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Experiences of an Internet-based Pilot Treatment Program for Persons Experiencing Harm from Gambling: A Qualitative Study of Criminal Justice Clients and Professionals from Finland

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Abstract: Gambling related harm is common among clients in the criminal justice system but detecting it and accessing support services remains challenging. This exploratory study examines the experiences of eight community sanctioned clients who participated in the Finnish Gambling Stop program—a CBT-based Internet therapy—as well as three professionals who delivered the therapy. The study aimed to identify stressors related to gambling and crime, barriers to treatment, and experiences of receiving support within this program. Using content and thematic analyses, common themes emerged from the clients’ experiences, including the overpowering role of problem gambling as an escape from everyday challenges, severe financial difficulties, and barriers to treatment such as stigma, shame, and a lack of qualified support. The importance of a holistic and client-centered approach was highlighted in both the clients’ and professionals’ interviews. In summary, this study offers promising insights into Internet-based treatment for persons experiencing harm from gambling among criminal justice clients and emphasizes the need for further program development to support recovery, reduce recidivism, and facilitate reintegration into society.

Keywords: Internet-based Support, Criminal Behavior, Criminal Justice Clients, Problem Gambling.

Introduction

The prevalence of problem gambling (PG) within prison settings is higher than in a general population (Turner et al., 2009; May-Chahal et al. 2017, Turner et al., 2013) and is a growing concern, particularly due to its association with recidivism (Turner et al., 2009; Turner et al., 2013; Williams et al., 2005; April & Weinstock, 2018; Lloyd et al. 2014). The prevalence of gambling issues is typically measured using problem gambling indicators, which focus on individual excessive gambling behavior. Problem gambling emphasizes an inability to limit the money and time spent on gambling, leading to negative personal consequences. However, this term can perpetuate stigma by implying personal weakness or a lack of self-control. In contrast, gambling harm encompasses a broader range of negative impacts, affecting not just individuals but also their families, communities, and society. This harm includes financial strain, relationship breakdowns, and deteriorating mental and physical health. To reduce the stigma, the term “person experiencing harm from gambling” is being adopted to encourage less judgmental and more empathetic language (Hilbercht et al., 2020; Victorian Responsible Gambling Foundation, 2024).

Criminal behavior and convictions, gambling related or not, are more common among persons experiencing harm from gambling (Rudd & Thomas 2015, Adolphe et al., 2019). Gambling-related crime is relatively common among prisoners (Banks et al., 2020) and more prevalent among men compared to women (Stark et al., 2012; Hurwitz & Smithey 1998; Hing et al., 2014). Income-generating crime is most common among persons experiencing harm from gambling, where heavy debts and PG as a non-sharable personal problem escalate to become criminal activity (Campbell & Marshall, 2007; Banks et al., 2020; Rosenthal & Lesieur, 1996 Binde et al., 2022).

Research highlights the need to address this issue comprehensively to improve outcomes for incarcerated individuals (Tørdal et al., 2024). Earlier research has shown that correctional interventions have generally demonstrated that problem gambling treatment programs are effective at reducing recidivism rates (Bourgon & Armstrong, 2005). However, Turner et al. demonstrated that, for example, in the USA and Canada there were remarkably few programs set up to help people in the correctional system overcome a gambling disorder (Turner et al., 2017). Furthermore, the scarcity of correctional treatment programs available for persons experiencing gambling harm is further compounded by a significant dearth of evidence-based research that evaluates the effectiveness of the existing programs (Turner et al., 2017; Perrone et al. 2013). The treatment of problem gambling within prison environments remains a critical area demanding attention due to concerns about unrecognized gambling disorders (GD) among incarcerated individuals. PG and GD are often intertwined with comorbid conditions such as depression, substance use

disorders (SUDs), alcohol use disorder (AUD), and personality disorders (PDs) (Baranyi et al., 2022). The complexity of these issues is compounded by financial burdens and interpersonal relationship problems (Adolphe et al., 2019). Furthermore, the high prevalence of other addictions and mental health problems among prisoners experiencing problem gambling (see also Widinghoff et al., 2017) can lead to a situation where the treatment of these co-existing conditions is prioritized over addressing problem gambling itself (Banks et al., 2020; Rudd & Thomas, 2015). This highlights the urgent need for comprehensive treatment strategies that address both problem gambling and its associated disorders within the prison system.

