Factors Influencing Audience's Urban Preference through Mobile-Enabled Music

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ABSTRACT

People's perception of and preference for cities have a close relationship with the shaping and transmission of the city's image. This article explores the factors that influence the audience's city preference by applying empathy theory to the mobile urban music "Xi'an People's Song." The branding of urban music and its mobile socialization appear to affect urban music empathy positively, although awareness has no significant effect. Urban music empathy fully mediates between branding and goodwill and between the social function of urban music and goodwill. However, the moderating effect of people's familiarity with urban culture is not significant for urban music empathy and urban preference. The hypothesized relationships are further illustrated on this basis, and the optimization of urban music as a creative medium for promoting city image is discussed.

Keywords: Urban Music, Branding, Mobile Social Networking, Empathy, Urban Preference
JEL Classifications: L82, D12

1. INTRODUCTION

Shaping a good urban image and publicity can convey a city's charm and competitiveness as well as improve visibility, reputation, and goodwill. The concept of the city image was first put forward by Lynch (1960), who suggested that the character of the city is realized through the interconnection of five elements: paths, edges, districts, nodes, and landmarks; people then build up a mental image of the material world based on the clearly demarcated physical symbols combined with past experience. When we mention the West Lake, we immediately think of Hangzhou, as the lake is not only a regional symbol but, more importantly, is linked to traditional culture accumulated through human history and development. As Emerson said, cities exist on memory (Lewicka, 2008); the cultural symbols attached to the spatial elements symbolize the city's identity. Each city thus contains both physical and virtual space (Zmudzinska-Nowak, 2003). The audience's impression of the city is affected by the media image. "The media is an extension of the person"—and the form of the media has an

important impact on people's feelings and experience. Music and art—with their own communicative rationality—strengthen the imprint of the city's humanistic landscape and customs in minds through flexible text combinations, rich melodies, and timbres. This arouses the goodwill of the audience toward the city's spiritual home. Current research on music and city image has tended to focus on communication content, and there are fewer quantitative analyses of the communication effects from the audience's perspective. Based on the theory of empathic communication, this paper uses "Xi'an People's Song" as an example to explore the impact of urban music on people's city preferences as expressed on mobile social media platforms.

1.1. Urban Music and Urban Image
According to Lobsang, from a music anthropological perspective, urban music is a cultural phenomenon in which individuals express their spirit, thoughts, and emotions through sound to promote the values of human civilization within a city's specific geographical, social, and economic context (Luo, 2017). Urban music is defined

by its connection to a city rather than by its name or genre. As long as the music exists within an urban setting and involves objects related to the city in its creation, performance, dissemination, and acceptance, it can be classified as "urban music" (Adam, 2007). The unique musical style of a city is shaped by its geographical environment, as well as by its social and cultural characteristics. Through diversified, artistic expressions, music is a medium of recognition, with countless instantaneous notes building the image of a city in people's minds. Urban music reflects the city's spirit and identity.

Analysis of the song "Chengdu" reveals that "the small city of music," "the tavern in the rainforest," and "the street" create an objective cognitive image of the city, while the feelings of "comfort" and "peace" also form part of this image. The subjective emotional expressions conveyed by the words "comfort," "cozy," "stay," and "sadness" mirror the city's emotional image. (Mthatiwa and Ngwira, 2019) analyzed city image as constructed by Malawian popular music and explored the role of songs in changing people's attitudes toward the city using culture as a link. Herff et al.'s (2021) experimental approach, utilizing Bayesian modeling, revealed that music can influence the emotions, vividness, and content of an imagined space. (Dossar, 1998) examined the correlation between music and national identity by providing a contextual analysis of texts from popular music genres in Latin America and the Caribbean. By studying the connection between music that incorporates place names and the concept of a "sense of place" in China since 1912 (Hong et al., 2021) discovered that a person's sense of place encompasses not only their individual emotional response to the music but also the socio-cultural context in which they live. The cultural imprint depends on practices and media, where music, carrying the city's historical development and geography, is the medium that reflects this imprinted culture.

