnaires and interviews. The results showed that most respondents held a positive attitude towards the therapeutic function of music. Based on the research results, the research team developed a healing product and conducted a small clinical trial. The results showed that the mass market, represented by Shandong Province and surrounding cities, has a high acceptance and positive feedback on music healing products and services.

Keywords: Music therapy demand, Product application

The research team has designed a precise stress relief and healing music push system based on the professional logic of music therapy. By evaluating data through biofeedback systems and psychological assessment systems, we use the “logic” of music therapy to push users a specialized music push system that focuses on emotional regulation and can reach the level of professional music therapy.

I. Research background

1. Top 10 billion dollar related industries within the regional scope

(1) Medical and health field

The surrounding urban agglomeration of Shandong Province, represented by the provincial capital Jinan, has relatively abundant medical resources. After the Shandong Provincial Government approved the establishment of Jinan International Medical Center in 2017, it aims to create ten billion dollar industries including biomedicine and medical health care. In the four highlands of high-end medical services, technology transfer, cutting-edge talent cultivation, and digital medical innovation, it aims to build an international smart medical city, a green health demonstration zone, and a “medical Silicon Valley between Beijing and Shanghai”. Represented by a series of professional medical research projects led by Academicians Li Lanjuan, Huang Luqi, Lu Lin, and Yu Jiming, “national level” projects have successively landed, attracting a large number of “national team” talents. The Jinan Hospital of Guang’anmen Hospital of the Chinese Academy of Traditional Chinese Medicine and the National Regional Medical Center jointly built with Guang’anmen Hospital have been officially approved, and the “Super Hospital” Shulan (Jinan) Hospital project is about to be officially launched. Three national level platforms, namely the National Health and Medical Big Data Center (North China), the Institute of Microbiology of the Chinese Academy of Sciences (Qilu Zhongke Modern Microbiology Technology Research Institute), and the National Human Genetic Resources Shandong Innovation Center, have successively launched operations.

With the intensification of aging population and the increasing attention and investment of the government and the public in health, the health industry is ushering in a new trend of rapid development. The size of the elderly market is expected to exceed 13 trillion yuan by 2024, ushering in the next golden decade of development. With the implementation of the huge industrial structure in Jinan’s medical field, the demand for medical care and health services will also increase as scheduled.

(2) The demand for mental health industry

The 2022 edition of the “Blue Book on Mental Health” and the “Report on the Development of National Mental Health in China (2021-2022)” (hereinafter referred to as the “Blue Book”) released by the Institute of Psychology of the Chinese Academy of Sciences in February 2023 showed that the level of mental health among Chinese citizens in 2022 increased with age and income. Research has found that young people are a high-risk group for depression in the adult population, with a depression risk detection rate of 24.1% in the 18-24 age group and 12.3% in the 25-34 age group. This study found that the depression risk detection rate was highest in the group with monthly income below 2000 yuan, significantly higher than other monthly income groups. The impact of job burnout on the risk of depression is more prominent. In the group with severe job burnout, the detection rate of depression risk exceeds 40%. In the group without job burnout, the detection rate of depression risk is very low. This result suggests that attention should be paid to the risk of depression in individuals with severe job burnout. The unmarried and childless group has the highest risk of depression, with a depression risk detection rate of 23.6%. In addition, the study also found that the group with a weekly exercise frequency of 0 times had a much higher detection rate of depression risk than other groups, and moderate napping had a protective effect on mental health. The depression risk detection rate is highest in the group that does not nap, while the depression risk detection rate is lowest in the group that nap for 30-60 minutes.

The Blue Book suggests that China should continue to improve the accessibility and standardization of mental health services, promote the widespread implementation of psychological examinations, and pay attention to and support low-income groups, unemployed groups, and youth groups. At the same time, we should pay attention to job burnout, strengthen career guidance, provide psychological services, and promote and support healthy lifestyles.

(3) Basic research needs

Since the Ministry of Education proposed the construction of the “Four New” (New Humanities, New Engineering, New Medicine, and

New Agricultural Science), the intersection of art and medicine, art and science has also become a “new trend” in scientific research. In 2023, the Interdisciplinary Science Department of the National Natural Science Foundation of China will establish a special project on “Music and Neuroscience” to conduct interdisciplinary research on several core scientific issues in the field of music neuroscience, including music therapy and its mechanisms of action. Under the guidance of the “baton” of the National Natural Science Foundation of China, there will be an increasing amount of research on interdisciplinary fields such as music therapy, music and neuroscience, and music and medicine in the future.

2. Professional practice background

This study relies on a team of teachers with a 10-year background in music therapy at Shandong University of the Arts, as well as domestic strengths in music therapy, music education, and psychological counseling, to conduct research and product design. The Music Therapy program at Shandong University of the Arts has provided clinical music therapy services for over 20000 people and 7000 hours in medical and health fields such as Shandong Provincial Hospital, Shandong University Qilu Children’s Hospital, and Lushang Furuida International Elderly Care Center, laying a solid foundation for product research and development. Professional responsible teachers provide full guidance on the development and implementation of this project, ensuring the professional functionality of the product in music therapy and laying the foundation for the project’s advantages in specific fields.

According to clinical practice and evaluation results, music therapy can alleviate pain to over 90% during natural childbirth; The degree of relief of preoperative anxiety reaches over 85%; In enterprise service projects, the overall satisfaction rate reaches 100%; In the field of music education, the positive support level of music prenatal education for childbirth and the improvement level of rehabilitation training for children with autism reached 91.3% and 88%, respectively.

