



## Rationalization as a Dissonance Management Strategy among Electronic Gambling Machine Players

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**Abstract:** Erroneous gambling-related beliefs are well researched in light of their association with problem gambling, with some research suggesting these beliefs also serve as justifications for gambling behaviour. The process of justification (i.e., rationalization) can provide insights into how those who gamble resolve dissonance resulting from persistent loss in the gambling context. Using in-depth interviews of 43 participants who identified electronic gambling machines as their preferred game type and were either experiencing gambling problems or were at risk of developing a problem, this study details how dissonance is managed through rationalizations in line with the Dawson (1999) framework. This framework is based on research of religious groups surviving prophetic disconfirmation and is employed here to highlight the contextual and socio-cultural underpinnings of rationalizations along with their supernatural and pseudo-religious qualities. Rationalizations reflect broader socio-cultural beliefs around morality, work, speculation, perseverance, and the supernatural. Implications for treatment are discussed.

*Keywords:* problem gambling, cognitive dissonance, erroneous gambling-related beliefs, rationalization

### Introduction

While condemned by many major religions, especially those that assert 'authority' in the 'transcendental,' gambling is found to embody magical, supernatural, and religious qualities (Binde, 2007a, p. 145). Binde's (2007a) paper on gambling and religion noted the reflections of many early scholars on this association. For instance, anthropologist Edward Tylor (1871) surmised that secular gambling has its evolutionary origins in religious practises of divination, and sociologist Lévy-Bruhl (1924, p. 200) stated that gambling possesses a 'metaphysical and almost sacred meaning.' For many, gambling offers hope (Downs, 2015) and the promise of a miracle akin to religious or spiritual forms of salvation (Binde, 2007a; Gudgeon & Stewart, 2001). While this may run counter to religious tenets, one can surmise that 'religion and gambling are alternative cultural systems of meaning and ritual,' where avoiding religiously condemned behaviours for the promise of salvation is culturally congruent to gambling for a 'secular reward' (Abt & McGurrin, 1992, p. 415).

Many years ago, Tylor (1871, p. 80) wrote that the 'arts of divination and games of chance are so similar

in principle that the very same instrument passes from one use to the other,' referring to objects such as playing cards and dice. Electronic gambling machines (EGMs) are modern-day instruments of divination referred to by Schüll (2012, p. 95) as 'vehicles of enchantment' in her ethnographic study of EGM players. Machines are designed in such a way to pull the player in while the mechanisms underlying them are unclear, allowing those using them to form their own doctrine on how they function (Turner & Horbay, 2004). The environments that house these machines are similarly designed, creating a 'cocoon' of insulation and security that 'disorients space and time' (Schüll, 2012, pp. 36, 41–43). Abt and colleagues (1985, p. 86) described the casino as an environment that secludes the player from 'outside demands', allows them to leave their ordinary identities and come together with others within a distinctive and even sacred space. In this vein, Ocean and Smith (1993) suggest those who gamble in casinos are united in a common cause.

The religious and magical undertones of gambling are also discussed in the broader problem gambling literature on erroneous gambling-related beliefs

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(EGRBs). Those who gamble commonly hold EGRBs about how gambling works (e.g., Wohl & Enzle, 2002); especially those with gambling problems (Goodie & Fortune, 2013), who experience the majority of the adverse financial, relational, health, and legal consequences (Langham et al., 2015). EGRBs are thought to be involved in the development of problem gambling (Cowie et al., 2017; Fortune & Goodie, 2012; Ladouceur et al., 2001), although some have suggested that this causal relationship requires further exploration with advanced methods and instruments (e.g., Leonard et al., 2015). Nevertheless, a key component of most problem gambling treatment is cognitive therapy, where attempts are made to correct EGRBs or weaken their validity by challenging them in the therapeutic context (Fortune & Goodie, 2012; Toneatto, 2002).