Various studies have highlighted earlier the need for problem gambling treatment as a way to reduce offending rates, need for increase awareness in various services regarding problem gambling, for example in the workplace (Binde et al., 2016), and its link to criminal behavior and barriers to treatment including denial, stigma, and shame (May-Chahal et al. 2015; Turner et al., 2017; Smith et al., 2022; Binde et al., 2016). A study by Jindani et al. (2021) comprehensively highlights the main points regarding the treatment issues for problem gambling in the criminal justice system. They identified five themes regarding barriers to treatment in this context:

- 1) availability and accessibility: treatment programs are scarce;
- 2) lack of awareness: key figures in the justice system often do not recognize problem gambling as a concern;
- 3) institutional issues: security routines and lockdowns limit access to programs;
- 4) stigma and fear: resistance due to stigma and fear of repercussions hinders treatment and
- 5) implementation barriers: Establishing specialized gambling treatment courts poses challenges.

In addition, Jindani et al. (2021) identified themes related to gender differences and program implementation, specifically whether problem gambling treatment should be integrated with substance use programs. In this paper, we will focus primarily on the barriers to treatment.

Similar barriers have been identified partially in Finland recently, since the research on and treatment options for problem gambling among criminal justice clients have been scarce. A pilot study by Lind et al. (2019) indicated that approximately 16% of prisoners in two Finnish correctional facilities experienced problem gambling in the year prior to their sentence. The study also found that one-third of offenders who committed property, financial crimes, or robbery reported gambling problems. Male offenders were more likely to have a prior criminal record than female offenders, with nearly a quarter of those with previous convictions having a history of problem gambling. Female offenders with gambling problem were also more likely to have a prior sentence. About a quarter of participants expressed interest in receiving support for their gambling issues, preferring group support and one-on-one conversations with prison staff. Offenders charged with gambling-related crimes favored personal conversations, mixed group support, and guided online forums. Additionally, Castrén et al.

(2021) surveyed prison workers and found that 94.1% had encountered prisoners with gambling problems, and nearly half felt inadequately trained to address this issue effectively.

Given the growing recognition of the need for treatment among the incarcerated population, our objective was to explore the perceptions and experiences of prisoners (specifically those under community sanctions) who participated in the Gambling Stop-program, an Internet-based cognitive-behavioral therapy initiative. We sought to answer the following questions:

- a) What are the strain factors for the clients?
- b) What are the barriers to treatment that are specific to criminal justice clients? and
- c) What were their experiences with this treatment program?

Additionally, we interviewed professionals assisting clients in the program, asking them about their experiences of supporting clients during their recovery. The findings from this inquiry could prove useful for refining and advancing therapeutic strategies designed for individuals within carceral institutions.

METHOD

Setting and collaborator

The Gambling Stop- treatment program is part of the broader objectives of the RISERaPeli development project, which aims to detect and prevent gambling problems among individuals in Finland's criminal justice system and provide rehabilitation. Organized and implemented by the Life Without Crime Foundation (RETS), this treatment program aligns with the RISERaPeli project's mission to raise awareness of the challenges faced by persons experiencing harm from gambling and develop effective rehabilitation and peer support models.

Pilot treatment program

The Gambling Stop-program is an eight-week CBT-based Internet therapy program for problem gambling for criminal justice clients with at-risk or problem gambling. The program is adapted from the Finnish Peli Poikki (PP) program, an eight-week CBT-based internet therapy program for problem gambling (Carlbring & Smit 2008; Korvuo et al., 2023; Palomäki et al., 2022). The original program contents included psychoeducation and motivation for treatment; recognition of high-risk situations and triggers; identification of the social consequences of gambling for affected others; working on the identification of gambling-related erroneous thoughts using a framework of cognitive behavioural therapy; practicing CBT with homework; relapse prevention (see Supplementary file 1 for a more detailed description of 8 modules). The adaptations include: a) minor linguistic changes into plainer language; b) adjusting the gambling severity measure so that the NODS (National Opinion Research Center (NORC) Diagnostic Screen for Gambling

Problems NODS; Gerstein et al., 1999) measure was changed to the PGSI (Problem Gambling Severity Index; Ferris & Wynne, 2001) measure because of its shorter and lighter structure; and c) professionals at the RETS facility assisted clients throughout the program by providing practical guidance and support for their recovery in 60 minute phone calls per treatment module (pre-treatment assessment, 8 modules and post-treatment assessment). The duration of the current program is 28 hours.

