What does it mean to recover from a Gambling Disorder? Perspectives of gambling help service users

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Abstract

Background: There is no consensus on how to best define recovery in gambling disorder. This minimizes clinicians' abilities to apply optimal treatment goals and contributes to inconsistency in the use of outcome variables to evaluate interventions. Current understanding of recovery is largely based on professional opinion and theoretical models of gambling disorder. This study aimed to examine core features of recovery identified by service users with lived experiences.

Methods: Thematic analysis was applied to qualitative data from 32 face-to-face interviews. Interviewees were at various stages of help-seeking for gambling problems mostly related to electronic gaming machines via self-exclusion and/or specialized gambling counseling.

Results: Recovery was perceived by the participants as a continuous process that encompasses periods of improvement and decline. Several key themes of recovery emerged; participants highlighted the importance of developing insight into the psychological and environmental processes that contribute to their gambling problem. Insight helped participants feel empowered to successfully manage their gambling urges and behavior. Recovery extended to building a meaningful life beyond gambling, which involved engagement in alternative activities and fostering strong social relationships. It included stabilization of personal finances and achieving general psychological health and wellbeing.

Conclusions: Findings challenge acute symptom-focused models of recovery by broadening the definitional boundaries to include sustained improvements across multiple psychosocial dimensions. Greater emphasis should be given to service user-defined elements of recovery in treatment and research. The long-term perspective of the recovery process has implications for extending standard follow-up assessment intervals in gambling treatment studies.

Keywords: Consumers, service users, recovery, gambling treatment, gambling disorder, problem gambling

Introduction

Over the last few decades, the concept of recovery has received increased attention in mental health research and practice. Influenced by service user advocacy organizations, recovery-oriented principles have been incorporated into contemporary mental health services policy across western countries (O'Hagan 2001; Mental Health and Substance Abuse Division 2012; Australian Health Ministers' Advisory Council 2013). Accordingly, a proliferation of recovery peer-reviewed journal articles and conference proceedings have emerged in the academic literature (Leamy et al. 2011; Slade 2017). Clear distinctions have been made between the medical and service user (also referred to as 'consumer') perspectives of recovery. The former, based on professional opinion, narrowly defines recovery as the absence of symptoms and return to a pre-morbid level of functioning (Mountain and Shah 2008). The medical model focuses primarily on illness symptoms and aligns with acute health care practices with short-term follow-up (Bellack 2006; White 2007). In contrast, the service user model adopts a broader holistic perspective of recovery and supports the potential for a socially rich and meaningful life despite symptom persistence or reoccurrence (Anthony 1993; Gagne et al. 2007). Accordingly, longer-term recovery management and extended follow-ups are inherent to the service user model (McLellan et al. 2007; Laudet 2007). Despite the increased focus on recovery, there is no consensus of how this term should be defined. The absence of clear operational criteria for recovery undermines the effectiveness of clinical practice and advancement of research. Indices of recovery must be clearly understood if mental health services are expected to work towards this goal.

Gambling disorder is characterized by repeated problematic gambling causing significant personal impairment or distress (American Psychiatric Association [APA] 2013). A gambling

disorder is associated with a diverse range of consequences, including significant financial hardship, financial crime, interpersonal conflict, social disengagement, decreased productivity, psychological distress, and physical health issues (i.e. sleep deprivation) (Langham et al. 2016; Shannon et al. 2017). Various biopsychosocial processes are implicated in the development and maintenance of a gambling disorder, evidenced by multiple explanatory models from a number of related disciplines (Jacobs 1986; Korn and Shaffer 1999; Blaszczynski and Nower 2002; Sharpe 2002; Potenza 2013). Separate subtypes of gambling disorder have been proposed (e.g., behaviorally conditioned, emotionally vulnerable, and antisocial impulsivist; see Blaszczynski and Nower, 2002), suggesting etiological heterogeneity. Pathways to recovery may differ depending on individual subtypes of gambling disorder. Non-treatment assisted 'natural' recovery has been linked to less severe instances of gambling disorder and individuals lacking premorbid psychopathology and correspond with a behaviorally conditioned subtype description (Hodgins and el-Guebaly 2000; Toneatto et al. 2008).

Diffuse conceptualizations of recovery have contributed to significant variability of reported outcomes in gambling treatment studies (Petry 2005; Smith et al. 2007). In a systematic review, Pickering et al. (2018) reported 63 different measures used to measure treatment effectiveness in 34 studies. The measures were categorized as gambling specific (i.e. problem gambling symptoms and behaviors) and non-gambling specific (i.e. psychopathology, cognitive-emotional processes, global functioning and wellbeing). Furthermore, although 'recovery' was operationalized by a small proportion of studies reviewed (32.4%), these also varied between gambling abstinence (Jiménez-Murcia et al. 2007), a specified reduction in gambling intensity or problem gambling symptoms (Myrseth et al. 2011; McIntosh et al. 2016), or to no longer meet diagnostic criteria for a gambling disorder (Rossini-Dib et al. 2015). A lack of sufficient follow-

up assessment in treatment outcome studies creates uncertainty concerning whether these studies measure temporary remission of symptoms rather than sustained recovery. Very few gambling treatment studies have employed follow-ups of two or more years (Merkouris et al. 2016). Studies with shorter assessment periods produce higher rates of recovery and may not account for relapse over time (Walker 1992; Pallesen et al. 2005).