EGRBs take many forms, and there is some debate about whether they derive from general cognitive biases (Fortune & Goodie, 2012) or from broader cultural belief structures that inform beliefs in the ability to find the right strategy that are then tested in the gambling context (Ejova & Ohtsuka, 2020). Ejova and Ohtsuka (2020) reviewed 40 studies of EGRBs and categorized beliefs as natural and supernatural. While 'natural' refers to beliefs about randomness, 'supernatural' references beliefs in god(s), luck, and other spiritual forces (Ejova et al., 2015). Czerny and colleagues (2008) explained that EGRBs form the justifications for continued gambling behaviour. Adding support to this understanding of EGRBs, Yuen et al. (2018) found evidence of mutual causality between EGRBs and behaviour, noting that both cognitive theory and cognitive dissonance should be considered in future research and treatment.

The psychological theory of cognitive dissonance (Festinger, 1957) suggests that when beliefs and attitudes are imbalanced, or dissonant, with an individual's actions, an attempt to resolve the imbalance will be made, through either belief, attitude, or behaviour modification. Those experiencing problem gambling are well-entrenched in the activity, having invested time, money, and energy. Therefore, instead of altering their gambling behaviour to resolve dissonance, they are more likely to try and justify their continued participation. This type of rationalization—that is, the process of justifying controversial behaviour—would then describe how a person manages dissonance in the face of persistent loss.

This research will employ a dissonance management framework derived from research on religious groups in order to provide a perspective that is sensitive to contextual/environmental cues, the influence of broader socio-cultural beliefs, and the transcendental and religious aspects of the casino-based gambling experience. Dawson (1999) and other researchers in the new religious movement field (e.g., Melton, 1985; Zygmunt, 1972) uncovered three

adaptational strategies used to manage dissonance caused by prophetic failure, with rationalization situated as the most important strategy in maintaining prophetic belief. Dawson's (1999) emphasis on rationalizations in dissonance management makes this framework useful in extending our understanding of how those experiencing problem gambling make sense of continued play in the face of persistent loss, something shared by both members of prophetic groups and those well entrenched in gambling.

## Methods

### Recruitment

A total of 43 adults were recruited from Toronto, Ontario, Canada, via online and paper-based classified advertisements that solicited study participants who cited EGM as their primary game of choice. Participants were screened using the Lie/Bet instrument (Johnson et al., 1997), a brief screening tool for problem gambling. During the interview, participants were assessed with the Problem Gambling Severity Index (Ferris & Wynne, 2001). Purposive sampling was used to recruit an equal proportion of men and women. All participants had to be of legal gambling age (i.e., 18 or older). The sample demographics are outlined in Table 1.

### Procedure

The study was approved by the Research Ethics Board of the University of Toronto, and all participants gave written informed consent. A semi-structured interview guide was administered to individual participants with questions about beliefs and behaviour, but participants were encouraged to expand on their beliefs, ideas, and experiences throughout the interview. Participants were referred to as experts regarding their lives in line with feminist epistemological insights (e.g., Devault, 1990). Interviews lasted between 60 and 120 minutes and were conducted by one interviewer [TH]. All participants were given a \$20.00 honorarium, with the monetary compensation being disclosed only when asked by the participants in order to avoid its influence on their decision to participate.

### Analysis

Interviews were audio-taped, transcribed verbatim, de-identified to ensure anonymity, and coded for emergent themes by the principal investigator with NVivo qualitative analysis software (QSR International, 2014). Qualitative content analysis (Hsieh & Shannon, 2005) was informed by an existing framework, namely Dawson's (1999) categorization of rationalizations.

**Table 1**  
*Sociodemographic Characteristics of Study Participants*

<b>Sample Composition (n=43)</b>	
<b>Characteristic</b>	<b>%</b>
<b>Gender</b>	
Female	46.5
Male	53.5
<b>Age range</b>	
21 to 30 years	14.0
31 to 40 years	18.6
41 to 50 years	34.9
51 to 60 years	20.9
61 and older	11.6
<b>Marital status</b>	
Never married	41.9
Married	18.6
Separated	4.7
Divorced	20.9
Widowed	2.3
Cohabiting	11.6
<b>Education</b>	
Secondary	25.6
Trade school	9.3
College diploma	4.7
Some university	27.9
University degree	9.3
Masters/Professional degree	14.0
<b>Income range</b>	
Less than \$20,000	23.3
\$20,001 to \$40,000	32.6
\$40,001 to \$60,000	32.6
\$60,001 to \$100,000	11.6
<b>Ethnic background</b>	
Indigenous	2.3
British Isles	18.6
Caribbean	14
Eastern/Other European	4.6
Southern European	25.6
Western European	7.0
Latin/Central/South American	2.3
West and East/South East Asian	14.0
South Asian	11.6
<b>Canadian-born</b>	
Yes	55.8
No	44.2
<b>Problem Gambling Severity Index (PGSI) Score</b>	
Moderate-risk	34.9
Problem gambling	65.1
<b>Electronic gambling machines exclusively</b>	
Yes	86
No	14