1.2. Urban Music Empathy

Empathy is the state of emotional experience in which an individual, recognizing the feelings generated by external influences, engages in an experience with the emotions of others by observing, imagining, or inferring those emotions (De Vignemont and Singer, 2006); this involves the stimulation of emotional factors that can produce altruistic and pro-social behaviors and establish a new relationship model between individuals and groups (Buck et al., 2020). The essence of the empathic experience is to achieve psychological and emotional understanding and feedback between transmitters and receivers in the communication interaction.

Human emotions can be expressed and exchanged through many language symbols. The abstract symbols of music—such as rhythm, melody, song structure, and artistic expression—have a high degree of consistency with human emotional forms (Tan and Maneewattana, 2022). When the audience interprets musical symbols, they think creatively based on their own understanding and experience; they expand and extend the emotions expressed in the music, and transform true feelings into a kind of spiritual power. Music that is closer to real life and special regional themes is more likely to stimulate emotional resonance (Clarke et al., 2015). Using empathic communication as a tool in media image communication, the quality of communication can be improved

with the help of the audience's cognitive and emotional empathy (Schouten et al., 2020). When constructing and disseminating urban music as a media image, enhancing empathy can arouse emotional resonance and inspire longing and good feelings toward the city in the audience.

2. RESEARCH HYPOTHESES

2.1. Urban Music Branding and Empathy

Sound branding involves linking a recognizable sound with a brand to enhance audience recognition and recollection. When the audience psychologically associates a sound with a brand, it may create a lasting memory (Spence, 2012). Sound is a symbolic representation, as its timbre, tone, melody, and other attributes evoke diverse associations. For instance, the clear and boisterous voices of children may bring to mind liveliness, beauty, and radiance, while low baritone voices may evoke coldness and authority. Musical symbols used to express a brand's image could also evoke associations with brand identity. When the depiction of the brand and musical symbolism cohere, consumers have heightened cognition and emotional experiences

Music can also create a sense of place, with local folk songs, dialects, or contemporary elements creating a distinct auditory landscape that brings the city to mind (Garrioch, 2003). Urban music can create cultural associations with the local landscape, which has been shaped by thousands of years of history, thus becoming a unique element in the virtual scene. The geography and emotions tied to the space of the city can also influence people's empathetic behavior. The empathetic understanding and recognition of others' emotions rely on the scenarios crafted. In an experimental comparison, Heejin An (Lim et al., 2022) showed that people who watched a series of movies had higher character empathy due to the emotional stimulation from the different stories of the film characters compared to people who watched a movie only once. In other words, having emotional brand stories boosts the effect of empathy and builds empathic scenes.

It is important to note that this empathetic connection is established through the city's unique cultural characteristics (Lin et al., 2020). Music's distinctive changes in pitch and rhythmic variations can swiftly generate recognition and resonance. Incorporating a unique brand identification mark in urban music facilitates the development of singular associations (Lv et al., 2023; Gretzel and Collier de Mendonça, 2019). This paper defines urban music branding as the use of city-specific markers, including dialects, landmarks, scenic spots, and cultures, in songs. Based on this definition, the following hypothesis is proposed.

H1: Branding of urban music positively influences empathy.

2.2. Urban Music Awareness and Empathy

Awareness refers to the degree something being recognized and known by the public; this also includes the depth of being recognized and the breadth of being known. Consumer–brand relationships reflect awareness through brand differentiation recognition, brand cognition, and brand recall (Keller, 1993). Awareness is created by frequent repetition and reinforcement learning, which establishes

a conditioned response between the brand and the individual. This response allows for rapid confirmation and identification of the brand within relevant situations. In this paper, the awareness of urban music is defined as the extent to which the public is cognitively and emotionally familiar with that music, borrowing from the MBE model constructed by (Yoo and Donthu, 2001). For example, if I recognize a song among all of the songs about a city, I can easily recall that song in my mind. Empathy is embodied in the emotions that individuals feel toward others on an emotional and cognitive level (Judith et al., 2020); in the minds of consumers, brands with high awareness are loaded with more social value and are more likely to be emotionally inclined and trusted (Clifton, 2009). Commodity brand awareness has a direct positive impact on consumer brand emotion. For example, awareness of public art festivals improves the audience's impression and emotional attachment to the location (De Vignemont and Singer, 2006). As a cultural symbol, the widespread appeal of urban music has the potential to evoke emotional connections among audiences from diverse regions and cultural backgrounds. Accordingly, we propose the following hypothesis.