Inconsistency of outcomes variables and follow-up periods between studies makes it difficult to perform valid comparisons of results and prevents the development of an optimal treatment approach. Researchers from several mental health and substance addiction fields have focused on developing a unified operational definition of recovery, encompassing multiple stakeholder perspectives (Silverstein and Bellack 2008; Dawson et al. 2014a; Neale et al. 2016; Crowe 2017). For example, the Betty Ford Institute (2007) forwarded a definition of substance use recovery based on a consensus panel of treatment, policy, advocacy, and research representatives. The definition framed recovery as 'a voluntarily maintained lifestyle characterized by sobriety, personal health, and citizenship' (p. 222). Laudet (2007) interviewed a large sample of 289 individuals in recovery from a substance use disorder. In defining recovery, most participants endorsed total abstinence as the core component. This finding, however, may be biased as past-month abstinence was included in the eligibility criteria. The sample also indicated that recovery went beyond just abstinence to encompass the realization of a fulfilling new life, continued personal growth, and reclaiming a positive sense of identity (Laudet 2007). Conversely, very few gambling researchers have directly addressed this topic, with professional opinion forming the basis of the available literature (Blaszczynski 2005; Walker et al. 2006; Nower and Blaszczynski 2008). The perspectives of individuals with lived experience of a gambling disorder in these studies has been overlooked.

It has been argued that greater attention to the subjective experience of addictive behaviors and recovery is essential to develop a more detailed psychological understanding of these phenomena (Larkin and Griffiths 2002). Qualitative studies are needed to address this gap as they can provide the level of detail required to analyze complex human processes (Smith 2015).

Few qualitative studies have addressed the topic of recovery in gambling disorder (McGowan 2003; Nixon and Solowoniuk 2006; Reith and Dobbie 2012; Nuske and Hing 2013). These studies apply narrative analysis to explore the trajectories of a gambling disorder in this population. The themes identified in previous qualitative studies are presented as temporal stages ranging from acute experiences of the disorder (e.g., denial, self-loathing, and despair) to transitions into health (e.g., [re-]discovery of social roles and positive self-esteem), including several stages in-between. The findings correspond with Prochaska and DiClemente's (1984) Transtheoretical (Stages of Change) Model that describes five stages of health behavior change (i.e. pre-contemplation, contemplation, preparation, action, and maintenance) (for an overview of the model visit https://web.uri.edu/cprc/detailed-overview/). Despite their intuitive appeal and widespread application, however, stage models have been the focus of substantial criticisms. These are founded on arguments that stage models oversimplify complex nonlinear change processes by imposing artificial categories that lack empirical validation (Brewer 1994; Bunton et al. 2000; Sutton 2001; Littell and Girvin 2002; West 2005).

A recent qualitative study explored the processes that led gamblers from recognition of the problem to corrective action and management without applying a stages model. Vasiliadis and Thomas (2018) interviewed 32 individuals who had attempted recovery from a gambling disorder without formal help and identified two key recovery pathways. The first pathway was

externally directed, where the problem was identified and managed by others with a goal to avoid negative consequences. In the second self-directed pathway, the problem is recognized by the individual, who initiates and manages their own recovery, with the goal to achieve a new prosocial personal narrative. In terms of recovery, current qualitative gambling studies may have utility in mapping shared experiences and processes of recovering but are of limited value with respect to the operationalization of recovery as a measurable outcome.

Researchers have underscored the need for a more nuanced view of gambling that considers key structural differences between games, attendant risk of harm, and unique profiles and experiences of participating gamblers (Sharpe 2002; Petry 2003; Lévesque et al. 2018). Qualitative research has found that recovering gamblers can distinguish between more and less harmful types of gambling (Anderson et al. 2009). While some gamblers in Anderson et al. (2009) reported difficulties controlling their behavior on any type of gambling, others were more discriminating as they were either not interested in certain gambling types or could engage in these problem-free. These qualitative accounts correspond with other research identifying Electronic Gaming Machines (EGMs) as particularly hazardous. Compared to other gambling types, large population studies have associated EGMs with higher levels of gambling-related harm (MacLaren 2016; Binde et al. 2017). This has mostly been attributed to structural characteristics of EGMs including the capacity for players to gamble in a rapid, continuous, and repetitive manner (Breen and Zimmerman 2002). In several jurisdictions, EGMs are reported as the preferred gambling type among most people accessing formal help services (Griffiths 2010; Delfabbro 2011). The overrepresentation of EGM gamblers in help service settings is reflected in the gambling preferences and experiences of the current sample.

Different types of gambling activities, complex profiles of disordered gamblers, and various theoretical models of gambling disorder have diverse implications for treatment service delivery. Consequently, there are multiple interpretations of a positive treatment outcome. The complex nature of gambling disorder thus renders it difficult to delineate clear uniform indices of recovery that are compatible to various treatment models and subtypes of disordered gamblers. While challenging, there is need in the gambling field for a thorough investigation and clarification of common formative elements that define recovery as an outcome. To date, there has been overreliance on professional opinion to determine what criteria distinguishes between disordered and recovered. This study is the first to seek input on this specific issue from gambling help service users. This population has detailed first-hand knowledge of their individual health statuses, future goals, and available resources. Of the available qualitative literature including service user populations, focus has been on disorder trajectories and recovery processes rather than outcomes. The current study used qualitative methods to investigate how service users define recovery in gambling disorder. Accordingly, the primary aim was to identify the dimensions and indicators that service users perceive as important to being recovered. A secondary aim was to ascertain the extent to which a service user conceptualization of recovery corresponded or deviated from existing conceptualizations of recovery in the gambling treatment literature. This information is critical to the development of an integrated definition of recovery, which has implications for the valid measurement of gambling treatment outcomes, approaches to gambling treatment, and relevant mental health policy.