### Framework

Dawson (1999) summarized four main types of rationalizations used to manage dissonance: 1) spiritualization; 2) test of faith; 3) human error; and 4) blaming others.

Spiritualization involves the reinterpretation of the prophesied event 'in such a way that what was supposed to have been a visible, verifiable occurrence

is seen to have been in reality an invisible, spiritual occurrence' (Melton, 1985, p. 21). In other words, the event happened, but on another spiritual plane.

Test of faith involves members of a group reinterpreting a failed prophecy as a success, claiming their continued faith in the face of seeming failure was proof of their worthiness to some larger entity or force. Members rationalize failure as a misunderstanding or

misinterpretation (i.e., failing to read the signs correctly), or conclude that the group did not merit the prophecy coming true yet.

Human error is another rationalization used to explain failed prophecy. Human error is the result of misunderstandings, miscalculations, or the 'moral inadequacy of followers' (Dawson, 1999, p. 67). However, the group may, in addition to or alternatively, hold outside forces, supernatural or natural, as being responsible for the failure. These rationalizations are ideal types and can occur in a united fashion (Dawson, 2012). For instance, failed prophecy could be characterized as a test of faith while stemming from human error.

### Sample

Using the Problem Gambling Severity Index to assess gambling problem severity, 65% of participants scored at the problem gambling level, while 35% were at risk of developing gambling problems. The sample composition (Table 1) includes a high percentage of people aged 41 years or older (67%) who participated exclusively in slot machine gambling (86%) and who have never been married (42%). Most had some post-secondary education (75%) and reported a gross annual income lower than \$40,000 (56%). The majority of participants were ethnically tied to Europe, followed by the British Isles; various parts of Asia were well represented (25.6%), as was the Caribbean (14%). Over half the participants were Canadian-born (56%).

## Findings

### Rationalizations

Dawson's (1999) framework was used to conceptualize rationalizations employed by participants to manage dissonance. The following sections will examine the four rationalizations, in line with the framework, that emerged from the data.

#### *Spiritualization*

Spiritualization signifies the reinterpretation of prophetic failure as something that was supposed to be visible and verifiable but is reimagined as an invisible spiritual occurrence on a higher plane of existence (Melton, 1985). Spiritualization is used to rationalize continued involvement in gambling, albeit manifesting in a less extreme fashion than among members of prophetic groups.

Gambling appeared to have a deeper significance that was often difficult for participants to explain. This might suggest implicit learning, where schemas or theories of the world may not have been fully discerned despite guiding behaviour. However, it might also imply something intangible about the gambling experience that defies verbalization. Participants struggled to provide an adequate description, although some elucidated a connection between gambling and spirituality: 'it's kind of like your luck or however the

gods prey on you. Kind of like it's spiritual I guess, I don't know' (Male, 33, South Asian).

For members of religious movements, participation provided spiritual fulfillment and meaning. So too, some participants explained just how valued an activity gambling was for them, not being able to imagine their life without it:

I think it [would] just feel like a void [if I had to stop gambling], like it's just turned into a routine for so many years of going to play. It's almost like an addiction, I guess. Like you feel like you need it. (Female, 51, South Asian)

Although it was difficult for participants to explain their attraction to gambling, the activity was said to satiate a need. Accordingly, the drug-use analogy was appropriate for several participants:

Yeah, there's that euphoria, you do hit. You do win [in some way], I guess. It's something that maybe only a doctor can explain. I don't understand the process, but I've heard that there's certain, I guess, endorphins that are released. I'm sure of it. I believe it. But yeah, there's definitely, you know, euphoria akin to probably some kind of drugs. And as I said, I mentioned that I've seen players with that crack-addicted look ... Well, I guess the hope of winning. That's basically what I think is the driving force, but I think it could be more than that. I think there's some kind of euphoria attached to it as well, to the process. (Female, 40, Southern European)

