Experience, satisfaction and loyalty in the context of online music festivals in China

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Abstract

Purpose

The COVID-19 pandemic has prompted the fast growth of online music festivals. This paper explores how festivalgoers' experience affects their satisfaction and drives their loyalty to re-attend online music festivals in China.

Design/methodology/approach

Based on an understanding of the music festival experience and the characteristics of live-streamed performances, this paper investigates five factors that affect festivalgoers' satisfaction and loyalty, namely the music experience, ambience experience, separation experience, social experience and novelty experience. The relationships between festivalgoers' experience, satisfaction and loyalty are also explored using structural equation modelling techniques.

Findings

The empirical results suggest that four of the above-mentioned five factors of the online music festival experience directly affect festivalgoers' satisfaction and loyalty. The online mode is a rapid adaptation of and preferred alternative to offline music festivals, whilst the creation of the experience, along with satisfaction with and loyalty to the online music festival, are determined by different factors compared to offline modes. Overall festival satisfaction positively enhances the relationship between festivalgoers' experience and loyalty to online music festivals.

Originality

This study explores a phenomenon that has evolved quickly since COVID-19 and will, potentially, have an ongoing and enduring impact on the music festival sector. It differentiates the understanding of festivalgoers' experience in online and offline modes, which is a new addition to the literature. It also enriches the theoretical understanding of the experience of, satisfaction with and loyalty to online music festivals.

Keywords:

Online music festival, Festival experience, Festival satisfaction, Festival loyalty

1. Introduction

Festivals, particularly music festivals, are among the fastest-growing segments of the events industry (Nhamo *et al.*, 2020; Dodds *et al.,* 2020). Studies suggest that their increasing popularity is primarily due to the aggregated opportunities for socialisation, novelty, excitement, and escapism that music festivals offer participants (Bowen and Daniels, 2005). For producers, music festivals also create multiple prospects for income generation through experiences on offer, such as access to live musical performances, food and craft stalls and interactive workshops. Studies also note that due to the diverse experiences that music festivals provide, they have the potential to actualise and construct new individual and community identities amongst participants (Eder, Staggenborg and Sudderth, 1995; Ballantyne *et al.,* 2014; Wu *et al*., 2020). For instance, in relation to lesbian feminist identities, Staggenborg and Suddherth (1995) found that the National Women's music festival strengthened lesbian identities for many female participants. Similarly, within the context of Chinese musical festivals, Wu *et al*. (2020) concluded that these can go beyond reshaping identities, by unveiling new social identities that participants adopt and maintain beyond the festival time and space. Concomitantly, virtual musical performances and online music festivals have also been seen to provide participants with opportunities to express fan identities and construct trans-local communities (Baym, 2007; Rendell, 2021).

The outbreak of the COVID-19 pandemic accelerated the digitalisation of festival spaces and music performances due to social distancing measures, lockdowns, and limited face-to-face interactions (Moon, 2020). Although music channels and social media sites organised immersive online performances as an opportunity to monetise and promote musical performances in a complementary way prior to the pandemic, virtual music festivals sharply increased during the coronavirus outbreak (Gallarza, Tubillejas-Andres, and Samartin, 2023, Green, 2023; Srivastava and Downs, 2020). In response to consumer demand, and in an effort to keep the live music industry going during the pandemic, online music festivals were widely introduced by artists and extensively promoted by event organisers (Gallarza, Tubillejas-Andrés, and Samartin, 2023; Nie *et al.,* 2021; Lee *et al*., 2022). The number of virtual music festivals, using both streaming services and virtual reality, has grown exponentially since the onset of the pandemic (Spangler, 2020; Lee *et al.*, 2022; Green, 2023). For example, in 2020, TikTok launched a live "SoFa festival", inviting artists to perform via a live broadcast, which achieved more than 2.6 million online viewers, a figure that most in-person outdoor festivals would find difficult to replicate (Spangler, 2020). Other social media channels such as Instagram, Twitter and Facebook organised prominent musical

virtual events, gathering more than 100,000 live views (Green, 2023). Large-scale music festivals traditionally organised in rural locations, such as 'Splendour in the Park' in Byron Bay, Australia, converted to a virtual format, digitally recreating musical performances and other festival attractions which attendees could access through various digital devices (Green, 2023). In a Chinese context, Modern Sky, one of the most popular Chinese music festivals, held several virtual events combining video streaming and live performances during the pandemic, and prioritised organising virtual music festivals as a key part of its strategy for 2022 (Live Music Intelligence, 2022). In April 2022, China Music Techno Base hosted a five-day online music festival, which was one of the largest online music festivals in China, including 15 performances for a total of 675 minutes of performing time (Zeng, 2022). Many influential bands and singers in China also hosted their online concerts during the pandemic, which attracted tens of millions of online viewers.

Online music festivals have rapidly evolved as a new phenomenon in the last three years (Green, 2023; Gallarza, Tubillejas-Andrés, and Samartin, 2023) but research in this area is scarce, particularly regarding the meaning, value and experience of music festivals for participants (Green, 2023). Considering the ongoing and enduring changes the pandemic has prompted in the events sector and festivalgoers' behaviour, online music festivals warrant further investigation, especially for the post-pandemic recovery of the sector and future growth of online events.

This research, therefore, aims to investigate motivation and willingness to attend online music festivals in the largest emerging market, China, through various dimensions of the festival experience, i.e., the music, ambience, separation, social, and novelty experience. Since festivalgoers' previous experience and word-of-mouth (WoM) are critical factors in motivating individuals to revisit and re-attend festivals (Tung and Ritchie, 2011), how past experiences of offline and online music festivals affect the perception of and participation in future online music festivals will be investigated. The relationships between festivalgoers' experience, satisfaction, and loyalty towards online music festivals will also be examined.

The findings should benefit academics, professionals and practitioners in the entertainment industry by revealing how to create a memorable online experience, enriching the understanding of festivalgoers' motivation and loyalty, and furthering the adoption and development of online performances.

2. Literature Review

2.1 Music Festivals in China

China has demonstrated a growing increase in music festivals since 2010 (Wu *et al*., 2020). Supported by central and local governments, the creative and cultural industries are increasingly being used to accelerate economic development, encouraging exponential growth in the number of music festivals across China (Groenewegen-Lau, 2014). Evidence suggests a continuous rise in music festivals in mainland China before the pandemic, with 2600 music festivals staged in 2018, compared to 1486 in 2016 (Statista, 2020).

