

# MUSIC IN GAMBLING CONTEXTS: WHAT ARE INDIVIDUALS' PERCEPTIONS OF MUSIC EXPERIENCED IN GAMBLING CONTEXTS & WHY DO INDIVIDUALS SELF-SELECT MUSIC TO ACCOMPANY GAMBLING?

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## Abstract

Music influences behaviours in everyday contexts (North & Hargreaves, 2008) and is a factor which can influence gambling behaviour (Griffiths & Parke, 2005; 2003). Experimenter-selected background music has been found to influence indices of gambling behaviour in laboratory gambling experiments (e.g. Spenwyn, Barrett & Griffiths, 2010; Noseworthy & Finlay, 2009; Dixon, Trigg & Griffiths, 2007; Marmurek et al., 2007). However, less is known about gamblers' experience of music in real-life gambling contexts. To date research has considered music's utilisation in gambling environments where fruit machines are located (Griffiths & Parke, 2005). Therefore further research is required to determine gamblers' responses to music in different gambling environments and when playing other gambling activities. Opportunities for individuals to gamble have increased; gambling activities can be accessed in both traditional (e.g. casinos, bookmakers) and remote gambling environments. Remote gambling permits individuals to gamble using technological devices and the same can be observed for music, as listeners access music using sophisticated electronic equipment. It is therefore feasible that individuals self-select music to accompany gambling. In the present study an online questionnaire was administered to examine gamblers' responses to music in traditional and remote gambling environments; the perceived functions and influences of music on gambling behaviour. This is the first study to examine gamblers' motivations for self-selecting music to accompany gambling. Our findings will be presented at the conference, where we will discuss the implications of music listening for gamblers and consider how future research could further the understanding of why music influences gambling behaviour.

**Keywords:** functions of music, self-selected music, gambling

## 1. Background & Aims of the Present Study

Gambling is a suitable paradigm in which to explore music's influence on behaviour because gambling requires individuals to use a range of psychological processes including attention, risk-taking, decision-making and memory. Research conducted within the field of music psychology has demonstrated that music can influence cognitive processes (North

& Hargreaves, 2008), individuals' behaviour (Kämpfe, Sedlmeier & Renkewitz, 2011) and elicit emotional responses (De Nora, 2000) in listeners in everyday situations. It is possible that background music can influence gambling behaviour and as gambling is potentially addictive (Orford, 2011) it is important to

determine how and why music can effect gambling behaviour.

The marketing methods employed by gambling operators to encourage and maintain gambling can be classified into two categories: situational characteristics and structural characteristics (Griffiths, 2003). Background music is a factor within the two marketing methods which can be utilised by gambling operators. As a situational characteristic music can attract individuals to gambling activities and can initiate gambling (Griffiths & Parke, 2003). Music can also maintain or reinforce gambling as a structural characteristic (Parke & Griffiths 2006). Recently researchers have begun to investigate background music's influence on gambling behaviour in laboratory studies and have found that music can influence the likelihood of individuals gambling beyond planned levels (Marmurek et al., 2007; Finlay et al., 2007), individuals' ability to estimate the time spent gambling (Noseworthy & Finlay, 2009) and fast tempo music can lead to faster betting in virtual roulette (Spennwyn et al., 2010; Dixon et al., 2007; Bramley, Dibben & Rowe, in press). These studies show that within laboratory environments background music can influence aspects of gambling behaviour, however, less is known about whether background music can effect gambling behaviour in real-life gambling situations.

Gambling is a leisure activity which can be undertaken in traditional gambling environments such as amusement arcades, casinos, bookmakers, pubs and clubs. Anecdotal evidence suggests that background music can be present in traditional gambling environments, however, we do not have comprehensive knowledge of how gambling-operators utilise music in these environments or gamblers' responses to the music. A study conducted in an amusement arcade indicated that the gambling operators played background music with the aim of appealing to gamblers' musical preferences: different music genres were played according to the customers' age and gender as well as which machine they were playing (Griffiths & Parke, 2005). However, it is unknown whether the

utilisation of music in this manner in the amusement arcade (Griffiths & Parke, 2005) represents the ways that music is presented to gamblers in other gambling environments.

Hypotheses have been proposed to suggest how the music heard in an amusement arcade may influence gamblers (Griffiths & Parke, 2005). The suggested effects of background music on fruit machine gamblers include increasing their confidence, arousal, aiding relaxation, helping gamblers' to disregard previous losses and inducing a "romantic" affective state leading gamblers to believe that their chances of winning are better than in reality (Griffiths & Parke, 2005; 2003). It is acknowledged by Griffiths and Parke (2005) that background music heard in other gambling environments may exert different effects on gamblers, however, to date, these hypotheses have not been tested. Therefore, an aim of the present study is to determine gamblers' responses to music, which will provide an insight into whether music is perceived to influence gambling behaviour.