Equating the experience to drug use helped participants to understand and explain the profound effect of gambling. Others tied the euphoria experienced to the EGM itself, with emphasis on its mesmeric abilities:

Yes, it's exciting with all that noise and the flashy machines. Yeah, hearing all that noise. Yeah, it's all the lights. I don't know what it is, but it is hypnotizing. (Male, 50, Southern European)

The interactive features of the EGM might have helped respondents build personalized relationships with them, with many explaining that they encouraged the machines, in an effort to coax a win through communicative or tactile interaction. Some anthropomorphized them, inferring human-like qualities, including emotions and intellects: 'you will press this, dab, dab, dab [change pattern of play] ... you will try to mess up its mind [the machine]' (Female, 65, East and Southeast Asian).

Some participants held animist perceptions of EGMs, where the machines became divine objects with an otherworldly essence. Bestowing special significance,

participants seemed to project onto the machine the ability to determine their fate:

We're interacting with a machine to see if it's my best friend and to see if it's my enemy, to see if it can bring me some money or make me happy or something. And yes, you know that could be good with the pot of luck, gold. Well, because you never know the machine could work with you to be your best friend and say 'okay, here, I am going to help you win some money and go home' and it could be like a magical machine. Or it could turn into a devil and say you know what, 'I ain't going to be helping you today, because I want all of your money. So just give it to me ... and I am going to make you miserable for the night.' (Female, 52, Caribbean)

Additionally, larger forces were held responsible for a win, transcending the power of the machine:

If it's in my cards to win that day, I'll win. If it isn't, I'm not going to. It doesn't matter what machine I'm playing on. I feel that way. I really do. Fate. (Male, 37, Latin Central South American)

To describe undesirable outcomes at the casino, supernatural forces and fate were referenced, demonstrating a deeper connection to the game beyond that of chance. These amorphous beliefs were underpinned by euphoric states, helping participants to maintain commitment to gambling and faith in winning.

#### *Test of Faith*

Depending on the group's beliefs, histories, and circumstances (Dawson, 1999), the test of faith rationalization can have varied representations. As discussed in the new religious movement literature, despite prophetic failure, religious group members continued to believe that prophetic realization was imminent. In effect, the groups decided to persevere in the face of adversity (Dawson, 1999), holding onto faith in some moral order that will lead to prophetic confirmation.

Similarly, participants here seemed to possess intuitive faith in and the need for some moral order. Their allegiance to the prophecy, by way of ongoing and persistent involvement in the activity despite predictive failure, held special significance. They believed that to demonstrate their worth, persistence was necessary, which draws parallels to the gambler's fallacy:

Yes, and in fact, you know sometimes I empty my pocket then I'm trying to get my ... what I am really trying to do is get my money back. Yes, and then I am sort of persistent! (Female, 51, Caribbean)

Another participant voiced their faith in and commitment to winning:

Yeah, sooner or later it's gonna click. Paid my dues, yeah. Well, I mean hopefully, that I am gonna win. So one of these days. (Female, 60, British Isles)

To demonstrate moral worth as a controlled and measured player, one participant spoke pointedly of the importance in saving and investing one's winnings:

[If I won a] half a million dollars, wow, I would buy a house. Something little, not a half a million, but maybe a condo for \$200,000 or something. I would definitely ask my parents if they needed anything. I'd ask them if they needed some help with anything first of all because they've given me quite a bit in my lifetime. If they said no, I would also invest a chunk of it too, to get a better return, ... like maybe a GIC (Guaranteed Investment Certificates), something ... medium risky ... because if you've bought it at a certain rate ... after the five years it's lower than that, your zero return is, but your money, your principle will still come back to you. Yeah, I like that type of investment where your principle will come back but taking a risk to see if your money can double or return. Possibly (buy) a car ... and maybe second hand, nothing brand new. (Female, 52, Caribbean)

While many respondents indicated they would spend their new wealth, this was tempered by claims that they would make sound, rational decisions with the remaining money.