Table 1 Clinical Music Therapy Projects Conducted by the Music Therapy Professional Team of Shandong University of Arts

Serial number	Practical resources	service content	service time	Direct service personnel	Total service duration (hours)
one	Shandong University Qilu Children’s Hospital	Music therapy for special needs children	2014.09-2020.01	5280+	three hundred and fifty-two
two	Jinan Xizang Middle School	Music and Mental Health Course	2014.09-2016.01	two thousand eight hundred and eighty	one hundred and forty-four
three	Jinan Jiefang Road First Primary School	Music and Mental Health Course	2015.09-2016.01	six hundred and forty	sixteen
four	Jinan Ji’ai Social Work Service Center and Furuida Elderly Care Home	Music therapy for elderly people with cognitive impairment in the community; Music therapy in nursing homes	From 2016 to present	one thousand three hundred and sixty-eight	three hundred and sixty-eight
five	Shandong Provincial Hospital	Preoperative music decompression, music therapy for cancer patients, music analgesia for delivery, and calming music therapy in respiratory wards	2016.10-2020.01	5842+	6563+
six	Jinan Lixia Chuangyi Park	Various streets, social organizations, and community residents in Lixia District, Jinan City	From April 2017 to present	5000+	100+
seven	Shandong University of Arts	The theme education activity of “Meeting with the Soul” for college students’ mental health	From 2010 to present	five hundred and sixty	seventy

3. Relevant product information

At present, technology IoT giants such as Xiaomi, Gree, and Huawei are laying out smart music push systems for home and civilian use. Music search giants such as NetEase Cloud and QQ Music have already launched “playlist” functions. However, most of the music push logic of the above-mentioned companies is based on user preferences as the standard for music push, and its accuracy is not high, let alone meeting the standards of music therapy. The development of products that can achieve precise and meet the psychological and physiological needs of users, with professional level music therapy needs as the core direction, is not yet perfect.

II. Research situation

1. Research subjects

The research subjects of this study are divided into fixed population and non fixed population, among which the fixed population includes music therapy practice service recipients, music therapy service recipients’ families, and relevant institution staff. The non fixed population is random.

2. Research content

Conduct research to understand the clinical effectiveness and improvement direction of music therapy practice services, as well as the current promotion of music therapy; The influence and role of music in individuals and families; People’s understanding of the value of the

social function of music in social governance; The attitude towards the role of music in the construction of national spiritual civilization and a better life, through the analysis of the above results, aims to improve and enhance professional service capabilities, and provide data references to relevant departments. According to the requirements of inheriting excellent traditional Chinese culture and practicing the “two innovations” of excellent traditional culture proposed in the report of the 20th National Congress of the Communist Party of China, we have specially designed a research content on the ritual and music system that affects the aesthetic of traditional music culture in China and related to modern social governance.

3. Research methods

We used a combination of interview and questionnaire survey methods to conduct research on the service recipients of music therapy practice, their families, relevant institution staff, and non fixed general population. Among them, the research on the service objects of music therapy practice, the families of music therapy service objects, and the staff of related institutions is mainly conducted through interviews, and questionnaire survey objects are also included; Use questionnaire survey method for non fixed general population.

4. Research results

Through 429 valid samples, it was found that over 60% of the respondents have established good relationships with music both personally and in their families, especially in the education of the next generation; More than 80% of the respondents believe that music is an important element in the process of national spiritual civilization construction, but the respondents generally have insufficient understanding of the “music governance” ideology in traditional Chinese culture; Music therapy has good therapeutic effects but is difficult to promote, and the public’s awareness of it is seriously insufficient; Music has a promoting effect on the mental health of primary, secondary, and tertiary students. The positive effects of red music and main melody music, as well as the positive impact of music on promoting a “Healthy China,” are widely recognized; The vast majority of respondents believe that music has a positive impact on the construction of a better life for the elderly; The vast majority of respondents are willing to make music one of the tools for building a better life.

III. Clinical feedback

Put the product into the community, invite more than ten elderly people to try it out and obtain relevant data.

1. Sleep Promotion: Nearly 80% of the trial participants reported an improvement in sleep quality, with a certain reduction in falling asleep time. However, due to equipment and other reasons, no relevant data was detected on sleep quality.

2. Improving emotions: More than 90% of testers rated their emotional assessment as 90 points, and about 10% of members were unable to continue using and provide timely feedback due to various reasons.

3. Psychological and physical health: Over 70% of the trial participants showed improvement in their mental state during the trial period, and some manifestations and symptoms related to cognitive impairment and risk were controlled to a certain extent.

IV. Conclusion

This study has to some extent obtained information on the demand for music therapy in Shandong region. However, there are still some shortcomings in the research design and implementation process, such as insufficient product trial population, and there is still room for improvement in data tracking. However, both social surveys and clinical applications can provide valuable data and information references for the development of music therapy related products and services. The research team will further conduct research and clinical trials in more diverse fields and populations to obtain more objective and intuitive data.

In addition, this study provides certain technical and data support for the social application of music therapy and social issues such as mental health and stress.

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Former President of the American Society for Music Therapy, K. Bruscia, proposed in the 2014 edition of “Defining Music Therapy” that music therapy is a reflexive process in which music therapists use different levels and dimensions of music experience, as well as the relationships formed within it, as a driving force for change to help clients achieve maximum health.