Digital enabled experience – the listening experience in music streaming

Bård Tronvoll

Abstract
This article investigates what constitutes a music listening experience in digital-driven markets and identifies the drivers, as well as outcomes of the experience. The article uses data collected from 1,794 respondents to a face-to-face survey to perform a structural equation modelling. The article reveals that the listening experience is an important mediator that enables artists to strengthen their relationships with fans, through playlists. The experience consists of cognitive, emotional, and sensory values; it is influenced by social factors such as recommendations and social fellowship with musical peers; and it strongly drives loyalty toward playlists. These results suggest that the key concept for understanding digital streaming services is the music listening co-experience, reflecting a social imperative.

Keywords: Music listening experience, co-experience, digital streaming services, loyalty, social fellowship

1 Introduction

Over the past decade, digitalization has changed multiple industries and markets, one of which is the music industry where digital music streaming has enforced a market and business transformation. Transformation addresses the importance and strategic role of new digital technologies and their ability to disrupt customer behaviour and corporate business models (Yoo, Henfridsson & Lyytinen 2010). A large number of external and internal drivers enable digital transformation, although the music industry is primarily driven by the customers’ adaptation to technology, through which easy access to music and a desire for a wider range of songs has become crucial to improving the listening experience. Therefore, the digital transformation has significantly affected music listening behaviour and the way listeners experience music.

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The development of technology has resulted in the disruption of traditional, tangible forms in which music, historically, has been bundled, such as LPs or CDs to become intangible and retrieved through technical mobile applications. Due to these changes, music is no longer limited to a certain time and place, indeed, music has become accessible 24/7 and users can stream unlimited amounts of songs, on demand. Thus, listeners have more opportunities than ever before to integrate music into all their activities (Heye & Lamont 2010; Sloboda, Lamont & Greasley 2009), and this has allowed listeners to change the way they interact with, listen to, and experience music (Borja & Dieringer 2016; Nill & Greipel 2010; North, Hargreaves & Hargreaves 2004; Sloboda 2002). This digital transformation also has had a major influence on music listening behaviour, as the listener has gone from being social and ‘collectively’ oriented in the ‘tangible age’, to becoming private and individually oriented in the ‘digital age’. As part of this development, digital streaming has impacted traditional concepts where, among other things, albums have been replaced by digital music playlists.

The music industry’s rapid technological transformation has enabled significant and extensive adaptation in listeners’ digital music streaming, through channels such as Spotify, Apple Music and YouTube. 2015 represented a key milestone year for revenue growth globally, when digital music revenues overtook income from physical music formats for the first time (IFPI 2016). The global digital music market in 2018 (IFPI 2019) shows that the primary revenue stream for recorded music is streaming, accounting for 46.9% of total revenues, compared with 24.7% attributable to physical sales. In mature markets such as Scandinavia (e.g. Norway), streaming accounts for more than 72% of total recorded music; in still emerging markets such as the United States, only 55.7% of recorded music is streaming (although an increase of 33.4% from last year). Therefore, it is imperative for record companies and other music industry stakeholders, regardless of the maturity of the streaming market, to understand how digital driven music listening experiences are created and what contributes to users’ reliance on digital music streaming playlists.
As digital music streaming has grown, playlists have become more important, such that they provide a common method for listening to music (Komulainen, Karrukka & Häkkilä 2010). As Sam Lee, the U.K. and Ireland editor for the music-streaming service Deezer has argued, "A playlist is far more than just a track listing. It's about the entire journey: you have to match and exceed the user's expectations throughout. It's not just about sticking together some tracks and off we go" (Dredge 2016). Leong & Gram (2011) accordingly argue that a new type of listening strategy results from the increased use of playlists, because the playlists grant listeners more control over the specific music they hear, including both the song content and their sequence. Such listeners likely regard music as a resource to meet their needs; a sort of adjustable soundtrack that supports their identity, emotions, activities, and social environments. DeNora (2000) asserts that listeners act as "personal DJs," adjusting their music to different situations and times to tailor the appropriate music to how they feel, the purpose, or the situation. A playlist via a digital streaming service thus introduces new practices and habits and is an appropriate context to use to study the everyday music listening experience (Hagen 2015; Krause & North 2016).

Experience is a key research priority (Jaakkola et al. 2015; Ostrom et al. 2015), and yet, considerations of digital driven experiences in general and in particular digital music streaming experience remain scarce (Lamont 2009). The vast number of customer interactions enabled by digitisation together with decreased control of the experience requires firms to integrate multiple business strategies in creating positive customer experiences. Thus, it has become increasingly intricate for firms to create, manage, and attempt to control customers' experiences (e.g. Edelman & Singer 2015; Rawson, Duncan & Jones 2013). Managers in digital-exposed industries such as the music industry recognise the need to invest in other experience strategies, spanning their offerings, categories, and channels, all to remain competitive in the rapidly evolving technological markets.