Maintaining a rational attitude towards wealth came alongside a steadfast belief that they were worthy of a win. Accordingly, they maintained, that despite failure, they were due for a win:

Oh yeah! That's what I feel right now, I am due. Because I haven't been for a while and I am due for a win. And the last time I went when I had money it was like that—I haven't won so now I feel it's ... the next time I go, I'm gonna win. Not big, but I'm going to win something. (Female, 25, Caribbean)

Strength of resolve was bolstered by the conviction that they, in contrast to others, were prepared and worthy of such a reward:

I just see all the other people they are living better than me. My parents were poor. I want to become like that, wealthy. I can handle wealth better than most. I don't want to become like somebody that has less than me; somebody who

is on the street, no, obviously. (Female, 56, Southern European)

'Due for a win' is similar in concept to the gambler's fallacy; however, here one's worth or readiness for a win appeared more meaningful than the idea of equilibrium restoration which underpins this fallacy. Respondents explained they should not expect or try to coerce a win, nor should they abandon self-control when gambling. This notion of moral worth as demonstrated by controlled gambling and tempered avidity suggests that the gambler's fallacy concept may be more nuanced than previously thought.

#### *Human Error*

Human error is a rationalization used by members of new religious movements to manage dissonance, attributing error to misunderstandings, miscalculations, or moral inadequacy (Dawson, 1999). This rationalization was used to describe losses attributed to erratic play driven by greed.

Participants faulted their desperation, manifesting in distracted and erratic play, when faced with gambling losses:

It's weird because I feel like I'd rather control my money than allow the machine to control my money or allow the computer to. But then it gets to the point where I will go to the slots as a desperation move. And then I'll play the slots and even though it feels like, okay, I'm winning something, in the long run I'm not. With all the bells and whistles, like, [it] distract[s] you. And eventually by the time you know, it's [my money] gone. (Male, 57, Other European)

It is a composed and controlled gambler that had the best chance of securing a win:

Calm. Yes. Everything's going at the pace it's supposed to go. That's when I find the days for me are the best. If I get into an uncontrollable urge and stuff like that and I want to do this so fast and I'm not, sort of, going to let time run by itself, I just don't have good days. ... I just don't have a good day when I sit, right, and I won't be concentrating. I won't be playing the game. My mind will be somewhere else. (Female, 62, Southern European)

Measured gambling and restraint were attached to worthiness. A worthy gambler, then, exercised self-control, and was not disoriented by a preoccupation with winning, as the same participant continued:

Yes. When I'm not focused it's going to be a bad day. It's a day when I'm not thinking about anything except just enjoying myself [that I win]. I don't think about winning, I think about just

enjoying myself so when I start thinking about winning some money that's when I never win. (Female, 62, Southern European)

Erratic gambling, which participants equated with avaricious play, would lead to gambling loss, signifying a lack of moral worth. That is, those who were overly eager would induce human error through frantic play motivated by greed:

People are naturally greedy. You can see that because if you go to a casino, you see people and they're up already \$500, you can see the credits they have but they keep playing. They don't stop and say, 'I have \$500. I think I'll go home now.' No, because everyone that goes there; they get greedy. Say you've won \$100, instead of going home you think, 'Now, I've won \$100, let's see if I can win another \$100 more' ... That's when you lose. (Female, 50, Caribbean)

Erratic play, driven by greed, was not the only way an individual could demonstrate moral inadequacy; high expectations could be equally problematic:

And, plus, if you really hope to win, you don't get it. That's my logic on it ... Don't hope to win. Don't expect it. Like expect the unexpected sort of thing. [If you don't expect it] it just comes. (Female, 26, East and Southeast Asian)

An amorphous higher order took account of behaviour both in and outside the casino. Being of good character amplified moral worth and, consequently, the chances of winning:

If you are a good person, not just to yourself and kind to others, I think you should have more chance ... But I never had that thought. If I had [that thought], I would feel like a greedy person ... I would say \$50,000. One hundred and fifty thousand—you're asking [for] too much [in a win]. Fifty thousand would be right ... I don't want to be or sound too greedy. I will be happy with \$50,000. (Male, 74, Western European)

Participants held the belief that, to secure a win, they had to exercise tempered avidity, moral worth, and faith. Those who were self-controlled and held modest expectations demonstrated the moral worth of a winner. These findings point to a gambling process that, for many, was anchored in an intuitive faith in, and need for, a higher moral order.

