

Construction of Positive Aging Image of Elderly People in Music Performance Short Videos: A Study of Grounded Theory Based on Audience Comments

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Abstract. This study aims to construct an image model of positive aging through short videos of musical performances by older adults. Based on the rooted theory approach, the study used the audience comments on the Jieyin platform as the data source. After three coding sessions, six core dimensions of the image of positive aging were finally distilled: musical talent, cultural heritage, vigorous vitality, spiritual fulfillment, social capital, and social and family support. Research has shown that musical talent is the basis for the functioning of the other dimensions, cultural heritage reflects the important role of older people in the continuation of social values, vigorous vitality is the presentation of the positive external image of older people, spiritual fulfillment represents the pursuit of the inner spiritual world and the experience of happiness, and social and family support enhances the psychological security and emotional belonging of older people participating in musical activities. The six dimensions support each other, and they build a positive aging image of the elderly. This study enriches the application of rootedness theory in the field of aging research, reveals the important role of music in promoting the mental health, social integration, and cultural inheritance of the elderly, and provides theoretical references and lessons for research and development related to active aging.

Keywords: music performance, active aging, short videos, social commentary, grounded theory

1. Introduction

With the rapid development of the global population aging, many countries have entered into an aging society. To enhance the quality of life and social participation of the elderly, the World Health Organization has proposed the strategy of active aging [1]. China is a typical aging society, and many older adults actively participate in various social and cultural activities after retirement, with music performance being an important component. Musical performances provide entertainment and artistic value to older adults and promote and enhance their ability to connect with society. With the gradual rise of short video platforms, older adults have begun using them as a new opportunity to participate in musical performances and express themselves. For short videos of older adults' musical performances, the content of viewers' comments on the platforms reflects the social attitudes and perspectives towards older adults and their participation in performing arts (Zhang & Wang, 2022), which influences older adults' social image and self-identity. However, while existing research has explored the benefits of music participation for older adults, there is still a gap in how viewer comments on short-form video platforms construct a positive image of aging for this population. Therefore, this study adopts a rooted theory approach and aims to construct a model of positive aging images of older adults to provide a theoretical basis for research on positive aging.

2. Literature Review

2.1. Active Ageing

In response to the global trend of aging, the World Health Organization (WHO) has proposed a strategy of active aging, which aims to improve the quality of life of older persons by optimizing their health, encouraging their participation in social activities,

and increasing their sense of security [1]. In recent years, several studies have expanded the concept of active aging to emphasize multidimensional experiences of mental health, cultural participation, and meaning in life [2]. For example, psychological resilience and social support are non-negligible factors in active aging, suggesting that older people's participation in the arts may be an important pathway toward this goal [3]. Arts activities have received increasing attention from the academic community for their role in health promotion and social connection. Research has shown that participation in the arts enhances the emotional state of older adults and promotes the development of cognitive functioning and social connectedness [4]. Music is the most promising medium for promoting active aging among the many art forms due to its unique emotional and social functions. Music enhances the mental health of older adults and promotes positive aging through social interaction and emotional expression [5]. Positive aging thus provides a theoretical framework for understanding the role of music in the lives of older adults, and the unique function of music further strengthens the practical implications of this concept.

2.2. The Value of Older People's Participation in Music Performance

Several studies support the role of music in enhancing language and memory in older adults. For example, one study found that listening to music, singing, or playing a musical instrument was independently associated with better situational memory [6]. Furthermore, music significantly affects verbal memory and may also impact visual memory and central executive function [7]. These studies suggest that music has significant potential to slow cognitive decline and enhance memory function in older adults.