Music playlists provide a vital foundation for ensuring popularity, because for a song to become a hit, it needs multiple plays. To increase
the number of plays, each individual listener must be motivated to be loyal to the digital playlist. The music industry therefore seeks ways to design and create digital music playlists, that enhance superior listening value and prompt recommendations as well as the effect of using a music playlist based on loyalty. Generally, considering the growth and importance of digitalization as well as the central role of digital tools and services, it is imperative to understand what drives and constitutes a digital experience. Therefore, this empirical study investigates how recommendations from others in the social setting and a social community might affect the use of digitalized music streaming and music listening experience as well as a person’s willingness to be loyal to these digital music playlists. The next section details the conceptualization of a music listening experience, before presenting its drivers and effects. After outlining the survey data, this article details the results and offers some suggestions for further research.

2 Conceptual background and research hypotheses

When listening to music, people receive the sound and also create an experience (Kerchner 2000; Peterson 2006). Establishing a compelling music listening experience within the digital setting represents a central objective for the modern music industry. In light of the complex, rapidly evolving music landscape, marked by rapid technological advances and increasing individualisation, the music listening experience is even more vital to comprehend. Although actors in this domain (e.g., artists, curators, record companies, listeners) cannot fully design listeners’ experiences, music playlists can enhance those experiences, as well as listeners’ willingness to replay songs multiple times. Not only can the music listening experiences reveal listeners’ perceptions, attitudes, and behaviours, but a favourable listening experience can enhance an artist’s competitive advantage and engender recommendations, especially if fans experience their favourite songs with friends through repeated listening, which ultimately drives revenue. The possibilities the digital channels create, provide the customer with a new and more active role.
A listening experience begins with interactions between the music signified by artists (represented by playlists) and the listener. Listeners' willingness to include a song in their playlists often also depends on their interaction with their social environment. That is, at the intersection of the individual and the environment, in the form of a specific event or situation, music listening experiences are triggered and form. Listeners create unique experiences through their interactions with the music across different touchpoints, and they respond not only to playlists but also to other elements, such as their social surroundings and environment. Therefore, experiences emerge through an "iterative circular process of individual and collective customer sense making," such that the person's reality is socially constructed (Helkkula, Kelleher & Pihlström 2012: 59). The value realized from such an experience is individually intra-subjective and socially inter-subjective, determined by both social contexts and interactions (Edvardsson, Tronvoll & Gruber 2011).

In the past, the album represented the record company's primary assets and a tool to gain a strong market image and customer loyalty (Allaway at al. 2011). The album market was wholly conceived of and controlled by the record companies; the digital playlist instead has been leveraged in various forms by other members of the value ecosystem, such as DJs and home recorders. It currently is a prominent feature on streaming services such as Spotify and Apple Music. In contrast to their domination over traditional albums, beyond their own branded streaming services (e.g. THIS IS [Universal], Filtr [Sony], Topsify [Warner]), the record companies have scant control over how people compose and distribute their playlists. Although artists and genres still are important to the playlist ecology, they face competition from fundamentally different, "listener-centric" taxonomies such as mood and activity states.

As part of this development, listeners become both co-creators of value and co-owners of the playlist. Their role has extended beyond being passive receivers of value, to the more important function of co-creators of the music listening experience who also co-own the digital playlist. The listeners co-create the music experience together with the music industry actors, making it come to life for themselves. Because the
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listener is always a co-creator of music value, a record company cannot deliver music listening value but can only offer value propositions to listeners (Vargo & Lusch 2008). These digital playlists constitute the listeners’ own experience, although they also might be important for music listening communities. Digital music streaming gives rise to individual experiences in specific social contexts, resulting in value-in-context (Chandler & Vargo 2011; Edvardsson et al. 2011). Consequently, the strategic goal for music industry actors, beyond listener loyalty, is to achieve customers’ active engagement as co-owners and co-creators of music experience value. Music industry actors thus must seek strategies to enhance listeners’ active engagement and encourage them to serve as brand ambassadors (James 2013).

We present our theoretical model in figure 1, which summarizes the hypotheses pertaining to the drivers and effects of music listening experience, as we develop next.

![Figure 1: Music listening experience: drivers and effects](image)