H2: Urban music awareness positively influences empathy.

2.3. Mobile Socialization and Empathy

With the continuous improvement of media forms and information acquisition methods, the dissemination of music has evolved from mere appreciation to a group social activity. For example, the social functions in the NetEase Cloud Music application (app)—such as playlists, cloud village, sharing, likes, and comments—and user social functions—such as dynamics, friends, and nearby—use music as a medium to establish a virtual space with common interests and emotions According to Carl Rogers, "Empathy refers to the ability of an individual to experience the spiritual world of others as if it were his or her own spiritual world." The exchange and communication of music is thus an important form of emotional interaction. With the help of mobile social platforms, after listening to urban music, people can communicate and interact through social sharing and topic comments, which allows people to build virtual social groups with the same interests and emotional identity through algorithmic recommendations. Members of the community show stronger self-perception and self-involvement in the group's informational exchange (Yin, n.d.). It is easy to produce emotional resonance within a group with a high degree of identification. Public discussion and information exchange make the expression of emotion stronger, and music videos with comments have relatively high engagement, which allows them easily to become a locus for the exchange of emotion (Li et al., 2023). Indeed, the comment section is based on the re-creation of the music object: the audience has their own feelings and emotions through the expression of textual information for re-circulation and sharing. The boundaries of the group involved continue to expand, forming a huge field of empathy, while the songs release their own emotions and continue to attract more people to participate and pay attention. The emotional power of the community continues to ferment and is strengthened. Socialized music is more infectious and has greater aggregation power because it is so strongly linked to emotional effects (Yin, n.d.). Based on this, the following hypothesis is proposed.

H3: Mobile socialization of urban music positively affects empathy.

2.4. Empathy and Urban Preference

Lyrics, melody, rhythm, and other musical symbols embody the value of art itself. The additional value beyond the musical theme, such as background story and network opinions, is more likely to arouse emotional resonance through diversified communication channels. According to semiotics, everything can be represented by symbols. Creators and communicators of urban music use musical symbols to shape and reconstruct the subjectively perceived regional culture, social reality, customs, and folklore of the city, and create an atmosphere through rhythms and rhymes to promote listeners' perception of the city. Music provides an emotional essence to locations while acting as a medium to connect specific places in the city with human activities. This enhances the audience's attachment to the city. Urban music shapes the collective memory of city dwellers, enhances their identification with the city, fosters empathy, expands their scope for imagination, and reinforces their sense of belonging to the city (Rapoo, 2013). The audience will forward and share the deeply resonant content with the help of the social behavior of new media. This in turn will enable more people to empathize and perform pro-social behaviors (Fatkin, 2015). Based on the above analysis, the following hypothesis is proposed.

H4: Urban music empathy positively affects the audience's urban preference.

However, people's ability to empathize is constrained by geography. The emotional state of the empathizer is directly affected by the recognition and understanding of specific situations based on existing knowledge and experience (Hein and Singer, 2008). Emotions are only triggered after one has been in specific environments or has a deep understanding of things. After analyzing the data, (Liu and Wang, 2020) verified that the frequency of humanistic exchanges between China and Vietnam and the depth of knowledge about Chinese culture enhanced the preference of young Vietnamese people for China. When listening to music, emotional arousal results from the combined influence of individual cognition, social environment, and external stimuli. Cognitive empathy and emotional empathy then moderate audience behavior (Bartsch et al., 2018).

The local factors influencing urban music include the systematic accumulation and expression of the city's historical and cultural elements (Luo, 2021) Listeners' perception and interpretation of symbolic musical information is also shaped by their life experiences, knowledge structures, and cultural beliefs (Tucker, 2016). In the creation of city image songs and urban identity, subjective evaluations should be excluded, unless clearly marked. The audience uses information aside from songs to comprehend the city, so emotions for the same song will vary across different times and spaces (Hong et al., 2021). Familiarity with a city's culture thus plays a significant role in shaping attitudes and behaviors. Individuals with varying cultural and social backgrounds also possess different perceptions and comprehensions of the city. Based on this analysis, the following hypothesis is proposed:

H5: Familiarity with the culture of the city regulates the audience's positive perception of the city.