#### *Blame Others*

Prophetic failure, according to some religious groups, has been associated with a combination of individual-level shortcomings, group-level flaws, and missteps by outsiders. In order to manage dissonance,

participants similarly attributed losses in the casino context to the missteps of others. Typically, these rationalizations presented themselves in two ways.

First, other casino patrons were blamed for transmitting their negative energy, resulting in bad luck or unfavorable outcomes:

I often avoid the slot machines where I noticed someone is very upset and frustrated with it. I just ... I leave that one alone. I feel like it's one of those, like, bad omen like in the sense like his frustration and just his negative energy from that is just lingering over it [the slot machine] now. (Male, 36, Western European)

Blame was spread between fellow patrons and family or friends who joined them at the casino:

Like I would rather just say, oh, after like a few minutes, oh, this is how much I won kind of thing. So it's kind of like, if he's [her negative friend] around sometimes I feel like it's bad luck. I don't know. I think if somebody is like looking at you while you are doing it [gambling], it's kind of like jinxing you. I experienced it before. (Female, 43, Southern European)

In this case, a respondent identified a friend's watchful gaze as a form of negative energy, ultimately causing her to perform poorly, a commonly used rationalization.

Second, the casino establishment was blamed for its underhanded way of controlling the flow of wins:

And it was terrible. It was really bad [no payouts] ... I think management must have done something. ... [They] probably programmed the slots to be like that. Yeah, there were not many people at the slots. Yeah. I lost. I lost ... they're setting them up a certain way—I really do believe that. I don't think that you can beat the house kind of thing with the slots. Well, I'm sure that they [the casino establishment], they've got cameras ... that they know who you are right away when you sit down because you're using your identification card. They're assessing how much you spent. Possibly. I'm not saying for sure but ... (Male, 24, West Asian)

Participants placed blame on both others and their own error. When others were blamed, it was typically those in close physical proximity to the participant: anyone from a fellow patron to a loved one and even the casino establishment could be designated the cause of prophetic failure.

### Discussion

This is one of the few studies that examined the rationalizations employed by those experiencing

problem gambling using a framework that highlights the deeper meaning affixed to the gambling experience and the contextual/environmental and socio-cultural underpinnings of rationalizations. Spiritualization, test of faith, human error, and blaming others were all used to explain gambling losses and are well-captured by Dawson's (1999) framework.

Within the context of spiritualization, respondents felt a deep sense of euphoria through interaction with EGMs, likening them to deities, a finding similar to Hayano (1978) whose poker players equated human opponents to 'whimsical forces ... or some other nonhuman spiritual being' (p. 486). Schüll (2012, pp. 77, 95) made a similar observation about EGMs when she described them as 'vehicles of enchantment.' In the same vein, Schüll (2012, p. 84) noted that casino industry insiders refer to the random number generator (RNG) in EGMs as the 'really new god' because 'people act like its casting a spell.'

Indeed, participants attributed animistic qualities to EGMs, reinforced by their vivid audio-visual components and their ability to determine the player's fate. EGMs are designed to pull people into the 'machine zone,' an affective state of balance and calm, as described by Schüll (2012). Although EGMs were a key aspect of the gambling experience, it was a mediator, in many ways, between them and transcendental forces. This research highlights the strong emphasis on the secondary illusion of control as described by others (e.g., Ejova et al., 2015) where control is situated outside the individual.