Although modern music festivals are relatively new to mainland Chinese audiences, research suggests that this emerging sector is particularly attractive to the younger generation (classified as under 35), who have less experience with different musical genres (Li and Wood, 2016). The younger generation is particularly drawn to music festivals since these offer them a means to construct and articulate their individual identities, engage in creative and authentic experiences, and explore elements of culture through socialisation (Kinnunen *et al*., 2019).

However, Li and Wood (2016) suggest that Chinese audiences' motivation to attend these festivals differs from audiences in Western countries. Besides the common motivations, such as entertainment, socialisation and relaxation, young Chinese audiences were also strongly motivated by spiritual escape and pursuit (Li and Wood, 2016). Their motivations may be related to the collectivist culture in China, where, in contrast to the more individualist and independent cultures found in Western societies, people view themselves as interdependent and tend to hide their feelings and views. Attending music festivals allows them to express their feelings through their preferred music and performances.

While there is growing empirical literature on festivalgoers within a Western context (Brown and Sharpley, 2019; Du Preez and Kruger, 2022), limited studies (e.g., Li and Wood, 2016; Li *et al.,* 2017) examine Chinese festivalgoers. Furthermore, existing literature predominantly focuses on operation mechanisms, profit models, and historical aspects of Chinese music festivals (Sun *et al*., 2019), whilst festivalgoers' experiences remain under-researched and under-theorised, particularly with the emergence of online music festivals.

2.2 Online Music Festivals

The COVID-19 pandemic caused music festivals to be cancelled or postponed due to virus containment measures (Nhamo *et al*., 2020). In the UK, one of the largest

markets for live music events, the music industry generated £4 billion in 2021, an increase of 26% compared to £3.1 billion in 2020, but still down 31% on the pre-pandemic all-time high of £5.8 billion in 2019 (Musicians Union, 2022). Pandemic conditions pushed festival organisers to explore technology-related alternatives for producing and distributing live events (Nhamo *et al.,* 2020). Whilst the online mode existed before COVID-19, changes in consumer trends and business models triggered by the pandemic meant that online events boomed and accelerated during this time. Notwithstanding that digitally-mediated music events fail to offer the iterative and unexpected aspects of live experiences (Charron, 2017), they can reduce staging costs and increase the accessibility of the event to larger audiences (Pearlman and Gates, 2010).

Online music festivals have benefited audiences with increased access to live music services and other entertainment-based digital platforms (Robinson, 2015; Maasø, 2018). Before COVID-19, younger generations mainly accessed and consumed recorded music through digital platforms, which have lower costs and suit their lifestyles. This phenomenon arguably facilitated a more immediate transition from offline to online music festivals, whilst new distribution channels, such as social media, were ideally positioned to offer real-time connectivity reminiscent of the live experience.

Online music festivals have moved beyond temporal and physical boundaries, with numerous online activities and resources, such as streaming of festival artists, festival forums, and festival-related content on social media, taking place in parallel to the primary festival experience (Danielsen and Kjus, 2019). This practice indicates that music festivals are increasingly shifting towards virtual domains, where the interplay between social media and online music festivals provides audiences with further opportunities for participation and interaction.

The digitisation of the music industry has been seen as a threat to live shows, as it is read by some critics as providing a less authentic experience than face-to-face events (Bennett, 2015; Jones, 2015). Online mediation of music festivals has been found to lack tangible socialisation compared to offline performances (Bennett, 2015; Harper, 2015), whilst the distance created by media screens has been claimed to reduce affective engagement for audience members (Harper, 2015). Yet, these arguments neglect the nuances of online engagement offered by virtual music shows, notably the way in which fans, unable to attend festivals due to cost or geographical proximity, engage with each other through social media channels, supporting inclusion and trans-local community growth (Baym, 2007; Rendell, 2021).

Whilst virtual festival spaces may “lack the smell of sweat and drinks that a person might experience at an analog concert” (Kent and Ellis, 2015, p.86) and may not “corporeally perform fan identities" (Rendell, 2021, p.1103), digital media encourage textual productivity and interactivity between audience members, albeit in a more nuanced way. In his study of live music portal shows, Rendell (2021) found that online audience members used emojis available in on-screen chat forums to imitate *in situ* live show behaviours, such as clapping, and throwing horns. Moreover, posts were used by online participants to converse with one another and describe how they felt about the performances (Rendell, 2021). Thus, online participant posts allowed audiences to express fan identities, and respond in real time to the event’s spontaneity and intimacy via the affordance of chat rooms and other digital resources (Rendell, 2021). It may be argued, then, that the temporal and spatial qualities of online music festivals can support fan engagement similar to face-to-face events, even while this is limited to online spatial realms.

Although studies increasingly recognise the opportunities for fan engagement and identity-making afforded by online music festivals (Rendell, 2021; Danielsen and Kjus, 2019), research examining online festival attendees’ motivations and perceived satisfaction and loyalty remains limited in scope, particularly concerning the Chinese socio-cultural context.

2.3 Festival Experience, Satisfaction and Loyalty

Experience is defined as a response to services provided or products offered, made personal and memorable through impacting individuals’ senses (Pine and Gilmore, 1999; Schmitt, 1999). In the case of music festival experience, Packer and Ballantyne (2001) drew on theoretical constructs from positive psychology (Seligman, 2002) and argued that the live music experience encompasses four facets: opportunities for social interactions, separation from everyday life, festival atmosphere, and the music itself. The music experience provides a common space in which both the festival experience and the social experience are built, facilitating a shared sense of connection among patrons (Ballantyne, Ballantyne and Packer, 2013). The separation experience marks the festival space as different from everyday life and offers participants an opportunity to ‘disconnect’, prompting self-understanding and reflection (Ballantyne, Ballantyne and Packer, 2013). It is the interplay of these four facets that characterise the music festival experience and that can potentially induce subjective, social, and psychological wellbeing among attendees. Subjective wellbeing refers to hedonic aspects (i.e. pleasure and happiness), whilst psychological wellbeing

encompasses eudaimonic aspects (i.e. self-realisation and personal growth) (Keyes, Shmotkin and Ryff, 2022). Lastly, social wellbeing is believed to include five components: social acceptance, social coherence, social integration, social actualisation, and social contribution (Keyes, 1998). Therefore, the music festival context can provide an environment that is conducive to positive psychological and social outcomes (Ballantyne, Ballantyne and Packer, 2014).

When examining satisfaction, existing research denotes that satisfaction is developed through a positive consumer experience with the service or product (Lee and Hsu, 2013). Attitudinal loyalty can be defined as consumers' intention to remain committed to a specific brand or provider by repeating their purchasing experiences (Thakur and Kaur, 2016). Loyalty is key for music festival organisers insofar as this increases the likelihood of repeat attendance and enhances the reputation of the festival's brand (Pitts and Spencer, 2008).