2.5. Hypothesis Modeling

Research on the relationship between music and the urban image has focused on how the medium reflects the image of the city, while less attention has been paid to the communication effects from the audience's perspective. This study proposes a conceptual model of urban music branding, awareness, mobile socialization, and urban preference and explores their interrelationships (Figure 1).

3. RESEARCH DESIGN AND DATA COLLECTION

The rise of the mobile Internet has led to an increase in the popularity of short videos featuring the "Xi'an People's Song" and "Flip Bowl of Wine" as background music, which have helped promote the ancient capital of Xi'an as a "Netflix city" with high viewership and approval ratings. When forming an impression of a city, individuals rely not only on the visual representation provided but also on the auditory impression created through sound. Music featuring regional elements elicits emotional resonance in people and directs their attention toward the city through its rich and diverse textures and timbres. This study therefore selected "Xi'an People's Song," which serves as background music for short videos with a high click rate, as the research material.

3.1. Questionnaire Design

The survey was divided into two sections. The first section sought demographic information about the participants, such as age, gender, education, location, and whether or not they intend to use a mobile app to listen to music. The second section included five measurement items addressing the features of urban music transmission, comprising urban music branding, popularity, mobile socialization empathy, and city preference. The measurement index for urban music branding was based on the literature (Garrioch, 2003; Lin et al., 2020). Four measurement indexes were selected based on the MBE model to assess the popularity of urban music. The measurement index for mobile socialization was based on the literature (Marjorie, 2000; Yin, n.d.; Li et al., 2023). The measurement index for empathy was based on the semiotics perspective, considering both the intrinsic value of the music and its value for attachment. The indicators for measuring familiarity with the target city's culture were determined using various literature sources (Buck et al., 2020; Tan and Maneewattana, 2022; Clarke et al., 2015). The literature was also referenced for the measurement of the city's cultural indicators (Hein and Singer, 2008) (Bartsch et al., 2018) (Luo, 2021). For example, goodwill toward China was segmented into willingness to visit, degree of fondness for Chinese culture, level of convenience of life, and goodwill toward Chinese tourists (Liu and Wang, 2020). In this study, the goodwill of the target city toward Chinese tourists was measured with the following

indicators: willingness to visit, degree of convenience of life, and goodwill toward Chinese tourists. The indicators of city preference had three components: willingness to visit the target city, fondness for the history and culture of the target city, and fondness for the people of the target city. The latter part of the survey used a five-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree).

3.2. Distribution of Questionnaires

Before distributing a large number of questionnaires, a pre-survey was conducted to ensure the scientific validity and rationality of the scale. A total of 92 valid questionnaires were analyzed for reliability using SPSS26 on the internet platform, and the results indicated an overall Cronbach's alpha coefficient of 0.955. The questionnaire thus demonstrated a high level of scientific validity and reliability, as indicated by Cronbach's alpha coefficients for the six dimensions of urban music branding, awareness, mobile socialization, empathy, familiarity with the city's culture, and goodwill toward Xi'an, which were 0.954, 0.840, 0.875, 0.932, 0.934, and 0.897, respectively. These coefficients exceeded the threshold of 0.7, thus demonstrating the good reliability and stability of the questionnaire. The validity results for the questionnaire indicated an ideal factor structure, with KMO = 0.908 and $P < 0.001$.

The survey was conducted using a web-based questionnaire format and included two questions, "Have you heard of this song?" and "Does the song promote Xi'an city?" These two questions were used to eliminate any invalid responses due to conflicting answers. A total of 402 questionnaires were collected, of which 383 were valid. Of these, 167 participants were male, comprising 43.8% of the sample, and 216 were female, comprising 56.3%. The age group with the highest percentage in the survey results was the post-00 age group, with 155 individuals (40.4%). This was followed closely by the post-80s and post-90s age groups, which respectively accounted for 25 and 23.7% of the sample. These findings align with the notion that younger individuals tend to be more interested in popular music. Of the respondents, 72 individuals (19%), have lived in Xi'an, while 311 people, accounting for 81%, have not. This reveals that the majority of individuals lack the experience of residence in Xi'an.