The central approach in the Gambling Stop-program is CBT focusing on psychoeducation, identifying gambling-related erroneous thoughts and relapse prevention along with enhancement of motivation for change (see a detailed description of the program in Palomäki et al., 2022). Provisions are made to sustain recovery post-treatment, including practical guidelines for financial oversight and management to forestall relapse.

Supplementary file 1.**Themes and subthemes with excerpts from the data.**

Theme	Subtheme	Examples
Psychosocial context		
	Problem gambling and its role in life	<p><i>"I had no upheavals in my life. I had a good job, it was a nice job, I liked it. I liked being at work. I had hobbies, I was involved in [name of a specific hobby], so really, really, I had a good life, and I still do not know why I did it. [...] I considered telling [family and friends about gambling], but the fear and that sort of shame caused by gambling grew too big. So, the threshold for telling them became way too high. [...] I had no courage to tell anyone. And it was really, really tough. All the concealing, the last year, especially the last six months, when I also had all these self-destructive thoughts coming on really strongly." F55641 (note 1)</i></p> <p><i>"So it went against my own morals already when I had gambled all my savings, and I, who was a person with no loans whatsoever [before this], took all those shitty [payday] loans to the max. I can't describe the feeling because there was no feeling. I have been completely messed up. If you think about asking some crazy person, who stabbed his wife without any reason, why, when they just snapped, the exact same thing happened to me. I can't say anything." M2534_B</i></p> <p><i>"I still don't completely know if my crime was induced by gambling, more like, it [gambling] has provided an impulse to it, sort of like an escape-reaction. [...] It [gambling] has been like a booster for me like, actually, or how it goes is like, you gamble, you get anxious, you go drinking, you go mess around, things go to hell, you do crazy things, then the police come in to the picture, so it [gambling] is like the starting point, that caused it all, that's what gambling does." M2534_A</i></p> <p><i>"Well, I knew that I would get caught eventually, so I did not even try to hide them [the crimes] or plan them smartly or anything. Although I thought that I'd only commit frauds with relatively small sums, so they would be considered as minor frauds, so I would not be sentenced to prison. That much I planned. [...] And I thought that in this concourse nothing really matters, and I just kept on</i></p>

committing these frauds and the police cut it off by contacting banks and closing all my accounts so that it was no longer possible for me to have a bank account.” M2534_C

Financial strains

“I borrowed money, yeah, but I always paid it back. If I think like, on a monthly basis, the sums were not over a hundred euros. So I more like spent all my own money first and then borrowed money to get food. And like... It did not go to like, at this point, but later I had rights to my dad’s account... so I might have borrowed money from there and paid them back on the go.” F2534

“Gambling was the catalyst there [for the crime]. I needed money for gambling, so, else I didn’t really need extra money so badly that I would have engaged in anything criminal like this, before this I had absolutely no criminal background, I have a day job and all.” M2534_D

“Feeling bad, feeling bad. That was my thing [to cope with], some people kill themselves or cut themselves, when they get depressed or experience something awfully traumatic, but I destroyed my finances, I hurt myself emotionally in that extreme way.” M2534_B

Barriers to treatment

Stigma and shame

“I experienced that I’m constantly to blame, and that the attitudes towards me are, you know, bad. But attitudes like that...I feel like, in the healthcare clinic if I talked about my substance use, the attitude and the way people talk to me and stuff like that changes into something completely different, but that’s all I can expect. [...] I’ve had mental health treatment contact since I was 16 years of age, so there I’ve talked to psychiatric nurses, psychologists and psychiatrists, and to doctors too, about how gambling controls me way too much, and how it is a real problem, but never once has anyone intervened. I was never directed anywhere; I never got a phone number to call and the directions given to me were usually like ‘just don’t gamble’. So it [gambling problem] was never really acknowledged or recognized.” M2534_C

“Yeah so I’d like to blow my brains out, I thought of that quite often in the evenings. [...] I’m a gambling addict and my life control is all over the place, I said to them [Prison and Probation Service] I’d rather do time than you know, take this [gambling problem] anymore, my head is about to explode and like really I’m going to hang myself any minute now.” M2534_A

“The shame and the guilt are in me so deep, that I cannot even go there [the region where the crime took place] anymore. When I visited my daughter there before this sentence a couple of times, I did not leave my daughter’s place. I did not go shopping, nowhere, I could not go to public places. So, like, my life there is completely over.” F5564

*Lack of emotional
and qualified
support*

“So you got this person, who was more like a person with lived experience, who asks you how you are doing, who really understands, so you don’t have to go to talk to someone, who had only read about these things from books and who have no clue about real life.”