Previous studies examining festival satisfaction have demonstrated that festival experience strongly affects the psychological and sensual state of festivalgoers (Brown *et al*., 2019), which in turn determines their satisfaction with the music festival itself. Mason and Paggario (2012), for instance, found that the festivalscape, which represents the general atmosphere experienced by attendees and includes tangible factors such as design elements along with intangible aspects such as social factors (Lee *et al.*, 2008), directly impacts satisfaction, which subsequently affects the behavioural intention of attendees and their loyalty to a particular festival. More specifically, the festivalscape construct is generally thought to be influenced by seven prominent environmental dimensions that can affect the festival participants' experience (Lee *et al*., 2008). These include the perceived quality of the festival's programme, the service quality offered by staff or volunteers, the quality of the food offered, the quality and availability of auxiliary facilities, convenience and accessibility, information availability, and the souvenirs on offer.

Similarly, within the context of live music performances, Bitner (1992) suggested three key servicescape elements that affect participant satisfaction: ambient conditions, such as noise, air quality, and temperature; spatial elements, such as furnishings, equipment, and layout; and finally signs, symbols and artefacts, such as decor, signage, and personal artefacts. These tangible elements create both functional and emotional value for attendees (Berry *et al.,* 2002, Sandstrorm *et al.,* 2008). Audience interaction also features heavily in Bitner's (1992) conceptualisation, suggesting that satisfaction with live music experiences is also determined by the opportunities

provided for audiences to enjoy themselves in the company of others.

Hausman (2011) extends these findings further and finds that, as well as attributes related to the performance and physical setting, experiential involvement is also an important determinant of satisfaction, including repeat attendance and consumer spending. Drawing on experiential marketing literature (Pine and Gilmore, 1999), Hausman (2011, p.213) defines experiential involvement as “a passive state, such as a person who is “in a stupor” at a rock concert”, where attendees passively immerse themselves in the experience, reflecting the importance of the sensory dimension of the music festival experience. Accordingly, consideration of the way in which multi-sensory elements, including both focal musical elements and surroundings, are perceived in live musical performances appears essential in understanding customer satisfaction with these events (Haussman, 2011; Thompson, 2007). The evaluation of both hedonic aspects (i.e. feelings of pleasure, excitement and fun), as well as utilitarian aspects of the music festival experience are thus key when assessing attendees’ satisfaction (Haussman, 2011). Concomitantly, existing research suggests that the in-use festival experience (i.e. what patrons experience during the festival), including both tangible and intangible elements, is key to their satisfaction (Holbrook, 2018) and linked to their willingness to pay, re-attend and recommend the festival (Borges *et al.,* 2016).

2.4 Brand Equity Theory and Online Musical Festivals

Aaker (1991) created and tested the brand equity theory, which contains five key factors (e.g., brand awareness, brand association, perceived quality, brand assets and brand loyalty). The theory has evolved over time, adapting to changes in digital landscape and consumer behaviour, and recent studies often focus on online brand equity and explore digital platforms. Underpinned by the brand equity theory, Brakus et al. (2009) developed the brand experience model, which elucidated studies conducted by Shim et al. (2015) and Bueno et al. (2019), establishing a compelling nexus between brand experience, loyalty and satisfaction. Rocha et al. (2022) conducted a rigorous examination of this model using data generated from a music festival in Brazil, affirming a robust and statistically significant positive association between experiential elements, satisfaction levels and loyalty for musical festivals.

The depth of the theoretical grounding extends further as Tan et al. (2020) asserted that attending a music festival transcends mere participation; it encompasses the entire spectrum from travel initiation to the engagement with various activities. Moreover, Elisa Alen-Gonzales et al. (2023) have ingeniously advanced the discourse

by introducing a comprehensive model, which employs multidimensional analysis, and delves into the intricate interplay of behavioural intentions, environmental psychology, and the unique context of music festivals. In this paradigm, the discernible impacts, both social and emotional, reverberate significantly, ultimately shaping the overall experience, satisfaction levels, and the ensuing loyalty of festival-goers. This nuanced approach enhances our understanding by situating music festivals within a broader behavioural and psychological context, elevating the theoretical underpinnings of the study to unprecedented levels of sophistication and depth.

Although online music festivals share the characteristics of offline music festivals, the online experience differs from the offline ones. Underpinned by the brand equity theory (Aaker, 1991) and extending Packer and Ballantyne's (2011) adoption of positive psychology (Seligman, 2002), the rest of this section discusses the factors contributing to the online festival experience, which consequently affecting festivalgoers' satisfaction and loyalty.

2.4.1 Music and performance – Music experience

Music and performance are the core elements constituting the festival experience. The quality of music and performances is key in offering emotional, social and psychological benefits, which positively influences festivalgoers' satisfaction, attendance and behaviour towards future purchase intention (Cole and Chancellor, 2009; Abreu-Novais and Arcodia, 2013).

Semrad and Rivera (2018) suggest that online music festivals are very different from physical ones, as they predominantly rely on the quality of music to satisfy their attendees. Thus, online music festival organisers must have a good understanding of their target market's music taste to ensure success. If the music and performances fail to engage the festivalgoers, all other stimulating effects may lose importance. For example, Semrad and Rivera (2018) noted that music events on social media platforms such as Facebook and YouTube fail to deliver stimulating music and performance for audiences.

Therefore, festivalgoers' satisfaction is developed through the music and performance experienced *in situ*, which could positively influence their purchase decisions in the future and lead to the development of loyalty. The following hypotheses are proposed:

$H1_a$: Music experience positively affects festivalgoers' satisfaction with online music festivals.

$H2_a$: Music experience positively affects festivalgoers' loyalty to online music festivals.

2.4.2 Ambience experience

The ambience is another critical aspect influencing festivalgoers' satisfaction with a music festival. Music festivals are a combination of ambience, food and services, which have a significant influence over festivalgoers' experience (Cole and Chancellor, 2009). Lee (2016) suggests that the locals who attend music festivals are more concerned about the physical atmosphere of the concert venues. Kuo *et al.* (2010) highlight that comfortable seating and capacity, clean and neat restrooms, and a high-quality soundproof room with professional setups of video and audio facilities strongly influence satisfaction with offline festivals.

Kuo et al. (2010) also noted that people attending music festivals desire an ambience where they can feel stimulated and gain rewarding psychological energy. However, online music festivals in China have shown that audiences have different priorities while attending online events. Chinese participants expect online events to provide them with greater comfort of use (Chen and Lei, 2021). Factors like food and service, which hold importance in offline music festivals, might not have the same significance as online music festivals.