Music practice is closely related to neuroplasticity in older adults, and related studies have revealed potential mechanisms and applications. James et al. (2020) first combined music practice in older adults with cutting-edge neuroimaging and behavioral methods and found that music practice significantly improved neurotransmission function [8]. For example, piano training induces functional neuroplasticity, providing a novel intervention pathway for mitigating age-related neurodegeneration [9]. These studies highlight the positive effects of music on the nervous system and provide a scientific basis for the development of music-based cognitive training and rehabilitation programs. Music participation has a significant contribution to the mental health of older people. By participating in choir performances, older people can improve their emotional state, enhance their sense of belonging and self-confidence, and effectively reduce anxiety, thus contributing to improving their mental health. Especially for individuals with mental health problems, group singing has significant psychotherapeutic potential as a positive social intervention [10]. In addition, music participation helps older adults understand self-identity through self-expression and emotional connection and enhances memory connectivity and life satisfaction by constructing meaning related to personal experiences and emotional needs [11]. These studies suggest that music can promote mental health in older adults through external support and internal emotional fulfillment.

2.3. The Value and Impact of Social Reviews

With the development of technology and the widespread use of social media for interpersonal communication, social media comments have become an important way to shape the public's image of positive aging for older adults. Research has shown that in short video platforms, social comments are not only a vehicle for viewers to express their opinions and attitudes but also affect the self-perception and social status of the performers themselves to a certain extent [12]. Positive evaluative content in viewers' comments on older adults' musical performances often focuses on the performers' vigor, talent, and emotional resonance [13], which supports the construction of positive aging images. Additionally, these comments reflect a recognition and expectation of older adults' participation in digital arts activities, further breaking down traditional age stereotypes [14].

In summary, existing studies have explored and expanded the connotation of active aging and suggested the importance of active aging strategies in global aging, the importance of musical performances for the physical and mental health of older adults, and the positive significance of self-awareness. Related studies have also demonstrated the impact of social commentary on older adults' self-perceptions. However, there are still the following gaps in the research: research on older people's music participation mainly focuses on traditional offline performance forms and lacks exploring the meaning and value of older people's music performances on short-video platforms; meanwhile, most of the existing research on how the audience evaluates the older people's music performances but lacks reflecting the construction of the public's image of positive aging through the content of the comments. Therefore, this study aims to fill the above gaps and construct a positive aging image of the elderly through the commentary content of short videos to provide theoretical references and lessons for aging research.

3. Methodology

This study used grounded theory as a research methodology, which involves coding, analyzing, comparing, and integrating interviews or literature to develop concepts, categories, and genera, describing phenomena and drivers through a "storyline" approach, and finally constructing a new conceptual model [15]. Rooted theory meets the needs of this study, and it has the advantage of being able to extract core concepts from a large number of viewer comments from short videos of music performances by older adults and construct a model of the image of positive aging for older adults through constant comparison and analysis.

3.1. Data Collection

In this study, the Doyin platform was used as the primary data source, and short videos related to music performances by older adults and their viewer comments were selected as the research samples. The collection went through three stages. The first stage was to search for keywords such as "elderly music performance" and "elderly instrumental music performance" from the Shake Music platform to filter out videos that fit the research theme, which were screened to meet the age characteristics of the elderly. At the same time, the videos were selected to be in line with the age characteristics of the elderly. After screening, the videos were selected to meet the age characteristics of the elderly and include different types of musical performances, such as solo, solo, chorus, and ensemble. A total of 20 related videos were collected in the end. The second stage is the collection of comments. For the screened videos, viewers' messages were collected through manual excerpts by hand, and the comments needed to reflect viewers' attitudes and feelings towards older people's musical performances. A total of 1,200 relevant comments were collected. The third stage was the initial screening of the collected comments, removing invalid data such as emoticons and duplicate comments, and after data cleaning, finally retaining 430 comments that were highly relevant to the research topic, constructing a systematic and representative original dataset to provide a research basis for subsequent coding.