2.1 Music listening experience

Dunn (2006) claims that every music listening experience is unique, even for a recording that the listener has heard multiple times, such that every note is the same. Thus, the music listening experience, at the individual level, is not an easily defined concept. However, Hargiss (1966: 96) suggests that it includes “a variety of introspective reactions such as
associations, memories, sensations, and other responses of a personal nature." Csikszentmihalyi (2002) describes the music listening experience as having the potential to induce flow in participants. Beyond these insights, relatively few definitions of listening experience are available within the body of music research, so this study turns to other disciplines for relevant definitions of experience. In particular, psychological and behavioural studies distinguish three basic systems or dimensions of experience: sensation, cognition, and affect, each with its own structures, principles, and mutual interactions (Anderson 2015; Goleman 2006; Schmitt & Simonson 1997). In a marketing context, Schmitt (1999) describes experience as the entire living being, including direct observation and/or participation in different events, which can be virtual, dreamlike, or real. He also identifies five types of experiences: sensory (appealing to the five senses, through sight, sound, touch, taste, and smell), affective (appealing to listeners' inner feelings and emotions), cognitive (appealing to the intellect, with the objective of creating cognitive, problem-solving experiences that engage a listener's creativity), physical (acting through bodily experiences, lifestyles, and interactions), and social identity (relating and creating value for customers by providing a social identity and a sense of belonging). Service scholars define experience as "a service process that creates the customer's cognitive, emotional, and behavioural responses, resulting in a mental mark, a memory" (Edvardsson, Enquist & Johnston 2005: 151) or "the internal and subjective response customers have to any contact (direct or indirect) with a company" (Meyer & Schwager 2007). Brakus, Schmitt & Zarantonello (2009: 53) define (brand) experience as the "subjective, internal consumer responses (sensations, feelings, and cognitions) and behavioural responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments."

Experience is most often viewed as subjective, personal, and at least partially internal (Edvardsson et al. 2005; Meyer & Schwager 2007). Individual listeners might exhibit emotional, cognitive, and sensory responses before, during, and after listening to a song. Furthermore, the music
listening experience is perceptual and highly impressionistic in nature, so even when listening to the same stimulus, listeners have unique experiences, depending on the features they attend to in the acoustic stream (Springer & Schlegel 2016). For this study, experience is specified as a mental process (e.g. perception, interpretation, sense making), through which the individual experience is realised. By using a sense making approach (e.g. Weick 2001) to explain the formation of music listening experiences, this study draws on theories from phenomenology (Husserl 1990), focusing on how a person subjectively experiences a lifeworld, consciously or not, and makes sense or gives meaning to the situation. This approach highlights life worlds, inner realism, and circular sense making as central concepts. Sense making-related studies regard an individual experience as a phenomenon that involves subjective, active, dynamic, and collective sense making (e.g. Carù & Cova 2003; McColl-Kennedy et al. 2015; Schembri 2006). Circular sense making refers to how a person interprets the surrounding physical and social world, by engaging in cognitive (thinking), emotive (feeling), and sensory (reactions) experiences in the moment. Finally, hermeneutics enriches phenomenology by emphasizing the interpretation of meaning, focusing on personal interpretations of events (Heidegger 1962).

Through social interaction, discussion, and sharing, people also create their individual experience, marked by cognitive, emotional, and sensory value. Cognitive value relates to facts, advice, and guidance that expand knowledge about music-related issues. Emotional value relates to affection, listening, and empathy (Juslin et al. 2008; Ong et al. 1995), which helps listeners vent their feelings, reduce unpleasant or enhance pleasant moods, and cope with or enhance their current listening situation. Sensory value relates to sights, sounds, touches, tastes, and smells that enhance reactions to listening, such that listeners create and recreate their own musical experience by perceiving different musical features through sensory modalities. A listener's ability to "perceive musical sounds, order them, and reshape extant musical structures is only part of an aesthetic musical experience" (Kerchner 2000: 32). Taken together, emotional, cognitive, and sensory value are shaped by songs on the
playlist, which signal and become the foundation for the music listening experience. As table 1 shows, this multifaceted phenomenon therefore consists of three sub-constructs: emotional, cognitive, and sensory value. With these arguments, the current study defines the listening experience as an individual listener's internalized (phenomenological) meaning for the music, used to achieve cognitive, emotional, and sensory value, to enhance the current social situation. Formally,

H1: The music listening experience consists of the positive effect of emotional value.

H2: The music listening experience consists of the positive effect of cognitive value.

H3: The music listening experience consists of the positive effect of sensory value.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Description</th>
<th>Theoretical sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music listening</td>
<td>Internalized (phenomenological) meaning of the music, to sustain affective,</td>
<td>Phenomenology and hermeneutics</td>
</tr>
<tr>
<td>experience</td>
<td>cognitive, and sensory value and enhance the current social situation</td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>Derived from inner feelings and emotions triggered by music listening</td>
<td>Brakus et al. (2009); Irrgang</td>
</tr>
<tr>
<td></td>
<td>circumstances</td>
<td>&amp; Egermann (2016)</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Derived from reasoning and deep thinking related to music listening</td>
<td>Chamorro-Premuzic &amp; Furnham</td>
</tr>
<tr>
<td></td>
<td>circumstances</td>
<td>(2007); Chin &amp; Rickard (2012);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zarantonello, Schmitt &amp; Brakus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2007)</td>
</tr>
<tr>
<td>Sensory</td>
<td>Derived from sight, sound, touch, taste, and smell associated with music</td>
<td>Brakus et al. (2009); Schmitt (1999)</td>
</tr>
<tr>
<td></td>
<td>listening circumstances.</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Constructs to define the music listening experience
2.2 Drivers of the music listening experience