4. DATA ANALYSIS AND HYPOTHESIS TESTING

4.1. Reliability Test

Reliability analysis, which evaluates the internal consistency of the data, is widely accepted that a Cronbach's alpha coefficient below 0.6 indicates low reliability, while a coefficient closer to 1 suggests higher reliability. The reliability analysis of the questionnaire variables shows that the coefficient of city music

Figure 1: Conceptual model
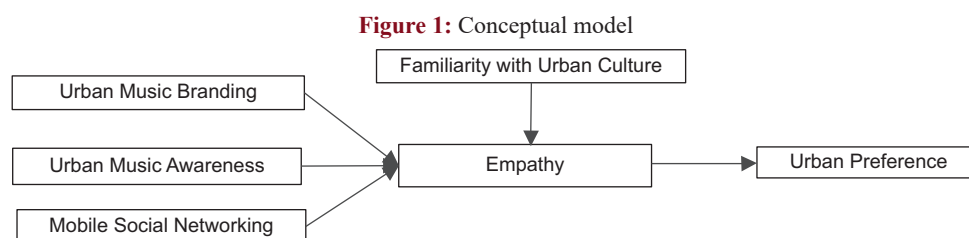
branding is α = 0.868, awareness is α = 0.805, mobile socialization is α = 0.839, empathy is α = 0.897, familiarity with city culture is α = 0.893, and preference for the city is α = 0.855. Each factor's reliability coefficient ranged from 0.8 to 0.9, with the scale's overall reliability coefficient being 0.952. These results indicate a high internal consistency of the scale.

Validity analysis determines whether each dimension correctly measures the required construct. Six dimensions were set based on preliminary experimental research, and the test results yielded a KMO value of 0.95; Bartlett's sphericity test results are $P < 0.001$, which is significant at the 99.9% significance level. Factor analysis, validated thinking, model construction, and AMOS data fitting analysis were used. The goodness-of-fit indices, including the chi-square degrees of freedom ratio (CMIN/DF = 2.97), the asymptotic variance mean square and square root (RMSEA = 0.072), the comparative fit index (CFI = 0.927), the value-added fit index (IFI = 0.972), and the non-gauge fit index (TLI = 0.914), all met the necessary criteria, which indicates that the constructed model achieved a good fit.

Table 1 displays the results of the convergent and concurrent validity tests for each factor. The results reveal that the average variance extracted (AVE) for each latent variable ranges from 0.514 to 0.643, which is above the criterion of 0.5, and the combined reliability ranges from 0.813 to 0.900, which is above the criterion of 0.7. Therefore, all of the dimensions exhibit excellent combination reliability. In addition, when the correlation

coefficients among the factors are smaller than the square root of their mean extracted variance, the discriminant validity is good. The standardized correlation coefficients among the six dimensions are basically smaller than the square root of the AVE corresponding to the dimensions, which means that, in general, there is discriminant validity among the dimensions.

4.2. Hypothesis Testing
In the hypotheses proposed based on the research theory into the influences between the factors, branding, awareness and mobile socialization of urban music are the independent variables in the model, empathy is the mediating variable, familiarity with Xi'an's urban culture is the moderating variable, and preference for Xi'an is the dependent variable.

The results in Table 2 show that the branding of urban music positively affects empathy ($\beta = 0.219$, $P < 0.001$), mobile socialization positively affects empathy ($\beta = 0.655$, $P < 0.001$), and empathy of urban music positively affects the audience's preference for the city ($\beta = 0.788$, $P < 0.01$). However, the result of popularity-empathy $\beta = 0.235$, $P < 0.05$, indicates the hypothesis that the popularity of urban music positively affects empathy is not valid.