Methods

Participants

Purposive sampling was used to recruit participants with current or past-experience seeking formal intervention for gambling problems. Twenty participants were recruited from a multi-venue self-exclusion program for gambling problems. They had previously consented to be contacted for future research opportunities. In addition to the aims of current study, these participants were also selected to discuss topics relating to their experience of the self-exclusion program. These findings will be reported elsewhere. To ensure representation of perspectives from another prominent gambling intervention, an additional 12 participants were recruited from gambling counseling services with assistance from the treating therapist or clinic intake officer. Of the self-exclusion-recruited participants, 15 had also sought counseling for gambling problems (75.0%); and of participants recruited from counseling services, five had previously self-excluded (41.7%). Nineteen of the total sample were still engaged with their respective treatments (59.4%), whereas 13 had completed or were no longer participating in the recruitment source treatment.

The final sample of 32 participants consisted mostly of men ($n = 20$; 62.5%); ages ranged between 21 and 60 years old ($M = 43.59$; $SD = 11.51$). Female participants were on average 11.05 years significantly older than male participants ($t[30] = -2.93$, $p = .006$). Participants were mostly Caucasian ($n = 27$; 84.4%), single ($n = 24$; 75.0%), and did not live with children ($n = 23$; 71.9%). Nine participants were educated at a high school level (28.1%), 16 held a college certificate or diploma (50.0%), and seven had university qualifications (21.9%). Half of the sample were employed full-time ($n = 16$), and slightly less than half had a personal annual income of AU$60,000 or greater ($n = 15$). Most of the sample met psychometric criteria for a gambling problem as measured by the Problem Gambling Severity Index (PGSI; Ferris and Wynne 2001) ($n = 28$; 87.5%). Thus far, in this paper, the term ‘gambling disorder’ has been

used purposely to coincide with the most recent clinical nomenclature (APA 2013; Yakovenko and Hodgins 2016; Pickering et al. 2018; Hunt and Blaszczynski 2019). The term 'problem gambling', however, will be used specifically to reference study participants in order to be consistent with PGSI classifications. Accordingly, the remaining participants were classified as moderate-risk ($n = 2$; 6.3%) and non-problem gamblers ($n = 2$; 6.3%). Most participants had sought help for problems primarily with electronic gaming machines (EGMs) ($n = 30$; 93.8%). One participant experienced problems mostly related to horse and greyhound wagering, and another with sports betting.

Process

Twenty-five face-to-face individual interviews were conducted, while participants from rural and remote locations had interviews conducted via telephone ($n = 6$) or Internet video call ($n = 1$). The interviews were conducted between April 2016 and June 2017. After obtaining consent, participants were administered a brief questionnaire. For phone and Skype interviewees, this was completed and returned to the lead author prior to the interview. Semi-structured, mostly face-to-face interviews were used for data collection as they are well-suited for discussing sensitive or complex topics; they provide flexibility to explore emergent themes; and facilitate synchronous communication including nonverbal cues (Opdenakker 2006; Saks and Allsop 2013). Semi-structured interviews took 43.91 ($SD = 17.60$) minutes to complete on average. They were audio-recorded, and transcribed verbatim for qualitative analyses. The investigator took field notes during the interviews to detail the relevant contextual information and highlight key points from participants' responses, which included some critical reflection. Participants were provided with a retail gift card to compensate them for their time.

Measures

Participants completed a brief questionnaire that consisted of two sections: demographic details, and the Problem Gambling Severity Index (PGSI; Ferris and Wynne 2001). This nine-item self-report questionnaire asks about gambling symptoms over a twelve-month period; it has previously demonstrated good construct validity, internal consistency and test-retest reliability (Ferris and Wynne 2001; Wynne 2003; Mcmillen and Wenzel 2006). Studies have reported that the PGSI demonstrates high diagnostic accuracy against clinical interviews based on the Diagnostic and Statistical Manual of Mental Disorders (Wynne 2003; Dellis et al. 2014; Lopez-Gonzalez et al. 2018). PGSI scores range between 0 and 27; scoring categories include non-problem (0), low-risk (1–2), moderate-risk (3–7), and problem gambler (≥8). The semi-structured interviews included five open-ended questions asking participants (1) to define recovery in their own words; (2) describe if and how recovery impacts different areas of life; (3) describe the role of abstinence; (4) distinguish between processes of recovery and being recovered; and (5) to identify barriers and supports to recovery from a gambling disorder. Probing questions were asked to expand on key points raised or to clarify unclear responses (Berg 2004). Participants were encouraged to draw on their experiences to formulate responses; it was further requested that they advance opinion to directly inform current knowledge.

Data analysis

Statistical analyses were completed for the demographic information and PGSI scores using SPSS version 24 (IBM Corp. 2016). In accordance with the study aims, an inductive analytic approach supported the formulation of a service user model of recovery, which was based on participants' first-hand experiences. Thematic analyses were conducted on interview transcriptions using NVivo qualitative data analysis Software version 11 (QSR International Pty Ltd. 2015), following the structured guidelines provided by Braun and Clarke (2006). In phase

one, the first and second authors closely read the full dataset to support content familiarity and form initial patterns of meaning. They used the NVivo annotation feature to record initial general comments on the data and highlight interesting quotes. The field notes were used to verify content of the interview transcriptions. In phase two, the first and second authors systematically and independently applied descriptive codes to the data then subsequently convened to form a consistent synthesized set of codes. Interpretational credibility was enhanced with the involvement of two independent coders, which enabled investigator triangulation (Nowell et al. 2017). The codes were created in NVivo by assigning relevant sections of the transcript data to specified 'nodes'. The coding process was data-driven and inclusive rather than focusing on a specific theoretical or analytic area. In phase three, the authors jointly organized, rearranged and subsumed the descriptive codes to form a set of interpretive themes and subthemes. This process was performed manually by writing down coding labels onto separate pieces of paper. In phase four, the identified themes were transferred back into NVivo using parent and child nodes to distinguish between themes and subthemes. These were further refined by making iterative comparisons between and within themes and cross-referencing these to the original data set to ensure its full variation of meaning was captured. For phase five, working theme titles and specifications were initially developed as the themes were manually formed, then refined further in NVivo. The final refinements are shown in a thematic map constructed using open source Visual Understanding Environment software (VUE v3.3.0; Tufts University 2015) (see Figure 1). In phase six, illustrative quotes were selected from the data to support the analytic narrative. For context, quotes were supplemented with non-identifying information about participants' age, sex, and PGSI scores.