Expanded knowledge about the social and psychological aspects of music reveals that listeners' perceptions of musical performances are influenced not only by factors related to the actual performance but also by non-musical factors (Springer & Schlegel 2016). In particular, the social functions of music and its importance in everyday life are key, as confirmed by demonstrated links of music with social behaviour (Hargreaves & North 1997; North, Hargreaves & McKendrick 2000), the social atmosphere (Laukka 2007), social bonding (Huron 2001), and social identities (North, Hargreaves & O’Neill 2000; Tarrant, North & Hargreaves 2000). Because the music listening experience is phenomenologically determined, formed by a circular sense making process, the exogenous environment also is pertinent. The music listening experience is the outcome of an individual’s interaction with the music (e.g. artist, band) and others (e.g. friends, family), as well as self-service technologies (e.g. mobile devices), artefacts (e.g. playlists), symbols (e.g. branded T-shirts) and the social environment.

The importance of social structures suggests that listening activities are driven by the social roles and positions that listeners hold within a particular social group or specific encounter, in that "institutional and social structures systematically influence consumption" (Arnould & Thompson 2005: 874). Holbrook (1999) and Scott (2008) argue that institutions, such as social standards, rules, criteria, norms, or ideals, influence evaluations of individual experiences, so the institutions associated with particular music communities drive interactions and listening behaviour. The experience of music shared with others (Juslin et al. 2008; North, Hargreaves & Hargreaves 2004) offers an important channel of communication in social settings (Greasley & Lamont 2006; Rentfrow & Gosling 2006). Social aspects encourage a collective musical experience, which fulfils the requirements of meaning by allowing listeners to go beyond themselves as individuals (Sloboda 2002). The instances of listening to music that people tend to remember, discuss with others, and value the most, generally relate to strong social involvement, with music as the main focus of attention (Lamont 2009).
Previous research also acknowledges the importance of context to understand responses to music, such as the prevalence of particular emotions in social settings (e.g. Juslin et al. 2008). Two prominent social concepts seem important for understanding the music listening experience: recommendations from friends for songs and playlists and belonging to a social community or music fellowship.

Recommendations

The influence of recommendations on behaviour is well documented (e.g. Fong & Burton 2006). Studies of the effects of group pressure on individual judgments even indicate that people modify their own judgments, in response to recommendations by a majority (Asch 1951). Crozier (1997) finds such conformity effects in music listening contexts too. Genuine recommendations entail personal, non-commercial communications about a brand, good, service, or other elements, shared among members of a social network (Arndt 1967; Wilson 1991). Critically, the person recommending a song or digital playlist receives no economic benefit for referring these songs to others. Listeners thus react confidently to positive recommendations from friends and acquaintances and perceive them as more reliable and trustworthy than commercial sources. In the modern market, most recommendations have moved online (Vilpponen, Winter & Sundqvist 2006), where the vast number of weak links in social networks helps spread the information (Barger and Labrecque 2013). In digital networks, messages often feature specific playlist recommendations, which can grow quite influential (Chiou, Hsiao & Su 2014). Although some recommendations may have commercial intent, which is not necessarily revealed to users (Ashley & Leonard 2009), the relationship between recommendations and the music listening experience should be positive:

H4: Recommendations from others in the social environment enhance the music listening experience.
Fellowship

A social community, through its norms and values, affects members' behaviours. A particular behaviour, such as listening, reflects the accepted terms within the fellowship of the social group (Qu & Lee 2011) and thus helps form the listener's social identity. A social identity implies the self-concept of belonging to certain social groups, which offer some emotional significance and value due to membership of the group (Tajfel 1978). Such social relationships within the community create a sense of fellowship (Gebauer, Füller & Pezzei 2013). At an aggregated level, social capital theory suggests that networks of relationships strongly influence interpersonal knowledge, because sharing takes place (Nahapiet and Ghoshal 1998). Social capital further guides the fellowship and includes access to reciprocal, trusted social connections that contribute to the giving and getting processes (Lu & Yang 2011), resulting in enhanced information exchanges.

With this foundation, it is possible to consider how digital music streaming has influenced the way the music industry actors attempt to engage listeners. Groups of advocates, playlist ambassadors, and emotionally loyal listeners are strategically significant; they have high lifetime value potential, such that they might not only engage in more music listening themselves but also influence other listeners' behaviours and willingness to engage in the fellowship.

A fellowship among music members can be highly developed as a social community, with a shared history, strong inter-dependence, frequent interactions, and closed structures (McLure Wasko & Faraj 2005; Nahapiet & Ghoshal 1998). The personal interactions in social music fellowships encourage the formation of a sense of social belonging. In digital environments, social fellowship can invoke various responses, such as an increasing sense of belonging (Zhao et al. 2012), greater individual participation (Wang & Chiang 2009), and sharing experiences with others (Lu & Yang 2011; Widén-Wulff & Ginman 2004).