3.2. Data Analysis

3.2.1. Open Code

Open coding is the initial stage of the grounded theory approach, which requires the researcher to have an open mind, try to "suspend" personal opinions and research preconceptions, analyze all the materials in their state, discover and name conceptual categories, determine the attributes and dimensions of the categories, and then name the phenomenon under study. Then, the phenomenon under study will be named and generalized [15]. In this study, Maxqda software was used to organize the transcribed text content of the interviews to obtain 430 original utterances, 78 initial concepts were derived, 14 initial categories were finally obtained, and only part of the coding was shown due to space constraints. (as shown in Table 1).

Table 1. Open Code

Initial Scope	Initial Concepts	Original Example Sentence
Performance Skills	Solid basic skills	This auntie is so solid in her fundamentals, every note is clean and crisp
	A sense of fun	She is definitely a professional piano teacher with a sense of musicality and a beautiful one-two punch!
	...	
Vitality	Full of youthful energy	Why do I think they're the vibrant young people?
	Fervor	Such a (performed) scene is quite harmonious and sung with passion!
	...	
Spreading Positivity	Boosting the morale of people	The two old gentlemen are blowing awesome, inspiring positive energy
	Inspiring young people	I'll sign up for the choir in 20 years
	...	
Patriotism	Love one's country	Love China, Red Classic Songs, Singing the Motherland's Great Rivers and Mountains
	Contribute to society	This group of seniors is still contributing to the community in retirement!
Traditional Music Culture	Ethnic culture	Folk music is the treasure of our Chinese culture!
	Passing on one's skills	The art of mastery needs to be passed on
	...	
Social Relationships	Accompany	How nice that these are performed by students together!
Family Relationships	Music organization	When I retire I'm going to join a choir and sing with the guys.
	Excellent children	They can only live like this because they have children at home who don't care about their old age.
	Good relationship with daughter-in-law	How elegant! These aunts shouldn't be fighting with their daughter-in-law! Because they don't have time.
Inner Fulfillment	Solitude	You don't always have to be famous to learn how to play the piano, and it's a great way to give yourself a little warmth when you're alone.

Table 1. (continued).

Self-Pursuit	Spiritually rich	This aunt is great, she's a rich spirit.
	...	
	Continuous learning	It's going to continue to roll into old age!
Economic Foundation	Autonomy	Just by looking at this grandma's sharp hairstyle, you can tell that she's definitely a person who demands a lot of herself
	Social Insurance	With Social Security, retirement is guaranteed!
	Pension	These old people are college graduates have good units with high pensions and have the financial ability to be calm and happy
Professional Background	A person of great erudition	It feels like they're all high rollers.
	Teachers	That aunt looks like a high school teacher or an accountant.
	...	
Physical Health	Longevity	Long and healthy seniors have a lifelong love of music
	Good health	The atmosphere is touching. It's good to have the spirit of the hobby, and good health is good for the spirit!
Active Lifestyle	Busy	My mom's in senior college now. She's busy every day. She's got a show to do at the end of the year.
	Fashions	The average Hangzhou senior citizen dresses fashionably, unlike other cities
Musical Accomplishment	...	
	Brimming over with talent	Talented people really shine, young and old alike
	Both inside and outside the box	Admire this old person, she is simple on the outside and rich on the inside, learn from her.

3.2.2. Axial Code

Axial coding is discovering and establishing various connections between conceptual categories to represent the organic associations between parts of the material [15]. The researcher must explore the correlations between these conceptual categories and the intentions and motivations of the researchers who express them, considering the researchers' words in the context of the time and the socio-cultural context in which they are embedded. Based on the 14 initial categories, six main categories were eventually formed and refined (as shown in Table 2).

Table 2. Axial Code

Main category	Corresponding category	Scope
Musical Talent	Performance Skills	Older adults demonstrate skill and mastery of playing or singing in musical performances.
	Musical Accomplishment	Musical literacy accumulated by older adults through long-term musical practice and study includes a deep understanding and expression of music theory, style, and emotion.
Cultural Inheritance	Patriotism	Elderly people express their love and sense of identification with the country and the nation through musical performances, conveying positive national sentiments and promoting the spirit of the nation.
	Traditional Music Culture	Older people pass on and promote the cultural heritage of their own people and region through the interpretation of traditional music, reflecting respect for and continuation of traditional culture.
	Spreading Positivity	Through musical performances, seniors convey positive values and optimism, influence and inspire others, and enhance positive social energy.
Vibrant	Physical Health	The good physical condition and health qualities maintained by older adults reflect the physical strength and endurance required to participate in musical performances.
	Active Lifestyle	Older adults maintain physically and mentally healthy habits through regular exercise and participation in the arts, reflecting a love of life and a positive attitude.