M2534_A

“It depends so much on your own motivation, but it was like... like when it was only phone-based [previous treatment], so they left you alone, there was no... But the motivation was the thing for me. I had none. I didn’t maybe want to admit to myself that I liked gambling too much.” M2544_D

“I didn’t have the courage to talk about this stuff [gambling problem and crime] to anyone. And it was really really straining, the concealing, last year or especially the last six months, where I already had these self-destructive thoughts strongly present.” F5564

Experiences
from the
treatment
program

*Building motivation
and trust*

"Many clients have a background of trying to seek help and trying to address the issue of gambling with a healthcare professional, and they have not received help, so when they eventually have someone to listen to them and to understand them. [...] And that you know, they [clients] are in a really vulnerable situation, when their gambling has progressed to such extent that it has led to crime, so in that dealing with this, by feeling that someone is recipient to them, accepting, listening and that the conversation is in a way equal, so that I understand it as a phenomenon, but at the same time also being conscious that our aim is not to make the client dependent on the professional or the relationship between us." PW3

"I liked the tasks in the modules, although I have had to complete literal tasks in school and all that, but I knew that I now have to really concentrate and really understand what I read and what I write and how I'm going to answer. But like yeah, if it would have been more formal with the worker, I'd say I wouldn't have much of motivation." F2534

*Client-centered
flexibility and
holistic approach*

"So yeah, it was like nice when the first phone call came from the program, and I get, like, casually, 'Hi, who are you?' Like, I had the opportunity to tell someone about myself and maybe why I'm a criminal justice client and all that—why I am in the program, what's the background, what happened—and it was so good to, you know, build like mutual trust right from the start." M2534_A

"[The time of the phone calls with the therapist] depended on which days I was able to do the program here [in incarceration], but usually I aimed to do it on Monday or Tuesday, on Tuesday I had usually completed it [the module], so when we had the call on Thursday, because for me Thursday was a day when I did not have any other program [in incarceration], so it was most fitting for me. So practically it went like the modules on Monday or Tuesday and the call on Thursday." F5564

“So, when I told them [other service] that my client had gambled all their money, and could not buy a bus ticket, so could you do something about it [...]. And there were thousands of euros transferred from the client’s account, so it did not really look like they needed discretionary basic social assistance, but when the service understood the reason [problem gambling], they could consider their situation on a whole other level.” PW1

*Psychoeducation
and practical tools:
gaining control*

“And somehow, like, it was really pivotal for me when I realized at some point in the program, like [...] I am not broken or that I am not to blame when I get these gambling-related thoughts, which I think are really disturbing, sort of like compulsive thoughts, that I have gotten rid of them. So, if I had such a thought in the morning, the rest of my day was like fighting against that thought, so I could not really think of anything but gambling, gambling, gambling. Only sleep helped. And when I learned how to manage them, I had learned different breathing techniques and calming down and stuff like that, so [project worker's name] guided me to apply them also to gambling-related thoughts. I got advice on how to catch the thought and stop by it, to think about what causes it and to remind myself of where it leads if I follow that impulse. So, it’s an awesome relief to realize that they are normal, they are part of this [gambling problem], these gambling-related thoughts, what I want to let go of and that it will last for a long time, however.” M2534_C

“For example, calculating incomes and expenses on paper, you get it like... because it was a really big surprise, when we - it was scheduled quite soon [in the program] - when we took my bank statements from one month and went through them, to see how much I had gambled and how much I had won. It was really concrete evidence of how you do not even realize how much you’ve staked in the games during a short period of time. That you can just repeat to yourself that I just played some tens of euros, and then you find out that it was actually a hundred.” F5564