H5: A greater degree of fellowship in the social community, increases the music listening experience.
2.3 Effects of the music listening experience on playlist loyalty

Loyalty to the music (or a digital playlist) is a strategic goal for artists and record companies, as well as other actors in the music industry. Loyalty is "a deeply held commitment to rebuy or patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour" (Oliver 1997: 392). Creating and maintaining loyalty helps music industry actors enter into long-term, mutually beneficial relationships with listeners. Listeners' loyalty is a pertinent goal for artists and curators, because loyal listeners spend more time listening to the music and tend to be more willing to pay for the services than other listeners. Loyal listeners also exhibit attachment and commitment to the playlist, such that they are not attracted to other, competing playlist offerings (So et al. 2013). Without listeners' loyalty, even the best-curated playlist cannot succeed. Rather, loyal, long-term users expand their relationships, providing cumulative rewards to other music industry actors (Srinivasan, Anderson and Ponnavolu 2002).

In their quest to develop a loyal base of listeners, most artists and music industry actors continually pursue more favourable listening experiences, which should encourage long-term relationships with listeners. However, competitiveness in the global music market has increased, along with the number of playlists. The co-creation of the music listening experience and listeners' fellowship both offer routes to valuable relationships with existing or potential users (Füller 2010), because listeners feel greater loyalty to artists with whom they develop a strong affinity (Hwang and Kandampully 2012). Consequently, firms have shifted their emphasis, from customer acquisition to customer engagement (Prahalad & Ramaswamy 2004; Sawhney, Verona & Prandelli 2005). In this sense, the music listening experience affects past-directed judgments and also future-directed listeners' loyalty, such that listeners should be less likely to listen to an alternative playlist (Mittal & Kamakura 2001; Oliver 1997).

Loyalty reflects both an attitudinal and a behavioural tendency to favour one playlist over all others, whether due to fellowship norms, convenience, performance standards, familiarity, or comfort with the
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Listening to a music playlist evokes an experience that establishes the basis for more elaborative information processing and inference making, which affect loyalty. Consequently,

H6: The music listening experience enhances listeners' loyalty to playlists.

3 Research method and procedure

3.1 Research context

Norway, as part of the Scandinavian market, provides an interesting context for investigating digital music streaming. In recent years, it has led in digital music streaming, and maintains a position among the international elite when it comes to the use of digital music (IFPI 2019). Revenues from streaming in 2018 accounted for more than 72% of total revenues from recorded music. Norway's total recorded music market also continues to grow, and digital streaming continues to build market share, whereas downloads have decreased significantly. Because Norway is a leading music digital streaming market, it may reveal new insights into the use of music playlists and listening experiences.

3.2 Data collection and sample

To reveal the underlying structure of the music listening experience, this study used a survey to guide respondents through their listening experience process, framing both the listening process and the social environment. Respondents' impressions thus are expressed in relation to an actual listening experience. The questionnaire was pre-tested by 25 respondents to check for content validity and a few questions were re-worded to improve their validity and clarity.

The data set was collected as part of a larger research project, investigating digital streaming and music listening. The survey collected data through personal interviews, with 1,794 respondents, carried out in streets, shopping malls, railway stations, and other public areas, over a
A slight majority of the respondents were women (52%). The average age was 29 years (46% 16–24 years of age, 23% 25–29 years of age, and 31% 30 years or older). With respect to education, 54% had no higher education (reflecting the young population), 31% had a bachelor’s degree, and 15% had a master’s degree or above. In terms of the number of hours they spent listening to music on a normal weekday, 36% listened to music up to 2 hours per day, 42% listened for 3–6 hours, and 22% listened more than 7 hours per day. Finally, with regard to genre popularity, most respondents listened to pop music (77%) or rock (66%), whereas metal, classic, jazz, and blues fans were fairly equally distributed (22%–26%).

3.3 Measures

To develop the items, this study adopted measures that had been validated in prior studies, modified to fit the music context. Music listening experience is operationalised with the three sub-constructs of emotional (four items, Chin & Rickard 2012), cognitive (three items, Zarantonello et al. 2007), and sensory (three items, Brakus et al. 2009; Zarantonello et al. 2007) value. These three sub-constructs represented endogenous aspects that constituted the entity or phenomenon of the music listening experience. All other constructs were exogenous from this phenomenon and considered drivers or effects of the listening experience. The drivers of the music listening experience included the three-item recommendation measure (Ma & Yuen 2011) and the three-item fellowship measure (Chin & Rickard 2012). The effects were summarized as playlist loyalty, with items from Brakus et al. (2009) and Anderson & Srinivasan (2003).

All questions in the questionnaire were formulated as statements, with responses measured on seven-point Likert-type scales (1 = "strongly disagree," 7 = "strongly agree"). Alternatively, respondents
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could indicate that a given variable was irrelevant. This study thus used 20 items for six constructs, see table 2.