Table 2. (continued).

Spiritual Fulfillment	Vitality	The vigor, passion, and inner strength that seniors display in their musical performances. Reflects spiritual activeness and vitality.
	Self-Pursuit	Older adults continue to pursue the goals of self-improvement and self-actualization through musical performances, demonstrating the pursuit of personal growth and fulfillment.
	Inner Fulfillment	The inner peace, fulfillment and sense of spiritual abundance gained through musical performances reflect the fulfillment of the spiritual world and the inner happiness of the elderly.
Social Capital	Economic Foundation	Stable material security on which older people's participation in musical performances rests, providing support for active participation in the arts.
	Professional Background	Older adults have experience and social status gained over the course of their careers, and these backgrounds add confidence and value to their participation in musical performance and social interaction.
Social and Family Support	Social Relationships	Positive social networks that older adults build and maintain during musical performances include interaction and support among friends, peers, and community members.
	Family Relationships	The support and companionship of family members in older people's participation in musical performances exemplifies the strength of family harmony and emotional bonds.

3.2.3. Selective Code

Selective coding is the final stage of the grounded theory approach, which involves a deeper analysis and refinement of the core concepts in spindle coding [15]. The researcher selects a "core category" after systematically analyzing all the conceptual categories found and focusing on the codes associated with that core category. Core categories are overarching and can place most research findings within a broad theoretical context to create a more precise and insightful theoretical framework to explain important patterns and relationships in the field of study. In this study, "positive aging image of older adults" is the core category, and its "storyline" is structured as follows: positive aging image consists of six main categories: musical talent, cultural heritage, vitality, spiritual fulfillment, social capital, and social and family support. Musical talent is the core foundation of the image of positive aging, providing a direct way of expression for the display of musical skills and expression of talent for the elderly; cultural heritage is the core source of the value of the image construction, the elderly through musical performances to convey the traditional culture and positive energy in society, which gives a profound social value; vigorous vitality is the external manifestation of the positive image of aging, breaking the stereotypes of senility, and establishing a healthy and positive public image, positive public image; spiritual enrichment is the internal motivation and psychological support of image construction, which is the inner expression of older people's love of life and sense of well-being; social capital is the resource guarantee provided by image construction, which lays down the material and social conditions for the realization of the image; and social and family support is the emotional connection and practical support of image construction, which provides older people with emotional belonging and a sense of security, and helps them to be more confident in participating in the music activities. These six main categories are interdependent and mutually reinforcing and contribute to constructing an image of positive aging for older adults.

3.2.4. Saturation Test

In order to ensure the scientific validity and accuracy of the results of rooted theory research, it is necessary to constantly search for new evidence for theoretical sampling and to constantly compare, analyze, and modify it with the categories that have already been formed, examining the adequacy and richness of the concepts and categories that have been generalized and outlined from existing information, until no new concepts and categories will be found again. In this study, 120 comments were set aside in the interview data as a saturation test. The saturation test was repeated with open coding, axial coding, and selective coding, following the steps described in the previous section, and no new main categories emerged as a result. As a result, this study was largely theoretically saturated with the image model of positive aging in older adults' musical performances.

4. Result

Based on the three codings, this study constructed an image model of positive aging for older adults in music performance through six main categories: musical talent, cultural heritage, vigorous vitality, spiritual fulfillment, social capital, and social and family support (see Figure 1). The connotation of each category in the model will be further elaborated next.