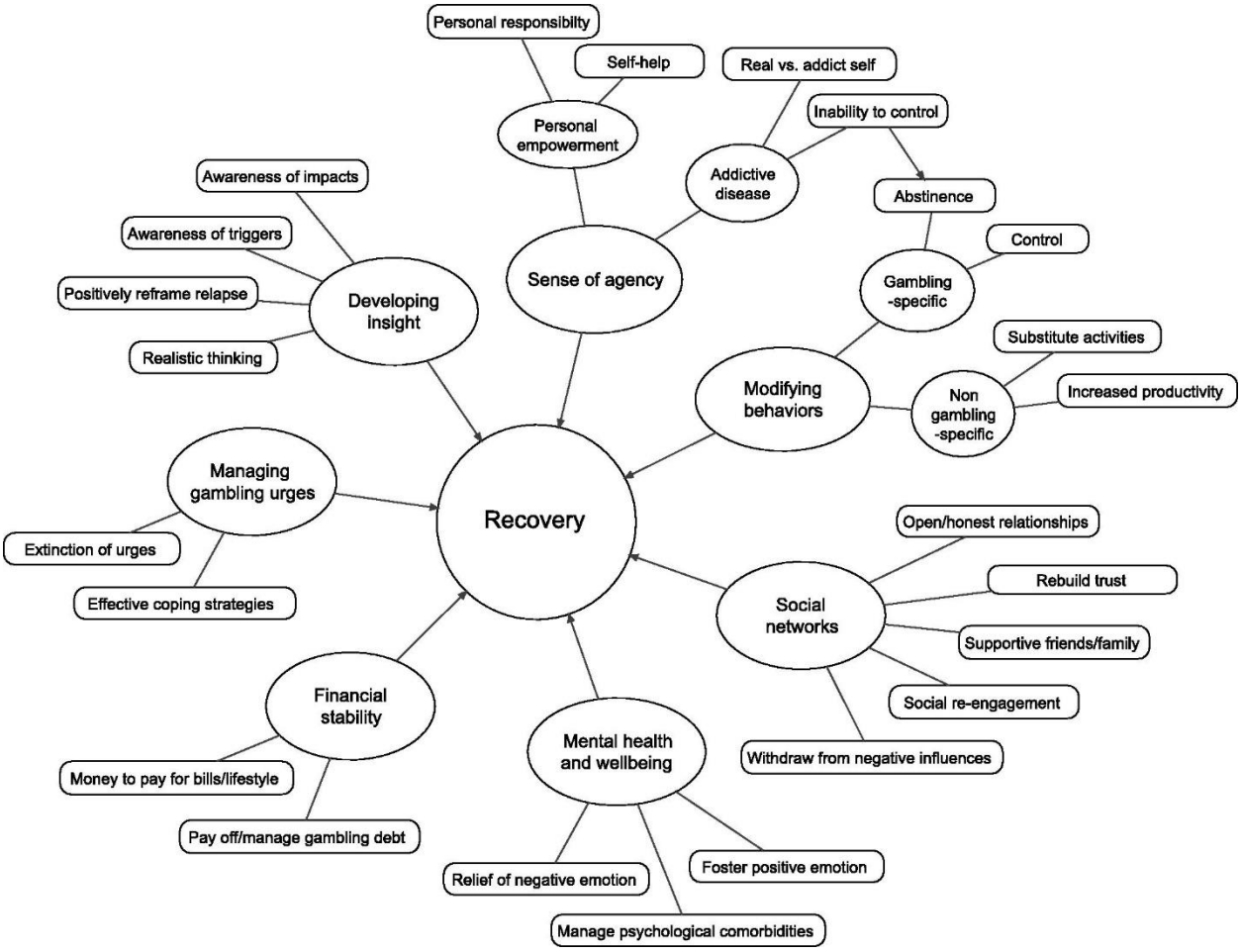

Figure 1. Thematic map of a service user-defined model of recovery in gambling disorder.

Results

Recovery was described by participants as a difficult, sometimes painful process, requiring considerable personal resources and commitment. At the same time, this process was highly rewarding and provided opportunity for personal development and growth. Most participants expressed a general belief that recovery was ongoing and included cycles of progress and relapse. Although some suggested that recovery may have an endpoint, these responses can be attributed to hope rather than experience: 'I'd hope that somewhere along, later on, that I would have no urges whatsoever and that I would be fully recovered.' (Male, 21 years, PGSI 20). Most of all, participants were reluctant to specify a timeframe for full recovery; some believed their

recovery will continue to require maintenance 'many years down the track' to prevent relapse. In terms of the composition of recovery, the analysis yielded a range of themes, suggesting the need for a holistic multidimensional approach. Seven key themes of recovery were identified in the analysis: (1) insight; (2) sense of agency; (3) modified behavior; (4) gambling urge management; (5) general mental health and wellbeing; (6) social networks; and (7) financial stability.