The test of faith rationalization was used to explain the importance of persistent faith despite continued failure. This is similar to Abt and McGurrian's (1992, p. 415) likening of gambling to religion, where the pursuit of 'an immediate secular reward' is 'culturally analogous' to the pursuit of 'a future heavenly reward.' Some argue Protestant beliefs about wealth and investment formed the basis of capitalism, and there is a kind of perverse and inverse analog to the Protestant work ethic and the spirit of capitalism (Weber, 1905/1930) in the rationalizations of these participants. Revealing a strange paradox in the gambling context, the ethical imperative of Protestantism, the virtuous accumulation of wealth through one's vocation, seemed to be a consideration for these participants in their journey to a secular form of salvation. Well aligned with the Protestant ethic's focus on rational capitalism, rationalizations revealed that salvation would require unwavering faith, in the form of controlled determination and righteousness. That is, many respondents qualified their worthiness by explaining that they would practice fiscal restraint, in alignment with the Protestant values of prudence and frugality. Respondents appeared to draw on both cultural and religious understandings to rationalize outcomes adding some support to Ejova and Ohtsuka's (2020) thesis that EGRBs are derived from broader beliefs that are common across cultures.

The gambling experience described by the study's participants seemed to edge towards religious expression and experience, especially given their persistent and unwavering intuitive faith and need for a higher moral order. As Hahmann (2016) described in her research on gambling beliefs, the well-documented gambler's fallacy did not simply reflect a 'self-correcting process in which a deviation in one direction induces a deviation in the opposite direction to restore the equilibrium' (Tversky & Kahneman, 1974, p. 1125). Being 'due for a win,' instead, reflects notions of moral worth, she explained. Here too a win was reserved for a morally worthy player expressed by, but not limited to, tempered avidity, controlled play, and good character. Not expecting a win was a way to curb their avarice. Only those who practised restraint, and were thereby unmoved by greed, would demonstrate the moral worth of a winner nearing themselves to a secular salvation. In an earlier study, bingo players spoke of the importance of not expecting a win, suggesting a similar notion of unworthiness marked by greed that should be avoided when gambling to win (King, 1990). While participants needed to temper their expectations to prove moral worth, their drive to pursue a win was propelled by an inherent need to have their worthiness validated. This calls to mind Weber's comments about the fundamental need for religious legitimacy:

The fortunate is seldom satisfied with the fact of being fortunate. Beyond this, he needs to know that he has a *right* to his good fortune. He wants to be convinced that he 'deserves' it, and above all, that he deserves it in comparison with others. He wishes to be allowed the belief that the less fortunate also merely experience his due. Good fortune thus wants to be 'legitimate' fortune.

If the general term 'fortune' covers all the 'good' of honor, power, possession, and pleasure, it is the most general formula for the service of legitimation, which religion has had to accomplish for the external and the inner interests of all ruling men, the propertied, the victorious, and the healthy. In short, religion provides the theodicy of good fortune for those who are fortunate. (1915/1946, p. 271)

Notions of moral worth are culturally pervasive, and participants might be pulling from broader cultural or religious beliefs when rationalizing their continued involvement in gambling. In this vein, Binde's (2007b) content analysis of 2,000 Swedish newspaper articles about lottery winners revealed that these winners were readily described in terms of moral worth, with blessings bestowed on the good and those in need. He suggested that such tales might fill the void left by folklore teachings and organized religion.

The final rationalization was directed outward, focused on the role of others in negative gambling

outcomes. Hayano (1978) similarly found that wins among poker players were often attributed to their own performance, while others were held responsible for losses. This rationalization did not manifest as simple blame deflection, but instead was congruent with what Toneatto (2002) described as 'luck as contagion,' in line with the 'law of contagion,' in his work on EGRBs. That is, energy, be it positive or negative, in the gambling context, could somehow transfer to those surrounding it and thus influence gambling outcomes. This form of cognitive framing is highly entrenched in our collective cultural consciousness, perhaps best exemplified by the widespread popularity of self-help books like *The Secret* (Byrne, 2006). Premised on the law of attraction, *The Secret* detailed how thoughts are made from 'pure energy,' through a process where like energy can attract like energy. For example, positive energy will attract like energy and can, thus, improve a person's condition. The pervasiveness of this cultural phenomenon was evident in the rationalization centered on blaming others, with respondents referring to the law of attraction, both of positive and negative energy.