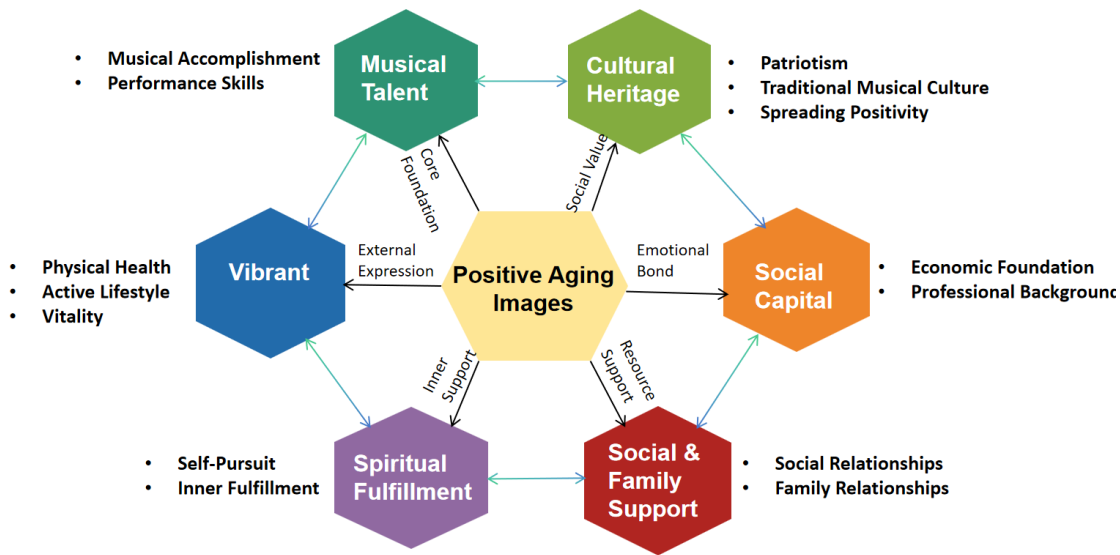


Figure 1. Positive Aging Image of Older Adults Model

4.1. Musical Talent

Musical talent is central to constructing an image of positive aging and is the basis for the other dimensions. Older persons demonstrate their creativity and individual talent through the demonstration of skills and artistic expression. Musical talent includes performance skills, musicianship, and artistic temperament.

Performance technique is the foundation of older adults' musical performances, the skill and mastery of playing or singing that they demonstrate in their musical performances. Fundamentals guarantee smooth performance and are the primary tool of musical expression, providing reliable technical support [16]. For example, *this aunt is so fundamentally sound that every note is clean* (Comment 49). Performance techniques also include a keen sense of emotion and structure in music for older adults. Musically aware performers can convey personal emotions and artistic personalities through music, making performances more engaging and compelling [17]. For example, *I am a professional piano teacher! It has a sense of musicality! One-two punch! Beautiful to enjoy!* (Comment 51). Through the demonstration of performance techniques, older people can better display their musical talents in musical performances, enhance their sense of personal fulfillment, and promote social recognition of the positive image of older people.

The musicianship is the musical literacy that older adults have accumulated through long-term musical practice and study, reflecting their deep understanding and expression of music theory, style, and emotion. They organically combine musical accumulation and external expression and translate these understandings into concrete artistic expression in musical performance. This ability to cultivate internal and external skills is the core of musicianship and can help music performers give their works more emotional depth and cultural value [18]. For example, *Admiring the teacher, simple on the outside, rich on the inside, learning from him* (Comment 48).

4.2. Cultural Heritage

Cultural inheritance is the core source of image-building value. Through their musical performances, the elderly convey traditional culture and positive social energy, endowing them with profound social value and making their image transcend the personal level.