For online music festivals, where the venue is not an issue, digital platforms increase exposure. Nevertheless, it can be challenging for online music festivals to provide an equally stimulating ambience to festivalgoers when they are not physically present, and certain live elements cannot be replicated (Musa *et al*., 2019). However, captivating stage setup and video streaming technologies could provide festivalgoers with a more engaging visual and audio ambience.

In light of these, the following hypotheses are proposed:

$H1_b$: Ambience experience positively affects festivalgoers' satisfaction with online music festivals.

$H2_b$: Ambience experience positively affects festivalgoers' loyalty to online music festivals.

2.4.3 Escape - Separation experience

Festivalgoers often attend music festivals to escape daily routines (Pavluković *et al*., 2019). Offline music festivals have remained attractive as they offer a source of escape and separation from daily stresses, given the experience and unique ambience created by offline music performances and audiences (Mok *et al*., 2011; Lee and Hsu, 2013). Similarly, research (Pearlman and Gates, 2010; Lee *et al*., 2017) suggest that attendees seek to escape their daily worries, relieve the negative energy in their bodies

and be entertained by their favourite artists and music and social interactions provided by online events.

Offline music festivals are more vivid and secluded, whilst online music festivals are limited in this regard, as they cannot provide attendees with the same live experience as offline festivals (Kinnunen *et al*., 2019). These limitations are linked to online festivals not offering attendees escapism to the same extent as offline events, given that festivalgoers usually attend online events from their homes. Festivalgoers can not get away from their everyday life and experience an escape from their daily routine. Online music festivals need to make significant efforts to provide festivalgoers with the sense of separation and escape that they desire from offline festivals (Lee *et al*., 2017) and can consequently prompt loyalty.

Henceforth, the following hypotheses are proposed:

$H1_c$: Separation experience positively affects festivalgoers' satisfaction with online music festivals.

$H2_c$: Separation experience positively affects festivalgoers' loyalty to online music festivals.

2.4.4 Social interaction – Social experience

Social interaction has also been recognised as a key motivator for attending music festivals (Mok *et al*., 2011). Physically meeting and interacting with new and different people while enjoying their favourite artists and music can positively affect festivalgoers' mental health. Online music festivals might achieve this via different channels, as festivalgoers can not interact with other participants like in offline festivals.

Online music festivals have unlimited reach across physical borders and time zones. In China, social interactions around online music festivals are supported by the prevalent use of social media (Pearlman and Gates, 2010). Online music festival organisers have also established dedicated platforms for more interactive and engaging social experiences (Lin and Lu, 2017). Festivalgoers enjoy attending events that provide unique interactions through dedicated Apps or websites. The use of online platforms, including reviews and recommendations, enables festivalgoers to interact and share their experience and satisfaction with whom they may never get the chance to interact in offline music festivals, a critical factor in prompting repeat attendance (Cohen *et al*., 2017; Teixeira *et al*., 2019). This continuous social engagement with online events and music streaming platforms could be translated into long-term loyalty. Consequently, loyalty towards online music festivals is on the rise in China. The

following hypotheses are thus proposed:

$H1_d$: Social experience positively affects festivalgoers' satisfaction with online music festivals.

$H2_d$: Social experience positively affects festivalgoers' loyalty to online music festivals.

2.4.5 Innovation - Novelty experiences

According to Holbrook (2018), music festivals cannot develop a permanent competitive advantage, as festivalgoers demand constant innovation. As new music and performance trends emerge, festivalgoers expect these to be reflected in music festivals. If music festivals do not keep up with these trends, they gradually lose loyal attendees who seek a more innovative experience.

Online music festivals have a competitive advantage in this regard, as they represent a new experience for audiences, who may view online festivals as an alternative to traditional offline events. Advanced technologies like augmented reality, simulation, and other innovative concepts can be employed at online music festivals to provide a memorable experience.

The hypotheses below are in turn proposed:

$H1_e$: Novelty experience positively affects festivalgoers' satisfaction with online music festivals.

$H2_e$: Novelty experience positively affects festivalgoers' loyalty to online music festivals.

2.4.6 Impacts of Experience and Satisfaction on Loyalty to Online Music Festivals

As previously discussed, experience and satisfaction are the primary attributes that significantly impact festivalgoers' willingness to pay and attend, contributing to the development of loyalty. Lee and Hsu (2013) suggest that satisfaction is developed through a positive consumer experience with the product or service, which could develop into loyalty over time. Therefore, the development of loyalty is a process that takes place within a certain period, beginning with the consumer's good experience.

In the case of music festivals, festivalgoers are looking for rewarding experiences they can share with their friends and family, which helps to create a positive impression (Abreu-Novais and Arcodia, 2013; Pavluković *et al*., 2019). Festivalgoers' satisfaction is the central focus of music festival organisers, as they want to ensure the development of a positive image in the market. Loyalty may be developed quickly amongst first-time attendees if their experience is memorable (Chaney and Martin, 2016). Therefore, festivalgoers' first impressions must be carefully handled, as their

experience can significantly affect their loyalty.

Although festivalgoers often prefer free online music festivals to save money (Drengner *et al*., 2012), frequent festivalgoers are more willing to pay for events that they had memorable experiences and were satisfied with in the past (Savinovic *et al*., 2012). Music festivals need to generate enough revenue to provide high-quality experiences and attract newcomers. This is further endorsed by Charron (2017), who asserts that audiences are willing to pay for their favourite music festivals to keep performing in their locality. Nevertheless, the shift towards online music festivals may not generate a positive response from frequent festivalgoers because their previous experience of offline music events is likely to negatively impact their satisfaction with the online experience. Hughes *et al*. (2017) suggest that satisfaction with offline music festivals before the COVID-19 pandemic was higher than with online music events. In China, online music festivals seem to have received a positive response from festivalgoers compared to other Western countries (Lin and Lu, 2017). Chinese audiences have been engaging with online music events for almost a decade and are thus not new to this type of event.

It should be noted that loyalty to music festivals is not permanent, as festivalgoers constantly seek an enhanced customer experience in the services provided at music festivals. It can be challenging for organisers to offer high-quality festival experiences online, particularly concerning the ambience, a sense of escape and social interactions, making it more difficult to create high satisfaction among festivalgoers. Online music festivals must continue to enhance the festival experience to keep festivalgoers interested, engaged and satisfied. Festivalgoers' satisfaction can be understood as their overall evaluation of the experience, consequently affecting their loyalty. Since festival satisfaction impacts the relationship between the different aspects of experience quality (Chen and Chen, 2010) and loyalty (Lee *et al*., 2012), the hypothesis below was proposed subsequently:

H3: Festivalgoers' satisfaction positively mediates the relationship between their experience and loyalty to online music festivals.