4.3. Testing the Mediating Effects of Urban Music Empathy
To further explore the role of empathy in the relationship between branding, awareness, and mobile social influence on urban preferences, structural equation modeling was applied using the bootstrap method. If the confidence interval of the indirect effect estimate does not contain 0, then a significant mediation effect can be observed. If the confidence interval of the direct effect does not contain 0, this would indicate partial mediation, whereas if it does contain 0, this would indicate full mediation. Based on the results shown in Table 3, it is evident that the mediating effect of empathy in the relationship between urban music branding and urban preference is significant and fully mediating. However, the mediating effect of empathy in the correlation between urban music awareness and urban preference is insignificant, while its mediating effect in the correlation between mobile social function and urban preference is fully mediated. The mediating role of empathy lacks significance for the relationship between awareness and preference for urban culture. However, empathy fully mediates the correlation between mobile socialization and preference for urban culture.

4.4. Testing the Moderating Effect of City Culture Familiarity
To test the difference between familiarity with city culture and people's urban preference, empathy was taken as the independent variable and preference as the dependent variable. As shown in Table 4, the overall fit test of the model (adjusted $R^2 = 0.557$, ANOVA F = 157.263, $P < 0.001$) indicates that the model is reasonable, so urban music's ability

Table 1: Convergent validity test and combined reliability (CR) test for each factor

Path relationship			Estimate	AVE	CR
pp1	←	Banding	0.742	0.625	0.869
pp2	←	Banding	0.829		
pp3	←	Banding	0.801		
pp4	←	Banding	0.788		
zm1	←	Awareness	0.736	0.593	0.813
zm2	←	Awareness	0.797		
zm3	←	Awareness	0.775		
sj1	←	Mobile socialization	0.653	0.514	0.840
sj2	←	Mobile socialization	0.713		
sj3	←	Mobile socialization	0.789		
sj4	←	Mobile socialization	0.704		
sj5	←	Mobile socialization	0.718		
gq1	←	Empathy	0.829	0.643	0.900
gq2	←	Empathy	0.835		
gq3	←	Empathy	0.841		
gq4	←	Empathy	0.755		
gq5	←	Empathy	0.744		
s×1	←	Familiarity	0.909	0.806	0.893
s×2	←	Familiarity	0.887		
hg1	←	Preference	0.708	0.594	0.854
hg2	←	Preference	0.766		
hg3	←	Preference	0.800		
hg4	←	Preference	0.806		

Table 2: Test results for research hypotheses

Hypothesis	Path	Estimate	S.E.	C.R.	P	Result
H1	Banding→Empathy	0.219	0.037	5.891	***	Valid
H2	Awareness→Empathy	0.235	0.098	2.177	0.029	Invalid
H3	Mobile socialization→Empathy	0.655	0.108	5.758	***	Valid
H4	Empathy→Preference	0.788	0.143	5.366	***	Valid

Table 3: Mediating role of empathy

Path relations	Effect relationship	Estimate	Lower	Upper	P	Mediating effect
Banding→Empathy→Preference	Indirect effect	0.166	0.064	0.325	0.001	Full mediation
	Direct effect	0.149	−0.013	0.340	0.069	
	Total effect	0.315	0.148	0.495	0.001	
Awareness→Empathy→Preference	Indirect effect	0.165	−0.062	0.479	0.135	Non-significant
	Direct effect	−0.075	−0.461	0.219	0.590	
	Total effect	0.090	−0.257	0.370	0.552	
Mobile socialization→Empathy→Preference	Indirect effect	0.477	0.221	1.030	0.001	Full mediation
	Direct effect	0.007	−0.509	0.394	0.957	
	Total effect	0.484	0.152	0.849	0.008	

Table 4: Moderating effect of city culture familiarity

Factor	Coeff	SE	t	P	LLCI	ULCI
Constant	1.039	0.405	2.565	0.011	0.243	1.836
Empathy	0.629	0.106	5.935	0.000	0.421	0.837
Familiarity	0.248	0.122	2.033	0.043	0.008	0.488
Empathy* Familiarity	−0.020	0.029	−0.692	0.489	−0.078	0.037
Adjusted R2			0.557			
F			159.263***			

to generate empathy can enhance people's favorable impression of the city of Xi'an. However, the coefficient of the interaction term for empathy and familiarity is −0.02 with P > 0.05, which indicates that the moderating effect of familiarity in the model is not significant. Hypothesis H5 is thus not supported. People's favorability toward Xi'an, based on their empathy toward urban music, is not significantly affected by their knowledge of the city's cultural history. There is no significant relationship between the two factors.