Patriotic sentiments are an important part of older people's transmission of culture through musical performances. Many older adults conveyed positive family and national sentiments in the short videos. They inspired the viewers' sense of national identity by playing and singing patriotic, classical musical works, reflecting that music is an important tool for cultural identity and can play a key role in collective memory and emotional expression [19]. For example, *Love My China, a red classic song, sings about the greatness of the motherland* (Comment 268). Traditional music culture is a bearer of historical memory and a cultural vehicle that can be transmitted across generations [20]. In the video, many older adults sing folk songs and play ethnic instruments, which makes the audience, especially the young audience, more directly contact and understand the Chinese people's cultural heritage and pass the Chinese people's essence from generation to generation. For example, *folk music is a treasure in our Chinese culture!* (Comment 208). *This is an excellent skill that needs to be passed on* (Comment 245).

Disseminating positive energy is key to the cultural legacy of older adults through music performance. Research has shown that the significance of music in the lives of older adults is reflected in the spiritual comfort and social stimulation it confers on performers and audiences [11]. Through musical performances, older adults show their optimistic spirit and convey positive

energy to the audience, relieving the stress and anxiety of contemporary life. For example, *the two older gentlemen played awesome, inspiring positive energy* (Comment 247).

4.3. Vitality

Vigorous vitality is the outward expression of a positive image of aging that breaks the stereotype of aging seniors and presents a healthy, positive public image. Vigorous vitality encompasses the vitality of older people who have a healthy body and an active lifestyle and, in the process, demonstrate vitality.

A healthy body is the physical foundation for seniors to perform music. In the video, some comments look at the older man singing with a firm bottom; *his breathing and breath are well maintained!* (Comment 160) This demonstrates the positive impact of music on older adults' physical fitness and is a good example of how musical activities can improve older adults' physical health through rhythm and movement [21]. Active lifestyles are an important expression of vitality, and older adults who engage in music activities are often more inclined to face life's challenges positively, viewing music as a key tool for maintaining psychological balance [22]. Both the group and solo forms of musical performances and the content of the performances demonstrate older people's love of life and spirit of exploration, and this positive state of life not only improves the quality of life of individuals but also infects a broader audience. For example, *my mom is now attending a senior citizen university, and she is busy every day, and at the end of the year, she has to be busy performing* (Comment 281)

Vigor refers to the passion and inner strength that older people show in their musical performances, reflecting the degree of spiritual activity. Older people's musical performances are often full of passion and vitality, bringing the audience an active external spiritual expression and also triggering the audience's emotional resonance. For example, *such a (performance) scene is quite harmonious and sung with passion!* (Comment 157). *I think they are energetic young people!* (Comment 139)

4.4. Spiritual Fulfillment

Spiritual fulfillment is the internal motivation and psychological support for the construction of the image of aging, and it is the inner expression of the elderly's love of life and sense of well-being. Spiritual fulfillment is mainly composed of the pursuit of the self and the inner abundance of the elderly.

Music participation can give older adults a sense of purpose and intrinsic drive [23]. Thus, self-seeking reflects the high level of artistic pursuits that older adults demand. For example, *to continue to roll in old age!* (Comment 111). Looking at this sharp hairstyle of grandma, I can tell that grandma is a person who demands a lot from herself in life (Comment 76).

Inner abundance refers to the inner peace and fulfillment that older adults gain through musical performances, reflecting the fullness of their spiritual world. They express their emotions, reflect on their lives through musical performances, and derive profound spiritual fulfillment from them. Engaging in musical activities can increase older adults' mental toughness and help them face life's challenges while providing deep spiritual fulfillment. For example, *you do not always have to be a pianist to learn to play the piano; it is enough to give yourself a little warmth when alone. Even though I can only play a few pieces, it does not stop me from enjoying music* (Comment 77). These suggest that musical performances allow older people to explore their sense of well-being.

4.5. Social Capital

Social capital is the resource and network support for image building. Older people's professional background and economic base provide material security and social resources for participating in music activities, ensuring a solid image and social integration.