Insight

Developing deeper understanding about the nature of one's gambling problem was identified as a critical aspect of personal recovery. Participants stated the need to acknowledge the existence of a problem as a requisite of recovery; this was achieved through inspection and critical evaluation of thinking and behaviors: 'The first step in any problem or issue is acknowledging that you have that problem or issue.' (Male, 35 years, PGSI 8). Such reflection extended beyond the self to also focus on participants' effect on their environment, including negative consequences of their gambling on family and friends:

> I appreciate them [my friends] more. When I was in the depths of my addiction, I think I ignored a lot of people, and now I am starting to socialize with them I realize the damage that I did over the years. (Female, 56 years, PGSI 15).

Self-reflection was perceived as important throughout the full recovery process. To maintain improvements, participants mentally compared their former (problem) to current (improved) self. Perceived recovery progress and fear of reverting to their former self, motivated participants to continually improve.

Insight also comprised an ability to recognize personal triggers. These varied between participants and can be categorized as psychological or environmental. For example, several participants gambled in response to emotional events including depression, anxiety, stress and

frustration: ‘I go through rollercoasters of emotional problems and that tends to lead me back down the wrong path.’ (Female, 33 years, PGSI 20). Psychological triggers could also relate to environmental stressors such as problems at work. Environmental triggers were primarily related to the ubiquity of gambling opportunities in daily life: ‘I walk the streets of Sydney and it’s probably easier to find a poker machine than it is to find a liter of milk.’ (Male, 52 years, PGSI 16). Recognition of personal triggers allowed participants to gain deeper insight into the processes that underlie their gambling problem. Such knowledge helped some participants to avoid high risk situations. The ability to resist temptation and manage urges when they arose was the key challenge for recovering gamblers.

All participants expressed some feeling of vulnerability to relapse, and for many this threat was a constant source of anxiety: ‘I think there’ll always be that fear.’ (Female, 60 years, PGSI 17). The difficulty of maintaining abstinence long-term affected some participants’ motivation to recover: ‘I had a feeling that I would probably relapse… Let’s have a relapse pokie party!’ (Male, 35 years, PGSI 8). On the contrary, understanding and accepting this likelihood can significantly improve motivation and commitment to recovery. Some participants described re-interpreting relapse as a manageable setback and/or a normal part of the recovery process, rather than a personal terminal failure. For example, one male participant (26 years, PGSI 20) stated:

> You’ll have your weak days and strong days, but what you have to remember about your weak days is you’ll come through it. And even if you do lapse, it’s hard to come to terms with, but don’t lose faith.

Participants identified misconceptions and irrational thinking as common internal processes that played a fundamental role in their gambling problems. Specific types of erroneous

cognitions included: misunderstanding the likelihood of significant payoffs (particularly for poker machines), a bias in memory for wins over losses, and a tendency to think entirely short-term particularly when evaluating one's financial position:

> One of the ironies of being a gambler of my type is you feel as wealthy as how fat your wallet was. I could be hundreds of grand in debt, and I've got two grand and I think, 'Wow, I've got two grand! I can afford this.' But you don't…it's not rational, it's not logical. (Male, 47 years, PGSI 24).

Challenging these thoughts through formal counseling was seen as an effective way of correcting mistaken beliefs:

> I had some misconceived ideas… when I actually went through the course, [I] realized the way I was thinking about it, was totally the wrong way to go about [it]… we [counselor and participant] addressed some issues and certain things that I was accepting as basic truths. It really sort of just dispelled it, it was like a web that I was trapped in. (Female, 59 years, PGSI 0).

Sense of agency

Personal empowerment

Most participants characterized themselves as active agents in relation to personal decisions concerning gambling and their recovery. One important aspect of recovery, as described by a number of participants, was to 'own' their problem. Taking personal responsibility for excessive gambling led to greater self-efficacy, specifically in terms of making positive changes:

> Actually owning it… you can't really blame anyone else… for what I am doing myself. I am the one putting money through these machines… So, not being in

> denial, that yes, I do have a problem and, you know, I am seeking the help. (Male, 48 years, PGSI 19).

Part of feeling empowered for some participants was to engage in self-help activities. Specifically, actively seeking relevant information led to more informed decisions that supported recovery: 'So that was where educating myself and learning… gave me knowledge, and the ability to empower myself… this allows me to think about things in a different way and acquire the tools to overcome this.' (Male, 36 years, PGSI 0).

Addictive disease

The perspective of individual responsibility, however, was not shared by all participants, as a subgroup drew heavily from an 'addictive disease' model when describing recovery from gambling problems. The views about gambling as an addiction appeared to be related to experience with Gamblers Anonymous (GA) support groups. These participants illustrated this perspective by making comparisons between gambling and substance addictions. They believed they had a genetic predisposition to addictive behavior, and described an inability to exercise self-control with respect to gambling:

> I have alcoholics in the family, and I believe that you can be genetically predisposed to addiction. It's a personality trait because some people can go into a gambling venue and put $20 in and walk out. Whereas I can't. (Female, 56 years, PGSI 15).

These beliefs were associated with the separation of actual-self from the addict-self: 'There is me and there is this little addiction demon that lives inside [me].' (Male, 43 years, PGSI 18). All participants in this subgroup firmly believed in abstinence as the only way to achieve recovery.