<table>
<thead>
<tr>
<th>Model</th>
<th>Main construct</th>
<th>Sub-construct</th>
<th>Items</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Music listening experience</td>
<td>Cognitive</td>
<td>analyse the complexity of the songs</td>
<td>.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>admire the technique of the artist</td>
<td>.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>music is an intellectual experience</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Affective</td>
<td>listen to playlists when I am depressed</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>playlists make me feel better</td>
<td>.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>music takes away tension in the body</td>
<td>.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>listen to playlists to maintain my mood</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sensory</td>
<td>music makes a strong impression on all my senses</td>
<td>.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the music is interesting on a sensory way</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>music provides physical reactions in my body</td>
<td>.64</td>
</tr>
<tr>
<td>2</td>
<td>Recommendation</td>
<td></td>
<td>helps me find new music</td>
<td>.77</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>helps me raise the quality of my own playlists</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>helps me be more independent in my musical tastes</td>
<td>.65</td>
</tr>
<tr>
<td>3</td>
<td>Fellowship</td>
<td></td>
<td>similar musical tastes as my friends help me have a better relationship with them</td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>friendships become better if we like the same kind of music</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I feel closer to my friends listening to the same type of music</td>
<td>.83</td>
</tr>
<tr>
<td>4</td>
<td>digital playlist loyalty</td>
<td></td>
<td>I always try to use my playlists when I want to listen to music</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>when I want to listen to music, my own playlists are the first choice</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I like to listen to my playlists</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>to me, my playlists are the best way to listen to music</td>
<td>.77</td>
</tr>
</tbody>
</table>

Table 2: Constructs and items

The correlations between the constructs fell between .197 and .516, and all Cronbach’s alpha values were greater than .77, beyond the recommended threshold of .6 (Nunnally & Bernstein 1994). The descriptive statistics for the constructs, along with their means and standard deviations, appear in table 3.
To avoid common methods bias, Harman’s one-factor test was executed, as recommended by Podsakoff, MacKenzie, Lee and Podsakoff (2003), with all items entered into an exploratory factor analysis. A common method bias exists if any single factor accounts for most of the variance in the resulting factors. However, no single factor emerged in the analyses, and the first factor (eigenvalue = 6.48) only accounted for 32% of the total variance.

4 Analysis and results

This study used structural equation modelling to investigate the music listening experience construct (Byrne 2001; Jöreskog & Sörbom 1993; Schumacker & Lomax 2004). This technique is widely used in behavioural sciences (Kline 1998) and is suitable for exploring the structure of human constructs (Hull, Lehn and Tedlie 1991). The structural equation methodology usually takes a confirmatory approach, separated into a measurement model and a structural model. This study adopted the recommended two-step approach for model construction and testing (Anderson & Gerbing 1988) and used SPSS 24 and Mplus 7.4 statistical analytical software applications to evaluate the collected data.
4.1 Measurement model

A confirmatory factor analysis served to assess the convergent and discriminant validity of the six measurement models (Anderson & Gerbing 1988). The first model established the music listening experience construct (emotional, cognitive, and sensory experiences); the second model included the recommendation construct; the third model featured fellowship; the fourth model represented the digital playlist loyalty and the last model represented the overall measurement model, see table 4.

<table>
<thead>
<tr>
<th>Measurement models</th>
<th>Range of standardized factor loadings</th>
<th>Number of variables</th>
<th>TLI</th>
<th>CFI</th>
<th>SRMR</th>
<th>RMSEA</th>
<th>$\chi^2$ (df, p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1: Music listening experience</td>
<td>.559 - .801</td>
<td>3+4+3</td>
<td>.957</td>
<td>.955</td>
<td>.045</td>
<td>.034</td>
<td>1549.2 (45, p &lt; .00)</td>
</tr>
<tr>
<td>Model 2: Recommendation</td>
<td>.651 - .864</td>
<td>3</td>
<td>1.000</td>
<td>1.000</td>
<td>.000</td>
<td>.000</td>
<td>274.6 (3, p &lt; .00)</td>
</tr>
<tr>
<td>Model 3: Fellowship</td>
<td>.698 - .828</td>
<td>3</td>
<td>1.000</td>
<td>1.000</td>
<td>.000</td>
<td>.000</td>
<td>208.0 (3, p &lt; .00)</td>
</tr>
<tr>
<td>Model 4: Playlist loyalty</td>
<td>.765 - .879</td>
<td>4</td>
<td>.996</td>
<td>.999</td>
<td>.010</td>
<td>.011</td>
<td>320.6 (6, p &lt; .00)</td>
</tr>
<tr>
<td>Model 5: Overall measurement model</td>
<td>.618 - .876</td>
<td>20</td>
<td>.962</td>
<td>.969</td>
<td>.039</td>
<td>.023</td>
<td>4940.5 (190, p &lt; .00)</td>
</tr>
</tbody>
</table>

* All factors loadings are significant at $p < .01$, according to the maximum likelihood extraction method.

Notes: TLI = Tucker-Lewis index, CFI = confirmatory fit index, SRMR = standardized root mean residual, RMSEA = root mean square error of approximation.

Table 4: Results from confirmatory factor analyses

The result of the overall measurement model is shown in table 4, which demonstrated high levels of fit, and all factor loadings were significant and greater than the .4 cut-off (Nunnally & Bernstein 1994). In
addition, discriminant validity was established, because all the t-values were statistically different from 1 (Anderson & Gerbing 1982).