An economic base supports older adults' participation in cultural activities and contributes to their quality of life [24]. Good economic conditions can provide solid material support for older adults' participation in music performances, including purchasing musical instruments, attending music learning classes, and paying dues for participation in music groups. For example, *some audience members commented that this group of seniors must have had good jobs when they were young and had good pensions* (Comment 112).

Occupational background is the experience and social status that older adults have gained throughout their careers, and occupational background not only enhances older adults' social capital but also serves as a bridge between their musical activities [23]. Many older performers draw on the expertise, networks, and social status they have accumulated from their professional backgrounds to support their musical activities with a wealth of resources. For example, *they were great performers, and that aunt was kind of like a high school teacher or an accountant, so she had access to such a great choir* (Comment 97).

4.6. Social and Family Support

Social and family support serves as an emotional bond that strengthens older people's ties to their families and society, and it provides older people with a sense of emotional belonging and security, helping them to participate more confidently in musical vitality. Social and family support consists mainly of interpersonal and family relationships.

Social relationships are an important way for older adults to gain social support through musical performances, and social relationships not only provide emotional support for their performances but enhance a sense of social belonging. Research has shown that musical activities can facilitate social interactions among older adults and form supportive interpersonal networks [25]. For example, some audience members watched older adults perform together and could not help but exclaim, "*How nice it is that we all perform together as classmates!*" (Comment 126)

Family relationships refer to the support and companionship that family members receive during older adults' participation in music performances, reflecting the emotional encouragement and support of family members. Family support can provide important motivation for older adults' musical participation while helping them achieve greater fulfillment on an emotional level [11]. For example, *they can live this life all because they have frugal sons and daughters at home who do not nibble on them* (Comment 127). Family relationships are an important foundation for positive aging among older adults.

5. Conclusion

Using grounded theory as a research method, this study constructed a theoretical model of the positive aging image of older adults based on data from audience comments on videos of Chinese older adults' musical performances on the ShakeMe platform.

The study found that musical talent, cultural heritage, vitality, spiritual fulfillment, social capital, and social and family support are the core dimensions of the image of positive aging. Musical talent shows the musical skills and creativity of older people, which is the basis of the other dimensions; cultural heritage reflects the continuation of older people's social value and recognition of their self-worth; vitality breaks the traditional stereotypical influence of older people's aging and loneliness, and demonstrates older people's spirit of a vigorous and active lifestyle; spiritual fulfillment is the inherent manifestation of the older person's pursuit of the self; while social capital provides an economic basis and resource guarantee for the elderly to actively participate in music activities, and social and family support provides emotional support and connection for the elderly. The six dimensions are interconnected and mutually supportive, building a positive aging image of the elderly.

This study shows that music performance is not only a tool for self-expression for older adults but also an important way to promote social integration and cultural heritage. In addition, the study reveals the critical role of social capital, such as economic and occupational backgrounds as well as family support, in older people's participation in musical activities.

The theoretical significance of this study is that it constructs an image model of positive aging for older adults from the assessment data, which provides empirical support for the application of rooted theory in the field of aging research. It deepens the understanding of the aging phenomenon in China, especially the important role of music participation in positive aging. The practical implications of this study are to provide insights for policymakers and music educators to encourage society to provide more opportunities for older adults to showcase their talents and social values and to provide more support for facilitating older adults' participation in music activities in the digital age.

The limitation of this study is that the research platform was chosen to be China's Jieyin platform. The audience is mainly Chinese viewers, whose evaluations of older people's music performance videos are determined by their cultural backgrounds and thus may not be representative of viewers' opinions of older people's music performances in other cultures; future research can be expanded to other digital short video platforms of different cultures in order to obtain a broader range of viewers' evaluations and to improve the positive image of aging. In terms of research methodology, future studies could use quantitative research to explore the more profound effects of musical activities on the psychology and well-being of older adults. At the same time, the potential of other art forms, such as painting, dance, and drama, in active aging could be further explored to fully understand the arts' contribution to older persons' well-being.

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