Modified behavior

Gambling-specific behavior

Significantly reducing or eliminating all gambling involvement was viewed by participants as the primary treatment goal and therefore the core feature of their recovery. Participants viewed their excessive gambling and related behavior as incongruous with personal morals or standards. Conflict between the actual-self and desired-self caused considerable psychological distress. Most endorsed total abstinence from gambling as vital to recovery: 'It's like a first drink to an alcoholic. You may feel you are in control…[but] with an opportunity to gamble you'd be back to where you started from.' (Male, 37 years, PGSI 25). Others acknowledged that complete abstinence may not be necessary for everyone and that limited social gambling may be a valid goal, particularly for those with less severe problems. However, the majority rejected controlled gambling for their own circumstances. Some participants felt that it was only necessary to abstain from the forms of gambling that caused them problems. For example, one male participant (47 years, PGSI 24) said: 'I firmly believe my addiction is with poker machines…the other ones [types of gambling] have not had any impact in my life. I've got an off-switch with all those, [but] I've got no off-switch with poker machines.'

Non-gambling-specific behavior

Participants described a sense of loss once their problematic gambling had been addressed, as it had previously occupied a significant amount of time in their daily lives and had satisfied certain emotional needs. For example, boredom was cited as a common reason for gambling. Thus, substituting gambling with meaningful activities was supported as an adaptive method to cope with boredom: 'What helped me was Oztag [a recreational Australian sport]… I went into that. I made a new path and I'm trying to get rid of that [gambling] one.' (Male, 26

years, PGSI 20). This type of behavioral change required participants to reevaluate what was important in their lives, to re-discover valued pre-gambling interests, or to discover new interests.

For some participants, an indicator of recovery was improved job performance. They felt more motivated and had more attentional resource and time to dedicate to work, which had a direct and positive effect on productivity: 'I never used to like working back, and now I have a lot more time. I have no problem doing overtime.' (Male, 21 years, PGSI 20).

Managing gambling urges

Almost all participants highlighted that overcoming urges or cravings to gamble was a vital part of recovery. The onset of urges was often in response to triggers as described above but could also occur without clear cause. Absolute extinction of these was seen as optimal, however, several considered this an unachievable goal. Accordingly, these participants perceived the successful management of urges as sufficient: 'The urges are still going to be there no matter what and it's just I'm conscious of it and managing it.' (Male, 37 years, PGSI 11). Participants also recognized the difficulty of resisting urges: 'With time, those urges slowly drop off…but you need a whole lot of strength to get over your urges and to reach out.' (Male, 26 years, PGSI 20). Counseling was viewed as important in developing proactive resistance strategies, however, they could also be discovered individually. These included various practices such as mindfulness meditation, yoga and exercise, attending support groups or sharing feelings with friends/family, rehearsing principals learned in therapy, and consciously shifting attention onto different activities. Transferring techniques from the counselor's office to a real-world setting posed a challenge: 'You can sit there, I talk and the counselor talks, and then you go home, go past a pub and get an urge. It all goes out the window.' (Male, 26 years, PGSI 20).

General mental health and wellbeing

All participants underscored good mental health as an important feature of recovery. This involved addressing preexisting sources of psychological distress and managing comorbid psychiatric conditions that may contribute to participants' problem gambling:

I'm quite an anxious person you see, although I probably dealt with my anxiety that way [by gambling], but now I have to sit with it and find other ways to deal with my anxiety… more adaptive ways as opposed to maladaptive ways. (Female, 56 years, PGSI 15).

Strategies used to regulate negative emotions paralleled those described above to manage gambling urges. A separate aspect of mental health was relief from the psychological distress that occurred as a direct consequence of participants' problem gambling (i.e. sadness, guilt, stress and irritability):

> I think it's calming and not as stressful… it's like a release as in - I don't have all that fog in my head… So, I think [my] headspace is a lot freer… I don't have any guilt because when you gamble you feel guilty… it's one less burden in my life that I have to carry around. (Male, 36 years, PGSI 0).

Several participants described feelings of embarrassment or shame due to perceived stigma associated with problem gamblers. To form a 'healthy opinion' of oneself, was therefore, important to recovery. Accordingly, fostering positive mental states was emphasized in addition to managing distress. These mainly consisted of building self-esteem and hope: 'The thought of a brighter future is absolutely motivating because I know that my current situation financially, mentally, just my whole demeanor is so different.' (Male, 50 years, PGSI 7). Participants' psychological wellbeing may also be linked to establishing a meaningful life outside of

gambling: ‘If you’re happy and you’re busy I guess you don’t have that need [to gamble].’ (Male, 31 years, PGSI 10).

Social networks

Recovery required participants to ‘come clean’ (i.e. be open and honest) with those they had lied to about their gambling and related behaviors, and to request and consent to support from family and friends: ‘You need the encouragement, you need support from family, from friends or whoever it might be that knows your problem.’ (Female, 28 years, PGSI 18). Although necessary for recovery, participants found the process challenging as they needed to overcome shame, rebuild trust, and help family and friends to understand their situation. However, relationships were ultimately made stronger throughout this process, thus reinforcing networks of support. Participants described a state of social disconnect that resulted from a gambling problem, therefore, recovery constituted a general (re-)engagement with various social roles and activities. For one participant, this meant being able to better meet family responsibilities: ‘It actually makes you stop and think, what is actually important? She’s [partner] got two kids who love me, so do I want to shape these kid’s lives? Or do I want to bet on horses?’ (Male, 46 years, PGSI 23). Several other participants expressed the desire to ‘give back’ to their community, especially in helping other problem gamblers. Certain relationships, however, were detrimental to recovery, where social groups themselves gambled regularly. In these cases, participants suggested that the best action may be to distance themselves from these relationships, or to insist on socializing in non-gambling environments.