2.5 Research Hypothetical Model

The hypothetical model for the research is presented in Figure I.

INSERT Figure I HERE

3. Methodology

3.1 Measurement

This paper investigates the factors affecting festivalgoers' experience and satisfaction, their relationship with loyalty and their likelihood of returning to the same online music festival in China. The questionnaire consisted of three sections, and the items were adapted and developed from relevant literature.

Section one uses multiple-choice questions, which collect demographic information, including gender, age, employment, income, and experience with offline and online music festivals. Section two investigates the theoretical model, which consists of three main constructs: festival experience, festival satisfaction, and festival loyalty. A 5-point Likert scale is adopted, labelled from 'strongly disagree' ('1') to 'strongly agree' ('5').

The festival experience was measured by 13 items, broken down into music, ambience, separation, social and novelty experience. Three items of music experience were adopted from Packer and Ballantyne (2011), Lee *et al*. (2017) and Semrad and Rivera (2018). Two items measured the ambience experience: one item was borrowed from Cole and Chancellor (2009) and Packer and Ballantyne (2011), and the other was explicitly added for online festivals. Separation experience was measured by two items: one was borrowed from Packer and Ballantyne (2011), and one was explicitly added for online festivals. Social experience was measured by three items adopted from Mok *et al*. (2011) and Packer and Ballantyne (2011). Drawing upon the previous works of Wang, Jiang and Shi (2019), three items were developed to explore the novelty experience.

Festival satisfaction was measured by three items borrowed from Lee and Hsu (2013). Four items of festival loyalty were adopted from Lee *et al*. (2012), Drengner *et al*. (2012) and Chaney and Martin (2017), which explore festivalgoers' loyal behaviours.

Section three included three multiple-choice questions and one open-ended question, which investigated festivalgoers' perceptions and expectations of online music festivals.

3.2 Sampling and Data Collection

The target population has been defined as festivalgoers who have attended at least one online music festival, whilst the genre or the brand of the music festival is not specified. The primary data was collected using multiple sampling strategies, through an online survey in August and September 2020, which is the high season for music festivals. Firstly, convenience sampling was adopted, using close contacts of the researchers, through which 81 valid responses were collected. Secondly, the survey

link was posted in the comments section of two online festivals, 'Strawberry Nebula 2020' and 'How in the wind', and other mainstream social media, such as WeChat, Sina Blog, Douban, Baidu, and Zhihu, where the post was tagged with 'online music festival'. However, no valid response was collected. Thirdly, purposive sampling was adopted, by inviting five key opinion leaders (KOL) of online music festivals to share the survey link via their WeChat Moment, equivalent to the Reed function on Instagram, and via ten music-specific WeChat groups, which resulted in 269 valid responses. A total of 350 valid responses were collected for this study.

3.3 Data and Procedure

A pilot test was conducted online using convenience sampling in July 2020 to eliminate potential issues in the questionnaire design. In total, 21 voluntary responses were collected from the researchers' immediate network. The questionnaire was revised based on the feedback gathered from the pilot. For example, some statements were reworded to improve clarity.

SPSS 22.0 and Amos 23.0 SEM packages were used for the statistical analysis. A one-way ANOVA test was conducted to compare the experience of offline music festivals and online music festivals. Regression analysis was conducted to examine the impact of each dimension of the festival experience on festival satisfaction and loyalty, respectively ($H1_a$-$H1_e$ and $H2_a$-$H2_e$). Correlation analysis examined the relationship between experience, satisfaction and loyalty for online music festivals. Structural equation modelling was conducted to estimate the relationships among festivalgoers' experience, satisfaction and loyal (H3).

The demographic characteristics of the 350 respondents are presented in Table I. The sample consists of comparable proportions of males (50.9%) and females (49.1%). Most respondents were 18-35 years old (90.0%), including 41.4% aged 18-25 and 48.6% aged 26-35, whilst only 5.7% were under 18 and 4.3% were over 35. The leading age group of the respondents matches the primary social media user, which supports the use of social media for data collection. Regarding their preferences for online or offline music festivals, offline music festivals were marginally more preferred (42.5%) over online ones (39.1%).

INSERT Table I HERE

4. Analysis and results

4.1 Measurement Model Analysis

Before the statistical analysis, the measurement model analysis was performed, including factor loading, internal consistency and validity. Table II demonstrates the results of the model measurement. Confirmatory factor analysis (CFA) was computed using Amos 28.0 to test the measurement model. As part of the CFA, factor loading (FL) were assessed for each item, which test how well all the measured variables represent the number of constructs. The factor loadings exceeded the recommended threshold value of 0.7, indicating acceptable measurement reliability (Hair *et al*., 2019). The model-fit measures were used to assess the model's overall goodness of fit (the chi-square, CFI, RMSEA and SRMR) and all values were within their respective common acceptance level (Hair *et al*., 2019), yielding good fit for the data, as demonstrated in Table II.

Cronbach's alpha (CA) and composite reliability (CR) were used to examine the internal consistency. Based on Hair *et al*.'s (2019) guidelines, these parameters should be between 0.7 and 0.95. As shown in Table II, the proposed model meets the criteria. The convergent validity of a construct is measured by the average variance extracted (AVE), and the recommended threshold value is above 0.5 (Hair *et al*., 2019). As shown in Table II, the AVE values range from 0.5516 to 0.8279, confirming the convergent validity of the proposed model. Discriminant validity was adopted to assess whether the constructs that should not be highly correlated are distinct from each other. Since the square root of the AVE is greater than the correlation with other constructs, discriminant validity is supported (Henseler *et al.*, 2015).

INSERT Table II HERE

4.2 Structural Model Analysis

The one-way ANOVA was conducted to test whether there are significant differences in festival satisfaction depending on respondents' past festival experience. The results ($F=226.540$, $p<0.05$) suggested that those who have not been to offline music festivals are more satisfied than those who have been to offline music festivals. This result concurs that online music festivals are not desired by music professionals or festival veterans (Perez-Monteagudo and Curras-Perez, 2022).