4.2 Structural equation model

After confirming the fit of the measurement model, it was possible to use the structural model to test the hypothesized relationships among the six constructs. The test used structural equation modelling (SEM) revealed good overall fit statistics for the model, including \( \chi^2(163) = 321.47, p < .000 \), comparative fit index (CFI) = .962, Tucker-Lewis index (TLI) = .956; root mean square error of approximation (RMSEA) = .023, and standardized root mean square residual (SRMR) = .045. The \( \chi^2 \) statistic was significant at the .000 level, which may be related to the large sample size of 1,794 respondents. Model fit was acceptable if the CFI and TLI were equal to or above .90, the RMSEA was less than .08, and the SRMR was below .05 (Bagozzi & Yi 1988; Byrne 1998; Diamantopoulos & Siguaw 2000).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Direction</th>
<th>Path coefficient</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective</td>
<td>→ Music listening experience</td>
<td>+</td>
<td>.764</td>
<td>15.23</td>
</tr>
<tr>
<td>Cognitive</td>
<td>→ Music listening experience</td>
<td>+</td>
<td>.693</td>
<td>17.89</td>
</tr>
<tr>
<td>Sensory</td>
<td>→ Music listening experience</td>
<td>+</td>
<td>.764</td>
<td>13.26</td>
</tr>
<tr>
<td>Recommendation</td>
<td>→ Music listening experience</td>
<td>+</td>
<td>.333</td>
<td>4.79</td>
</tr>
<tr>
<td>Fellowship</td>
<td>→ Music listening experience</td>
<td>+</td>
<td>.495</td>
<td>7.63</td>
</tr>
<tr>
<td>Music listening experience</td>
<td>→ Playlist loyalty</td>
<td>+</td>
<td>.634</td>
<td>11.66</td>
</tr>
</tbody>
</table>

Table 4: Path coefficients of the structural model and hypotheses results

The results offered support for all the hypotheses. Music listening experience was a strong construct, with path coefficients ranging between .693 and .764. The influences of recommendations and fellowship were somewhat weaker, though both were substantial and statistically
significant. The relationship between music listening experience and playlist loyalty was both substantial and statistically significant.

5 Discussion

This study confirmed that music listening experience is a key construct for understanding how listeners may be influenced by their social surroundings and the effects on their loyalty toward digital music playlists. The listening experience thus is an important mediator that enables artists to strengthen their relationships with fans, through digital playlists. The music listening experience consists of cognitive, emotional, and sensory values, all of which exhibit high factor loadings on listening experience; the construct also achieves good overall fit. Therefore, the music listening experience as part of the digital streaming is a rigorous and solid construct. Moreover, this study confirms that the music listening experience, despite its digital nature, facilitating private and individual characteristics, depends on social factors, such as recommendation from peers and fellowship. Social fellowship with music peers has the strongest influence on the listening experience, indicating that a sense of belonging and social identity are important elements. In addition, the music listening experience strongly drives loyalty to digital playlists.

Digital streaming accordingly affects the very act of music listening and alters its understanding, in terms of how playlists are used and how listening behaviour itself has changed. Mulligan (2016) blogged that "streaming has melded discovery and consumption into a single whole," which emphasizes the active role of listeners, who often become searchers, distributors, and listeners, all at the same time. In particular, younger generations seem less interested in owning music but instead enjoy the experience of music listening, as part of their social activities. Despite such radical changes, the fundamental relationship between an artist and fans persists, premised on the music itself and the listening experience. The technological shift even emphasizes the music listening experience, rather than the objects that hold the music, as the focus.
Although experience is phenomenologically determined by the individual, it depends on social fellowship and is embedded in the norms and values of music peers. To-date research has mainly focused on individual experience approaches, neglecting social interactions. To reveal the changes driven by digitalization and the social aspects of music listening though, experience must be viewed as a "co-experience," that is, as a music listening co-experience. Co-experience might be described as the process of aggregating individual experiences to a shared attention process, so the listening experience becomes part of a social interpretation process (Battarbee & Koskinen 2005). Co-experience results from creating emotions, meaning, and belonging in social fellowship, through music listening in spite of its digital nature. In this process, listeners jointly contribute to the shared experience in a reciprocal interaction, creating interpretations and meanings from the context and allowing practices to evolve in the social context. Thus, co-experience is driven by social needs for communication and relationships, as well as creativity in collaboration. Shared experiences allow for a range of interpretations by other peers, from the expected and agreeable to the unusual or even deviant; the practices may entail reciprocating, rejecting, or ignoring an experience (ibid.). Therefore, expressing meanings and emotions and feeling a sense of belonging are fundamental to co-experiences through social fellowship.