Financial stability

All participants highlighted improvements of their financial situation as a practical outcome of recovery. As money was no longer spent gambling, they described their sense of

relief related to a greater capacity to pay bills and rent, purchase essential items including groceries, whilst having discretionary money left-over to spend on meaningful indulgences (e.g. gifts for others):

> This month, for the first time, I actually bought presents for my grandkids… Because I'm not gambling now… I try to help my son because he is studying [at] Uni. I spend a little bit of money on him [to] make him happy. (Female, 52 years, PGSI 8).

Participants were also more successful in managing or able to completely payoff debt to various creditors (i.e. banks, nil interest loan providers ['NILS'], private payday loan companies, and family and friends). The easing of financial pressure also carried psychological benefits: 'In the past, it would have been a struggle to find the money. So, my whole demeanor has changed. It's just a little weight off your shoulder… you get your confidence back.' (Male, 50 years, PGSI 7).

Discussion

The purpose of this qualitative study was to explore conceptualizations of recovery from the perspectives of individuals with current or former involvement in formal help services for a gambling problem. The results help to expand the current understanding of the construct of recovery which has previously been largely based on professional opinion, and to inform an integrated definition of recovery including goals valued by those with lived experience of the disorder. Based on the analysis of 32 interviews, relief from, or successful regulation of gambling-specific symptoms, including urges and erroneous cognitions, and the elimination of problematic gambling behaviors were identified as core features of recovery. Emphasis on these features was unexpected in this sample as they align with a medical model of recovery as

opposed to the service user model (Mountain and Shah 2008). The latter model, however, was well-represented in participants' belief that recovery extended beyond gambling-specific variables to encompass a range of improvements across multiple life domains. These include indices of enlightenment and personal growth, empowerment and individual responsibility, trusting and supportive relationships, (re)discovery of meaning through engagement in rewarding activities, psychological health, and financial stability. Some aspects of recovery are distinctly associated with a gambling disorder (e.g. debt management), whereas others are universally described by service users for various mental disorders and addictions (e.g., accepting the severity of a problem) (Piat et al. 2009; Katsakou et al. 2012; Dawson et al. 2014b).

Comparisons between recovery themes emerging from the current study and the categories identified in the systematic review of Pickering et al. (2018) show several areas of overlap. Uniform conceptualizations were observed between gambling researchers and service users with respect to gambling-specific indices of recovery, in addition to more general indices of mental health and wellbeing. The inclusion of outcomes relating to quality of life in recent treatment studies may be evidence that gambling researchers are beginning to adopt a more holistic perspective of recovery. It is possible that work in other mental health fields including substance use disorders, to broaden the concept of recovery based on the perspectives of multiple stakeholders, has had a flow-on effect in the gambling field. However, treatment studies that specify operational criteria for recovery do so in terms of gambling behavior and/or diagnostic thresholds (e.g., Lloret et al. 2014; Jiménez-Murcia et al. 2015; McIntosh et al. 2016), suggesting that the narrower medical model of recovery remains influential in this context.

In addition to reported similarities, study findings indicate that important aspects of recovery exist in gambling disorders which are underrepresented in the treatment literature. For

example, the current theme of insight is overlooked in treatment studies or otherwise is partially assessed with measures of erroneous gambling cognitions (e.g. Fortune and Goodie 2012).

Greater representation of insight is evident in the reviewed qualitative studies, where acceptance of a disorder and self-reflection purportedly predict the transition between denial and change contemplation (McGowan 2003; Nixon and Solowoniuk 2006; Reith and Dobbie 2012; Nuske and Hing 2013). These studies, however, limit the role of insight to an early 'stage' of recovery. Results from this study suggest that these dimensions are continuous features of recovery and represent the primary source of personal growth. Sense of agency is another theme that is not considered in the treatment literature. The subthemes personal empowerment and addictive disease share similar characteristics to the respective recovery pathways of self-directed and externally directed recovery (Vasiliadis and Thomas 2018), particularly in terms of the participants' locus of control. Vasiliadis and Thomas (2018), however, reported that those in self-directed recovery tended to opt against formal help services. This is contradictory to the presence of a similar theme in the current sample, all of whom had sought help from counseling or self-exclusion. The specific type of help may be more the issue. The addictive disease theme tended to coincide with GA membership. Counseling may provide opportunity to teach gamblers skills that empower them to make good decision and manage their own recovery. The emergence of two disparate subthemes under sense of agency, suggests that some flexibility in terms of recovery goals and outcomes may be required.

Total abstinence is typically viewed as a pre-requisite of recovery in the substance addiction literature, both from a medical and service user perspective (McLellan et al. 2007; Laudet 2007; The Betty Ford Institute Consensus 2007). Similarly, most study participants viewed abstinence as essential (at least for them personally). The small subgroup of participants

who attended GA meetings were especially fervent in their belief that it was impossible to achieve recovery without total abstinence. The same ideology from members of these groups has been reported in previous qualitative studies (McGowan 2003; Reith and Dobbie 2012). A common characteristic among GA involved participants was that they embraced addictiveness as an immutable feature of their personality. This observation is not surprising given that GA organizations endorse a disease model of gambling disorder – that it is a progressive illness that can be arrested but not cured (Gamblers Anonymous 1984).