Pearson's correlation analysis was conducted to investigate the relationship between each festival experience, festival satisfaction and loyalty. The results suggested a significant positive relationship between the festival experience, satisfaction and loyalty. In detail, satisfaction and loyalty significantly correlate with the music, ambience, social and novelty experiences. The impact of each significant experience

on satisfaction is similar (ranging from 0.241** to 0.258**). Social experience made the most significant impact on loyalty to online music festivals (0.398**), followed by novelty experience (0.328**), music experience (0.214**) and separation experience (0.172**). Festival satisfaction also positively influences loyalty. However, the surprising finding was that ambience is not correlated to satisfaction nor loyalty, suggesting that the online music festival may fail to bring the ambience experience. It is also noted that music experience has no obvious correlation with ambience experience and separation experience. The full results are shown in Table III.

INSERT Table III HERE

Regression analysis followed, to investigate the relationship further and test the proposed hypothesis. The structural model with one exogenous construct (i.e. experience) and two endogenous measures (i.e. satisfaction and behaviour intention) were examined. Before the analysis, collinearity tests of every dependent variable were conducted to eliminate instability in the model, which may be caused by high correlation of multiple variables. Table IV shows that the eigenvalues are less than 30, and the variance contribution of each variable is greater than 50%, indicating that collinearity does not exist in each variable and the model is suitable for regression analysis.

INSERT Table IV HERE

Path analyses on how festival experience impacts festival satisfaction and loyalty, respectively, were conducted. The results are shown in Table V.

INSERT Table V HERE

The results of the path analyses revealed that music experience, separation experience, social experience and novelty experience could significantly predict festival satisfaction and festival loyalty, suggesting that hypotheses $H1_a$, $H1_c$, $H1_d$, $H1_e$, $H2_a$, $H2_c$, $H2_d$ and $H2_e$ are all accepted.

The linear relationship between festival experience and festival satisfaction can be expressed in the equation:

$$Festival\ satisfaction = 0.855 + 0.204 \times ME + 0.170 \times NE + 0.131 \times SE + 0.142 \times SPE$$

The linear relationship between festival experience and festival loyalty can be expressed in the equation:

$$Festival\ loyalty = 0.735 + 0.295 \times SE + 0.216 \times SPE + 0.163 \times ME + 0.103 \times NE$$

The mediating effect of festival satisfaction between festival experience and loyalty

was tested using a non-standardised bootstrap mediating effect test (Hayes, 2009). Table VI shows that the music, separation, social and novelty experience positively mediate festival loyalty through satisfaction, whilst the ambience does not. As a result, festival satisfaction can mediate the relationship between the festival experience and loyalty, and H3 is accepted.

INSERT Table VI HERE

By conducting the correlation analysis, regression analysis and mediating analysis, the hypotheses proposed for this study are all tested, and the test results are shown in Table V and VI. In summary, music, separation, social and novelty experience positively affect festivalgoers' satisfaction and loyalty. At the same time, they also positively mediate festival loyalty through satisfaction.

5. Discussion and conclusion

5.1 Theoretical Implications

This study aims to enrich the literature about online music festivals and generate more understanding of how festivalgoers' experiences affect their satisfaction and loyalty for online music festivals. The theoretical contributions emerged in three key areas, i.e., 1) the acceptance of online music festivals; 2) the facets of the overall experience for online music festivals; and 3) the relationship between festival experience, festival satisfaction and festival loyalty for online music festivals.

First, this study contributes to the literature with an improved understanding of the popularity of online music festivals. Festivalgoers are willing to attend online music festivals, especially when they are new to music festivals. Compared to offline music festivals, online music festivals are attractive because 1) there is 'no limitation of location'; 2) the admission is cheap or free; and 3) festivalgoers can choose the performance at their convenience. Under travel restrictions, such as during the pandemic, or time constraints, online music festivals quickly emerged as an attractive and convenient proposition. Festivalgoers' rapid adaptation to the online mode might signal that online festivals could remain an attractive alternative beyond the pandemic, despite the lack of ambience experience.

Findings also revealed that festivalgoers who had attended offline music festivals were less satisfied with online music festivals than those who had not been to offline music festivals. This finding confirms the assertion of Perez-Monteagudo and Curras-Perez (2022) that online music festivals have the potential for future development and growth.

Their convenience, flexibility, and low cost are attractive to newcomers to music festivals. This finding suggests that the online mode is an acceptable alternative to offline festivals to attract newcomers and festivalgoers. In the post-pandemic environment, a hybrid mode of music festivals, concerts or stage performances could be more favourable to festivalgoers and beneficial for the growth of the sector.

Secondly, this study contributes to an enhanced theoretical understanding of the key factors impacting the experience of online music festivals by distinguishing between online and offline music festivals. Five dimensions of festival experience were investigated: the music experience, ambience experience, social experience, separation experience and novelty experience. The novelty experience dimension was added by this study, whilst the other four dimensions were previously tested for offline music festivals by Packer and Ballantyne (2011), and were revised and investigated for online musical festivals in this study. The results suggested that four dimensions, i.e., music experience, separation experience, social experience and novelty experience, are positively correlated with online festival satisfaction and loyalty. In this study, the investigation of festival experiences, satisfaction and loyalty was tailored to online delivery. As a result, a more nuanced understanding of online musical festivals, with explicit consideration of factors that are unique to the online experience, satisfaction and loyalty, was contributed to the literature. The items were revised and developed specifically for investigating the experience of, satisfaction with and loyalty to online music festivals and their design makes a significant contribution to future research.

Furthermore, this study also identified that music experience and novelty experience exhibit stronger influences on festival satisfaction, whilst the social experience and separation experience exhibit stronger influences on festival loyalty. However, unlike previous studies on offline music festivals (Cole and Chancellor, 2009; Lee, 2016), the ambience experience does not impact festival satisfaction and loyalty. This result correlates with Musa *et al*. (2019) regarding the challenges of providing the ambience experience for online music festivals. The findings contribute to a more granular understanding of the impact of different aspects of festival experience on festival satisfaction and festival loyalty. The transmission of physical music and novelty experience are less affected online, whilst it is challenging to recreate the ambience when festivalgoers join virtually. This finding also explains why new festivalgoers are more satisfied with and loyal to online music festivals than veteran ones. However, music can act as an emotional trigger for festivalgoers, evoking their sense of belonging, and creating a transformative experience by offering an escape from

everyday life. Their loyalty to certain music festivals can trigger nostalgic emotions and connect them with their personal history and growth. This emotional attachment to online music festivals is a key driver for attracting younger generations to music festivals (Ozdemir *et al.,* 2023). This finding is particularly pertinent in China because, in a collectivist culture, attending music festivals online could allow festivalgoers to express their feelings and emotions in a more private space and enable their identity recognition, via online communications and hashtags, beyond the physical festival ground.