In their entirety, these findings offer critical insight into the governing logic of these participants in addition to the deeper meaning they attach to gambling. This knowledge can help inform problem gambling interventions. Cognitive behavioural therapy (CBT), which targets EGRBs, is one of the foremost treatment approaches and uses a variety of techniques to challenge EGRB, such as questioning their evidential or formative basis, reframing explanations of gambling outcomes, and considering neglected evidence (Toneatto et al., 2007). While CBT has shown promise in the treatment of problem gambling, relapse and treatment non-response to CBT remain high (Toneatto & Millar, 2004). A key consideration might be the applicability of treatment techniques surrounding evidentiary facts when gamblers discredit such information in the gambling context. In fact, Reith's (2002) logic applies here: knowledge is socially constructed and 'adapted to meet the requirements of particular situations,' and in this sense, gamblers 'reject the knowledge provided by probability theory, adopting instead another type, more relevant to the environment of chance' (p. 156). Situated in a sacred space, participants in this study embraced supernatural and even divine insights while also drawing on culture more generally in their rationalizations.

Reflecting on the importance of culture in CBT treatment, Okuda and colleagues (2009) explained that cultural beliefs play a role in maintained behaviour and need to be considered in the application of specific interventions, such as those aimed at challenging EGRBs. Similar to Abt & McGurrian (1992, p. 415), participants described how gambling provided a 'cultural system of meaning and ritual' that was deeply important to them. Problem gambling interventions may, therefore, benefit from the application of less oppositional treatments in favour of more empathic, or



goal- and value-oriented treatment types, such as Motivational Interviewing (Yakovenko et al., 2015) or Acceptance and Commitment Therapy (Nastally & Dixon, 2012), which might help build a therapeutic alliance. In a similar vein, spiritual or holistic interventions/treatments (e.g., mindfulness or spiritual interventions, or Gambler's Anonymous) (Adedyoin et al., 2014; Schuler et al., 2016; Toneatto et al., 2014) might offer a connection to something greater than the individual. The selection of a more spiritual therapeutic approach should be tailored to the client and could perhaps be paired with more formal therapies for a more effective problem gambling treatment (e.g., Schuler et al., 2016).

What these rationalizations ultimately reveal is that gambling holds special meaning and may fill a deeper emotional or spiritual void. If gambling meets a need for deeper (and even sacred) meaning, this makes it all the more important to better understand the significance of the activity from the perspective of those involved in it and to be sensitive and mindful of this in the development and application of interventions aimed at curbing problem gambling.

### Limitations and Opportunities for Future Research

This research draws on the gambling experiences, beliefs, and attitudes of EGM players, situated in a specific geographical context, so our findings are not generalizable to the full spectrum of gambling engaged persons. This research was also based on a convenience sample of 43 participants, including a combination of those gambling at the moderate-risk or problem level; however, given the preliminary nature of this research, these findings do offer unique insight into how players make sense of their losses and the deeper meaning and significance attached to gambling itself. Given that the adopted framework originated outside of the addictions field, there is an opportunity for future research to explore how these rationalizations might extrapolate or generalize to individuals without gambling problems.

### Conclusion

This study uncovered the deeper significance affixed to the gambling experience. References to faith and morality suggest that gambling itself could be interpreted as a form of religious expression and experience. To better understand what draws people to gambling and keeps them engaged in the activity, despite adverse consequences, a complex interplay of psychological, sociocultural, and environmental/contextual factors should be considered. Dawson's (1999) framework, applied to the gambling experience, helped to determine the rationalizations used to justify behaviour that has significance for problem gambling treatment. While cognitive behavioural therapy is widely used to treat problem gambling, more holistic and less confrontational approaches might warrant consideration in light of findings that point to gambling

as a deeply meaningful activity. As noted in the work of Dawson (1999, 2012), dissonance management benefits from social processes (e.g., prior preparatory processes, social support processes) that strengthen rationalizations and, in turn, faith in prophetic confirmation. Future research should attempt to determine how social processes factor into dissonance management in the gambling context.

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### Funding Statement

In the past three years, Hahmann was listed as a co-investigator on three major grants awarded by the Social Science and Humanities Research Council and the Ontario Ministry of Housing through the Poverty Reduction Fund.

Monson currently receives salary support from the Fonds de recherche du Québec—Société et culture (FRQSC). In the past three years, she has additionally received funding as a principal investigator from FRQSC and the Social Sciences and Humanities Research Council (SSHRC), as well as a co-investigator funding from FRQSC and the Canadian Institutes of Health Research (CIHR).

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