Challenging the brain disease model, addiction researchers have asserted that while people cannot simply give up a mental or physical illness such as Alzheimer's or diabetes, they can and do decide to give up various addictive behaviors (Davies 2018). Further, Heim (2014) argues that the brain disease mode is one-dimensional; it fails to recognize other important social, psychological, cultural, political, legal, and environmental determinants; and it undermines the role of people's circumstances and individual choice. Consistent with this perspective, most participants indicated that despite strong urges to gamble, they were ultimately responsible for gambling decisions. Additionally, several participants recognized the feasibility of controlled gambling for certain subtypes of disordered gambler, even though most in the sample preferred a total abstinence approach. The subtypes referred to included gamblers with problems that are less severe or those still able to engage in certain types of gambling problem-free. The tendency for some recovering gamblers to specifically target types of gambling that are personally problematic or especially risky is consistent with findings from Anderson et al. (2009). Evidence suggests that gamblers with less severe problems are more likely to prefer and successfully implement controlled gambling as a treatment goal, compared to higher severity disordered gamblers (Ladouceur et al. 2009; Stea et al. 2015). Individuals with a gambling

disorder that is less severe are also more likely to adopt informal pathways to recovery and thus may not be represented in the current sample (Hodgins and el-Guebaly 2000; Toneatto et al. 2008).

Although the purpose of this study was to identify dimensions and indices reflecting recovery as an outcome, the interviews highlighted the difficulty of disentangling these from descriptions of the recovery process. Part of the confusion in operationalizing recovery from psychological disorders has previously been attributed to an inability to make this distinction clear (Liberman et al. 2002; Resnick et al. 2005). In this study, participants' characterization of recovery processes provided useful context for understanding outcomes with direct implication to how it should be measured. Paralleling prior qualitative studies, there was general agreement among the sample that recovery was a continuous and nonlinear process, marked by periods of improvement and decline. This suggests that recovery in gambling disorders is not a stable outcome and requires long-term maintenance. In the treatment literature, however, recovery is often treated as a categorical event, measured in the short-term, and a single relapse is characterized as 'treatment failure' (Echeburúa et al. 2001; Jiménez-Murcia et al. 2007; Lloret et al. 2014; Ramos-Grille et al. 2015). According to the relapse prevention model, Marlatt and Gordon (1985) suggest reinterpreting 'lapses' as learning experiences, thus allowing individuals to develop more effective coping methods in high risk situations.

Strengths, limitations, and future directions

This qualitative study is the first to explore opinions and perspectives of a service user population for gambling problems to expand understanding of how recovery should be defined as an outcome. For a qualitative research design, the sample size was relatively large ($N = 32$). Participants were recruited from different types of interventions for gambling problems and

represented various levels of recovery. The study, however, only included participants with involvement in a formal help service and almost exclusively for problems with EGMs. This sample is justifiable as the dimensions of recovery identified have direct clinical utility, for the type of gambling most associated with harm in the community. Nevertheless, the sample does not represent the considerable proportion of individuals recovering naturally or via self-help methods, nor those experiencing problems from other types of gambling (Petry 2003; Slutske et al. 2003; Hodgins and Peden 2005). All participants in this study were Australian and mostly Caucasian; therefore, they do not represent the perspectives of recovery held by people from different socio-cultural backgrounds. These factors, including the specific gambling environment, i.e. gambling availability and accessibility, relevant policy, and community attitudes towards gambling may influence conceptualizations of recovery. Exploring the impact of environmental factors on recovery is particularly important given that social disadvantage and concentration of EGM venues has been associated with greater vulnerability to gambling disorders (Doran and Young 2010; Barnes et al. 2013).

The findings serve as a useful platform to stimulate further investigation of recovery in the gambling field. The methodological design of this study allowed the identification of common themes perceived by participants as key recovery domains. Future studies should examine if the domains identified are stable across different subpopulations of disordered gamblers, or whether unique interpretations of recovery exist. It is possible that sample differences in terms of comorbidities, gambling severity, primary form of gambling, or socio-cultural context may influence how recovery is perceived. Competing schemas relating to the disease model of gambling disorder versus a model of personal responsibility and empowerment also warrant thorough examination; including correlations with different recovery goals (e.g.

abstinence or controlled gambling), unique characteristics of individuals who internalize each model, and expected outcomes of each subgroup.

Conclusion and implications

The results of this study challenge the medical model of recovery in gambling disorder by broadening its definitional parameters and encompassing multiple pertinent psychosocial dimensions. Nonetheless, traditional medical dimensions of recovery, including reduction of gambling-specific symptoms and behaviors, were underscored throughout the interviews. This suggests that medical and service user models of recovery may not be disparate or incompatible. An approach that seeks to operationalize unique service user-defined features of recovery and integrate these with established medical criteria may be beneficial in the gambling field (Resnick et al. 2005; Bellack 2006; Barber 2012). For clinical purposes, it is important that treatment interventions target variables that align with the individual goals of service users. These findings suggest a clinician's role extends beyond symptom management to psychoeducation and motivation enhancement, strengthening social networks, and building a satisfactory life for service users outside of gambling (e.g. Jackson et al. 2013). Where clinician expertise is limited, service users would benefit from integrated support services such as financial and legal counseling. Guidance can be sought from the substance addiction field which has well-established policies of recovery-oriented health care (Sheedy and Whitter 2013)

Conceptualizing gambling disorder recovery as continuous and nonlinear has implications for the design of optimal treatment and assessment protocols. From this perspective, post-treatment and short- to medium-term follow-up assessments alone (up to 12 months after treatment) are insufficient measures of recovery. It is expected that extending the standard follow-up duration to three or more years will improve the reporting accuracy of recovery

(Laudet 2007). Implementing routine monitoring during treatment and throughout the follow-up period may help support sustained recovery, as will linkages to mutual aid support groups and ongoing refresher sessions after treatment completion (McLellan et al. 2005; Scott et al. 2005). Research is needed in the gambling field to demonstrate the effectiveness of these long-term strategies in minimizing risk of relapse and facilitating recovery.

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Ethical statement

The University of Sydney Human Research Ethics Committee, University of Sydney, approved February 9, 2017, protocol number: 2017/007.

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