Lastly, this study contributes to the literature with an understanding of the relationship between festival experience, satisfaction and loyalty to online music festivals. Festival experience strongly predicts festival satisfaction and loyalty, and festival satisfaction positively enhances the relationship between festival experience and loyalty. This finding is consistent with previous studies (Packer and Ballantyne, 2011) on the positive relationship between experience, satisfaction and loyalty for offline music festivals. This finding also confirms the results of other studies (Kuo *et al*., 2010; Andersson *et al*., 2017) on the mediating effects of festival experience between festival satisfaction and loyalty.

5.2 Practical and Managerial Implications

This study provides a range of managerial and practical implications for festival planners, organisers, marketers and the music industry involved in online music festivals, similar activities such as live streaming of concerts and stage performances, and hybrid event models.

This study identifies differences in the acceptance of online music festivals between newcomers and veteran festivalgoers. This understanding can help marketers and music professionals reach out to their target audience more effectively via different channels, whether the music festivals are offline, online or hybrid. For music professionals and stage performers, the acceptance and success of online music festivals signal the possibility of live-streaming more performances to large audiences at low costs, especially under travel restrictions or time constraints.

This study provides a more granular understanding of the factors constituting the online festival experience and how the festival experience affects festival satisfaction and loyalty. To create an enhanced festival experience and satisfaction, music festival planners, organisers and events companies can pay more attention to music experience and novelty experience. They need to explore new technologies, facilities

and equipment that can deliver the best quality of music and capture and transmit the unique visual effects on and around the stage to various digital devices. It is also crucial for them to recognise the challenges in recreating the festival ambience for online musical festivals and minimise the negative impact by highlighting the benefits of online music festivals. For example, it is vital for them to adopt or create safe and interactive platforms to allow attendees to socialise virtually. Consequently, to improve festival loyalty, they can capitalise on the convenience and efficiency of online platforms in creating the emotional attachment and identity recognition by paying more attention to the separation and social experiences. For example, they can use live chat, virtual fan clubs and virtual dance floors to enhance engagement, stimulate emotional attachment and foster a sense of community among festivalgoers.

From a marketing perspective, promotions of online music festivals should focus on the festival experience, including the music, separation, novelty and social experience. Since online music festivals fail to deliver the festival ambience, it is worthwhile for festival planners and organisers to explore new ways to improve the festival ambience, such as taking advantage of online platforms to enable a more personalised festival experience and create a unique and tailored festival ambience in future online events.

The nuanced understanding of festivalgoers' experience of, satisfaction with and loyalty to online music festivals can inform festival planners, organisers and the music industry as a whole with a distinctive recognition of the difference between offline and online deliveries. It is vital that they maximise the benefits of the online mode, as aforementioned, and are also aware of the limitations and weaknesses, such as the lack of ambience and dependence on technology. Nevertheless, the intention is not to separate offline and online modes into two competing components of musical festivals. Instead, companies could strike the right balance between the physical and virtual components, maximise the benefits from both modes and create hybrid events that can cater to a broader audience, achieving higher satisfaction and enhanced loyalty.

5.3 Limitations and Future Research

The sampled respondents attended a wide range of online music festivals, offering diverse experiences, which could affect the understanding of the festival experience. It is also recognised that the sample size is comparatively small and a larger sample would improve the generalisability of the study. Moreover, this study was conducted during the initial outbreak of COVID-19, when people were less adapted to the online context, which might affect their perception and expectations about online music festivals.

Future research could further examine how crises, e.g., health crises like COVID-19, impact festivalgoers' access to these events and investigate how festivalgoers' perceptions of online music festivals change over the entire cycle of crises. A specific online music festival could be considered for future research for a more homogeneous understanding of whether the purpose of festivals has shifted with the change of access, and whether and how the understanding of festival experience has shifted along the way. Moreover, it would be beneficial to investigate similar online activities, such as live streaming of concerts and stage performances, or the hybrid mode of these events.

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Table I: Demographic characteristics of the respondents

	Category	Frequency	Per cent
Gender	Men	178	50.9
	Women	172	49.1
Age	Under 18	20	5.7
	18-25	145	41.4
	26-35	170	48.6
	Over 35	15	4.3
Profession	Student	97	27.7
	In employment	155	44.3
	Freelancer	49	14
	Unemployment	49	14
Average Monthly Income	¥ < 2000	86	24.6
	¥ 2000-6000	111	31.7
	¥ 6001-10000	120	34.3
	¥ 10001-14000	15	4.3
	¥ 14001-18000	4	1.1
	¥ > 18000	14	4
Will you return to offline music festivals when they resume?	I don't want to attend any music festival, online or offline	18	5.6
	I prefer to attend the offline music festival	136	42.5
	I prefer to attend the online music festival	125	39.1
	Both forms of them are considered for me	41	12.8

Table II: Results of the Measurement Model

Dimension	Measurement Variables	Mean	*SD*	Standardised Factor Loading	R^2
Music Experience (α= 0.920, CR=0.9232, AVE = 0.8009)	ME1	3.569	1.207	0.853	
	ME2	3.511	1.239	0.976	
	ME3	3.369	1.304	0.850	
Ambience Experience (α= 0.849, CR=0.9011, AVE = 0.8202)	FE1	3.000	1.367	0.939	
	FE2	3.089	1.316	0.871	
Separation Experience (α= 0.795, CR=0.7176, AVE = 0.5516)	SPE 1	3.054	1.394	0.756	
	SPE 2	3.026	1.376	0.871	
Social Experience (α= 0.921, CR=0.9248, AVE = 0.8051)	SE1	2.991	1.395	0.786	
	SE2	2.926	1.414	0.950	
	SE3	2.949	1.395	0.946	
Novelty Experience (α= 0.931, CR=0.9350, AVE = 0.8278)	NE1	3.349	1.324	0.874	
	NE2	3.380	1.263	0.984	
	NE3	3.311	1.297	0.867	
Experience (second order)					
Music experience				0.915	0.359
Ambience experience				0.901	0.124
Separation experience				0.927	0.187
Social experience				0.938	0.472
Novelth experience				0.912	0.443
Satisfaction (α= 0.731, CR=0.7352, AVE = 0.6512)	SA1	2.963	1.449	0.773	
	SA2	2.991	1.443	0.848	
	SA3	2.966	1.424	0.797	
Loyalty (α= 0.921, CR=0.9334, AVE = 0.8125)	LO1	3.297	1.465	0.970	
	LO2	3.214	1.515	0.779	
	LO3	3.306	1.466	0.925	
	LO4	3.257	1.455	0.919	
Overall Model fit indices: $\chi^2(149) = 214.66$, CFI = 0.987 (>.90), RMSEA = 0.036 (<.08), SRMR = 0.042 (<.08)					