The structural and situational characteristics associated with remote gambling are different to when gambling in traditional gambling environments. For example, remote gambling affords increased accessibility, anonymity, convenience, disinhibition, event-frequency (shorter length of time between each gamble), asociality (reduced social interaction), interactivity (increased personal control) and stimulation (Griffiths et al., 2005). Therefore, background music may provide other functions for remote gamblers and elicit different responses from them. The present study therefore also investigates remote gamblers' responses to music which will enable comparisons to be made between responses obtained within other gambling environments.

To date, studies which have investigated gamblers' experience of background music have considered their responses to either gambling-operator selected (Griffiths & Parke, 2005) or experimenter-selected music (e.g. Spennwyn et al., 2010). Given that the portability and miniaturisation of technological devices have led to both music listening and gambling participation being more accessible,

it may be that gamblers' self-select music to listen to when gambling similar to the practice of self-selecting music to accompany activities such as travelling or driving (North, Hargreaves & Hargreaves, 2004). In the present study we therefore compare individuals' responses to gambling-operator selected and self-selected music.

Studies have identified four recurring functions of self-selected music – distraction, energising, entrainment and meaning enhancement (Sloboda, Lamont & Greasley, 2009). In a gambling situation it may be that self-selected music may maintain or exacerbate individuals' gambling behaviour as the music matches gamblers' musical preferences (Griffiths & Parke, 2003). Given that music can be self-selected to support psychological processes such as attention (De Nora, 2000), memory (North et al., 2004), for affective reasons (e.g. Dibben & Williamson, 2007), to achieve a specific physiological state (Laukka & Quick, 2011) and there are behavioural, cognitive and emotional aspects to gambling (Orford, 2011), it appears that research is needed to establish the reasons why gamblers' self-select music. It may be that music fulfils unique functions for gamblers and may use music for behavioural, cognitive or emotional reasons in order to meet their needs, goals and desires in gambling situations. We therefore explore gamblers' motivations for listening to music, any benefits that music listening may afford and the perceived influences of self-selected music on gambling behaviour.

Our study builds upon existing research conducted within laboratory and traditional gambling environments to consider gamblers' perceptions of the music heard when gambling in a range of contexts. For example, we extend the gambling situations previously considered within other research (e.g. Griffiths & Parke, 2005) to include remote gambling, thereby recognising that the different features of remote gambling may influence gamblers' experience of music.

We also consider that gamblers may self-select music to listen to and this may elicit different responses from them compared to gambling-operator selected music. An insight

is also obtained into gamblers' music listening habits – the technology used to listen to music, the music genres listened to, perceived functions, effects of music on gambling behaviour and the motivations for self-selecting music to listen to when gambling. We suggest that gamblers' responses to music may differ according to the environment in which it is experienced and whether gamblers' have control over the music that is present. Furthermore we suggest that the reasons given for why certain music is chosen to accompany gambling will differ according to gamblers' goals and the gambling context. We therefore consider whether the reciprocal feedback of musical response model (Hargreaves, MacDonald & Miell, 2005), which states that there are personal, musical and situational variables to take into account when explaining individuals' responses to music can apply to understanding the experience of music in gambling situations.

## 2. Method

An online questionnaire was designed to investigate the aims of the present study. The questionnaire consisted of 26 items and skip-logic was employed to ensure that respondents were asked only relevant questions about the gambling environments (traditional versus remote) in which they gambled.

The questionnaire collected demographic information, asked respondents about their gambling habits, their perceptions of the music heard when gambling and the extent that they self-selected music to listen to when gambling. The questionnaire probed music's potential to influence aspects of gambling behaviour by asking respondents' to rate their agreement with a number of statements (e.g. "The music that I hear when gambling remotely aids my concentration"). Respondents indicated their agreement using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Descriptive and inferential statistics will be referred to at the conference in order to present the findings obtained from the quantitative data.

Qualitative data were collected via a question which probed the reasons why respondents' self-selected music to listen to whilst gambling. Responses to this question were analysed using Thematic Analysis (Braun & Clarke, 2006). The findings of the present study will be presented at the conference.

### 3. Implications & Future Research

This exploratory study is the first to consider gamblers' responses to self-selected music and to gambling-operator selected music in traditional and remote gambling situations. One implication of this research is that more knowledge has been gathered about why music is an important factor to consider when identifying why certain gambling activities or environments are fun, engaging, exciting, addictive and commercially successful. This knowledge could improve the understanding of why factors, such as music, promote gambling participation and why gambling is appealing (Cornish, 1978; Griffiths, 1993; Parke & Griffiths, 2007). Furthermore, this research may contribute to the promotion of responsible gambling, development of harm-minimisation strategies and gamblers themselves could modify their behaviour (Gainsbury & Blaszczynski, 2012). This study has also provided a basis for future research to explore the possibility of a relationship between gamblers' beliefs about music's effects and whether music actually influences their gambling behaviour.

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