Moreover, co-experience implies mutual understanding and a context for action, particularly when interacting with technology (Dourish 2004). Interactive technological systems, such as digital streaming services, can support co-experience effectively, by providing mediated communication channels and the possibility to create, edit, share, and view content with others (Forlizzi & Battarbee 2004). Consequently, digital streaming services enable co-experience by providing new channels for social interaction. The co-experience of digital music listening can thus be understood as a non-linear, recursive process of co-creating a listening solution through interactions with the music itself and social fellowship, to enhance emotional, cognitive, and sensory states of mind.
Digital playlists have drawn considerable attention among music industry actors, as part of digital streaming services, yet these actors struggle with what to make of the playlist conceptually. In this sense, the music industry has been profoundly challenged by this radical shift, from a physical product and transaction orientation to a streaming and experience orientation. These changes affect the way music industry actors must approach listeners along with their understanding of streaming behaviour, and how to handle digital music playlists. The music listening experience in new digital technology markets promotes the "dematerialization" and fluidity of intangible digital formats in general (Magaudda 2011) and emphasizes music as a service. It is not just the unbundling of the album and the dematerialization of music that poses a challenge to traditional corporate strategies. The record industry, since its inception, has relied on a traditional transaction based economic model, selling records, cassettes, CDs, and mp3’s for a non-recurring one-time charge. Yet now it is shifting to what appears to be an age of digital streaming, in which listeners simply pay a monthly fee for access to an entire music catalogue, and the net revenue pool is distributed to various rights holders, based on their market share. In this setting, record companies and artists need to get listeners to make a habit of engaging in experiences while listening to music; it is no longer about "making the sale."

The industry-disrupting potential of digitalization demand that firms quickly respond and assemble their digital resources to understand the changed market behaviour. Connectivity, mobility and social networks enable connected customers across all facets of society to completely alter their behaviours and expectations from the actors they interact with Youngjin (Chahal & Dutta 2015; Hess et al. 2016). More importantly, the customer expects firms to not only react to their demands but also to anticipate their future needs before identifying them themselves, putting immense pressure on firms to respond accordingly (Von Leipzig et al. 2017).

Loyalty provides a foundation for sustained competitive edges, so developing and increasing loyalty is a crucial factor in any company’s' growth and performance (Aaker 1991; Lee & Cunningham 2001). This
standard applies to the recording industry, where corporate strategies for developing, maintaining, and enhancing listener loyalty have only been implemented at the goods level, such as LPs and CDs. Yet listeners do not have an overt relationship with the album itself and the value system supported by record companies is a loosely coupled system, in which their link to the music experience and the listener is weaker than in many other lines of business (Burnett 2002: 71). The music industry employs concepts like ‘artists’ and ‘genres’ as reinforcing “ties” within the marketing to ensure listeners’ loyalty is built on their relationship with an artist.

Previously, albums contributed to a form of loyalty, through a focus on a particular, tangible collection of songs that was predetermined for the listener. Playlists diminish the opportunities for artists to create loyalty, because they span a wide range of songs, adopted explicitly to meet individual needs. Therefore, digital playlists are not "the new intangible album"; they are a disruptive new approach that enables listeners to take control in digital-driven music markets and co-experience music listening. The challenges continue as the music industry still tries to deal with digital streaming’s dissolution of the album. Artists continue to regard the album as their core creative construct, and many record companies continue to build marketing campaigns and core business models around albums and album release schedules. A music streaming focused approach challenges the very essence and meaning of the record industry’s offerings. The market for albums may not disappear, especially among serious fans, but it is just one segment of the market, not the market. Independent of the various market segments, music industry actors must find a way to put the music listening experience as part of the digitalization transformation at the top of their agenda, by focusing on social aspects and the music listening co-experience.

6 Limitations and further research

This study provides several new insights into the results of digitalization and the role of digital streaming services and music co-experiences.
However, the study is subject to certain limitations that must be acknowledged. Firstly, the findings are limited by measurement issues. Listening experience is presented as a broad conceptualization, consistent with previous definitions in psychology, organisational behaviour, marketing, service, and management literature. The source studies offer good fit and rigorous results, but this concept has not previously been applied within the music context. Additional conceptualizations of the listening experience might be helpful. Secondly, the use of the survey method means the responses might not be free of personal biases. However, the data were collected during face-to-face interviews, so respondents received personal assistance if needed, thereby reducing possible biases or ignorance. Furthermore, respondents were asked randomly to participate in public places, although the recruitment is not a probability based and thus creates a risk of biased data. However, the large number of respondents (N = 1,794 respondents) reduced the likelihood of inaccurate results. Thirdly this research relies on data collected in a single, limited geographical region so these respondents may not be statistically representative of music listeners in other markets or nations.

Further research should explore how the music listening experience in technologically driven markets relates to social aspects, such as the importance of social identity or social norms. Furthermore, a deeper understanding of music playlists and how the listening experience affects them could result from investigations of sharing propensity, word of mouth, and other pertinent consequences. Finally, it is of interest to gain a deeper understanding of the evolution of the listening experience as markets change, suggesting the need for a longitudinal research design.

7 References


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Listening experience in music streaming


Listening experience in music streaming