Table III: Results of correlation analysis

	ME	AE	SPE	SE	NE	Loyalty	Satisfaction
ME	1						
AE	-.003	1					
SPE	0.096	0.082	1				
SE	0.254**	0.040	0.125*	1			
NE	0.214**	0.102	0.113*	0.300**	1		
Loyalty	**0.268****	0.058	**0.172****	**0.398****	**0.328****	1	
Satisfaction	**0.291****	0.046	**0.241****	**0.267****	**0.258****	**0.478****	1

** At level 0.01 (double tails), the correlation was significant

* At the 0.05 level (double tails), the correlation was significant

Table IV: Results of the collinearity test

Model		Eigenvalue	Condition index	Variance ratio (constant)	ME	AE	SPE	SE	NE
1	1	5.496	1.000	.00	.00	.00	.00	.00	.00
	2	.154	5.965	.00	.02	.45	.05	.34	.02
	3	.132	6.454	.00	.00	.25	.77	.04	.02
	4	.099	7.460	.01	.28	.09	.06	.60	.15
	5	.085	8.035	.00	.40	.01	.01	.01	.72
	6	.034	12.694	.98	.29	.19	.11	.01	.09

a. dependent variable：Satisfaction

Table V: The path analysis of the construct

Parameter		Path Coefficient	SE.	CR.	P	Results
$H1_a$: Music experience--->Satisfaction		0.225	0.055	3.620	***	Supported
$H2_a$: Music experience --->Loyalty		0.125	0.067	2.459	0.014	Supported
$H1_b$: Ambience experience--> Satisfaction		0.014	0.057	0.231	0.817	Not supported
$H2_b$: Ambience experience -->Loyalty		0.010	0.071	0.192	0.847	Not supported
$H1_c$: Separation experience--> Satisfaction		0.237	0.194	3.239	0.001	Supported
$H2_c$: Separation experience-->Loyalty		0.119	0.070	2.064	0.039	Supported
$H1_d$: Social experience--> Satisfaction		0.173	0.128	2.742	0.006	Supported
$H2_d$: Social experience-->Loyalty		0.289	0.058	5.502	***	Supported
$H1_e$: Novelty experience-->Loyalty		0.186	0.067	3.585	***	Supported
$H2_e$: Novelty experience--> Satisfaction		0.148	0.129	2.386	0.017	Supported
Fitting Index	experience->satisfaction	X^2/df=1.423, CFI=0.989, NFI=0.965, GFI=0.957, RMSEA=0.035				
	experience->loyalty	X^2/df=1.641, CFI=0.986, NFI=0.964, GFI=0.947, RMSEA=0.043				

Table VI: Mediating effect test

Parameter	Effect Size	SE	Bias-corrected 95%CI			Percentile 95%CI		
			Lower	Upper	P	Lower	Upper	P
ME-Satisfaction-Loyalty	0.132	0.049	0.053	0.246	0.001	0.051	0.242	0.002
AE-Satisfaction-Loyalty	0.009	0.038	-0.054	0.102	0.701	-0.064	0.089	0.848
SPE-Satisfaction-Loyalty	0.128	0.054	0.048	0.271	***	0.041	0.248	0.001
SE-Satisfaction-Loyalty	0.085	0.039	0.024	0.180	0.008	0.022	0.176	0.010
NE-Satisfaction-Loyalty	0.086	0.043	0.013	0.183	0.021	0.015	0.186	0.018
H3: Festival satisfaction positively mediates the relationship between festivalgoers' experience and loyalty at online music festivals. (Supported)								
λ^2=214.667(df=149,p=0.000),Q=1.441,GFI=0.944,AGFI=0.921,RMSEA=0.036,NFI=0.958,CFI=0.987,IFI=0.987								
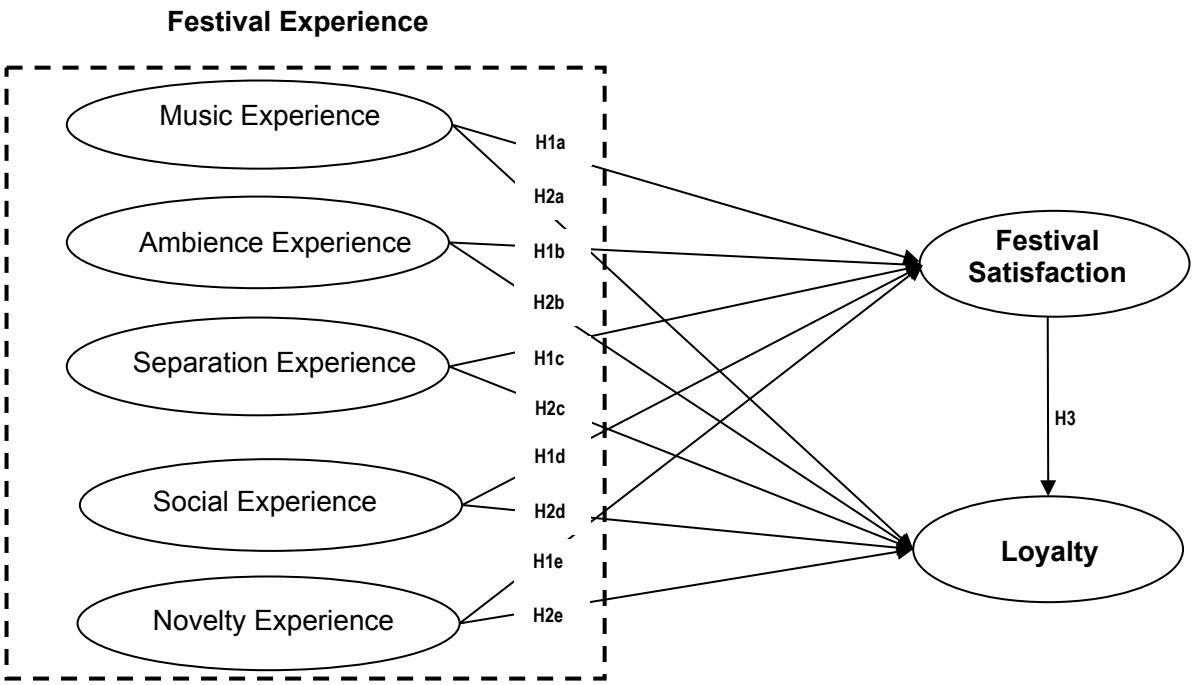
Figure I: Hypothetical construct