5. DISCUSSION AND CONCLUSIONS

First, based on our study of urban music, we found that branding and mobile social function have a positive impact on empathy. However, awareness does not significantly affect empathy. Among the three factors selected in this study, the mobile social function has the greatest impact, which indicates that, as the mode for communication of music changes from individual appreciation to a group social function, people are more likely to experience emotional resonance in the virtual space constructed by urban music with common interests. The socialization functions of music such as clicks, reprints, and comments have a stronger infectious effect given their emotional padding. This study found that music in the comment section and music circles inspired individuals to experience heightened emotions. Within a group with a stronger sense of identity, the use of text to convey and share emotions through music also led to the expansion of emotional boundaries and enhanced the group's emotional cohesion.

The branding of urban music has a positive impact on empathy. In "Xi'an People's Song," regional branding elements—such as the rough Northwest dialect, typical Xi'an cuisine, and iconic historical and cultural buildings—enhance listeners' cognitive and emotional experience of Xi'an. This discovery reinforces the theory on the connection between brand narratives, city culture branding, and empathy. In promoting urban image, using distinctive symbols that reflect the region and incorporating them into music can amplify audience attention. By highlighting the

unique scenery, history, and culture of the city, the emotional impact of the music can influence people's perceptions of and feelings toward the city's image.

However, there was no significant correlation between the awareness of urban music and empathetic responses toward the city. Previous research has primarily focused on the impact of popularity on brand emotion. For instance, the popularity of Pu-erh tea influences consumer brand emotion, and the popularity of an art festival affects an individual's location emotion; these examples are often viewed as a type of emotional reflection within a particular situation. Empathy is a state of common emotional experience formed by secondary learning of others' emotions based on self-knowledge, with music as an external stimulus. Determining whether music will produce emotional commonality after eliciting the audience's emotional response also needs to consider the situation, concepts, experience, and cultural level.

Second, empathy plays an intermediary role between urban music branding and people's positive feelings toward the city, as well as playing a mediating role between urban music mobile socialization and urban preference. This means that urban music branding and mobile socialization affect people's positive feelings toward the city entirely through empathy. From a physical standpoint, music is a series of regular sound waves created through vibration, while the positive emotions associated with a city are a psychological experience that people feel. Music can stimulate and evoke emotions in its listeners, thereby becoming an intentional focus. The fundamental reason for this is that the creation of music is essentially the construction of emotions by the composer, the singer, and other individuals. These emotions are then conveyed through the musical notes, which makes it an art form particularly centered on emotion. Leonard and Mayer stated that music can often elicit emotions through conscious or unconscious processes, which are related to an individual's realities, personal cognition, perception of the music, and the aesthetics of the experience. The branding and mobile social function of urban music are its social attributes. These two factors promote positive feelings toward the city, while the emotional impact of the music itself plays a crucial role in connecting people. To ensure that audiences at various levels can comprehend and connect emotionally with the sentiments expressed in urban music, the processes of creation and dissemination ought to be based on emotional theory and diversified psychological construction stemming from social life experiences.

Third, the moderating effect of familiarity with urban culture on the relationship between empathy and urban preference was not

significant. Previous studies have mentioned that empathic ability plays a moderating role in the behavior of empathizing, and the higher the empathy ability, the more it can lead the audience to have a deeper understanding and feeling of the external environment. The relationship between human emotion and the environment is significant in understanding that environment. Advances in contemporary media technology permit situational and three-dimensional simulations of local landscapes using visuals and sound. Realistic local symbols can be represented through an audio-visual medium, thereby immersing the audience in an anthropomorphic habitat, which effectively generates emotional resonance. Social media also alters the formation of collectives by creating groups with shared interests and experiences in the virtual realm. Emotion is the primary characteristic of these virtual communities, with music serving as one medium for emotional expression. The dual function of music and social media is thus critical in fostering emotional resonance among group members. In an era of digitization, the channels for the dissemination of urban culture have diversified, and urban culture can be invisibly embedded in the diversified and three-dimensional publicity channels, so that people unconsciously transform their cognition into emotion, which in turn affects their goodwill toward the city.

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