*Dealing with
Relapses*

“And let's say this week, I was like, okay, I've got this interview coming, I'm kind of anxious, I have just gambled a little, I was like, okay, that's nothing, what I gambled. Then somehow, I did not realize what had activated in me, so I, goddammit, well, the other night I gambled, almost emptied my bank account at one point, won my money back and 300 euros plus. Yesterday I came back from work, like goddamn sat down to eat, but opened my laptop, which I usually do to read the news and stuff. At the same time, I do not know what happened, I suddenly went onto the online casino site and gambled 20 euros. I kept going until midnight last night, until my bank account was empty. [...] You know, during the program, I completely quit gambling. I was clean from gambling for like three months. When it's like fresh from the program, maybe I have like the determination to overcome it, and I am going straight to my family or mom, like yeah, I relapsed, I need to borrow money to survive this month.” M2534_A

“I had been without gambling already when I started Gambling Stop, and one time I relapsed and gambled. And like thinking back, it was good that I relapsed, because I did not get the excitement anymore.” F2435

“During the Gambling Stop program I have relapsed once, and it was quite eye-opening somehow, to realize that no, I did not get the excitement or the dopamine rush out of it... sure I have ADHD-medication now, so that can also affect things. [...] We were leaving on a trip on our fall holiday with my son, I had bought train tickets and all, but then I got all impulsive and went shopping with the autumn sales and all in the stores. Then I got like anxious over the fact that we have the trip ahead of us, although I just bought stuff for our home. Laundry detergent and stuff like that, it was not that I just shopped for fun. I bought a freezer full of food, so when we come back, we have food at home so we won't have to leave home to shop for groceries when we come back. But the anxiety of going for a trip, you know, we are going to be there for a week and the budget is in the minus already. That was the moment when I thought, well if I give it [gambling] a try. But as I was gambling, I started to wonder am I really going to mess this up, really: my income is based on basic social assistance and we have a really financially tight situation, so even if I won, how many months would it even affect things? And the game did not even give me anything, so I did not get the feeling that we'll be alright. Later I told [the worker] that without the

trip and staying at the holiday at home, I think that that wouldn't have happened, because it was nice to leave for the trip and nice to do things there, go eat out and stuff with friends, so that was it maybe." F2534

*Technical feasibility
and ergonomics*

"And we got feedback about things that do not work for our clients, like there are answer options about how much debt you have, and the maximum amount is ten times smaller than the average for this clientele. So, we got feedback that it really does not feel great to be that much over the maximum answering option." PW1

"Some of the questions are contradictory, so that they (feel like they) are built to provoke certain groups of people or certain thought patterns. For example, what has come up several times, is this compulsive (note 1) thinking and obligations, what is taken as a bad thing there [in the program modules]. The program was [originally] produced for normal people, who have maybe always demanded a little too much from themselves, like they have to clean up the house before friends come over, or when they have a deadline tomorrow they have to accomplish the task today and all that. [...] But the if a person with criminal tendencies, or let's say in such a situation whether he has even been caught, but some dude who has never felt that he has the obligation to do anything and instead have gone off the radar of the society and its' rules and all, and then in the program compulsion is represented as a bad thing, I think it's not a good angle." M2534_B

"Then we have some wordings, that can trigger people in our [prison and probation] context. [...] So, some of the questions for example related to obligations feel like they are written for people who are sort of achievement oriented in our culture, who feel a responsibility to do certain things, for kind of like overly conscientious types." PW3

"A client said that it's difficult to fill out the gambling calendar feature in one module, and did not quite get how it's supposed to be done, so we looked at it together. [...] And clients who are serving a prison sentence, for example, and have not had an opportunity to gamble for a long time, so they are like it's been nine months since I've been in my normal day-to-day life and they are struggling to remember or to visualize what their gambling behavior would be if they weren't in prison. So, I've told them to check their bank

statements to get a picture of their typical expenditure, so they would not think about their situation during the sentence, because that's no use in this as they are unable to gamble anyways, but to concentrate on their common day life outside. So, it's difficult to get a precise picture of the gambling situation from prison, compared to those who are free." PW2

Participants

Client- participants

The program clients (n=8) had been sentenced to community service, probationary liberty under supervision or were currently serving a prison sentence. Clients were referred to the program by their prison and probation service worker, who contacted a RETS project professional (associated with the Gambling Stop-program) after problem gambling was identified during discussions with the client, such as when creating their sentence plan. They completed the program either as part of their sentence or in their own time, alongside their sanctions. For those on probation or under community sanctions, there was an opportunity to use their own devices, while in other cases, the Prison and Probation Service of Finland provided access to a computer.

Inclusion criteria for participation in the Gambling Stop program were: a) that the participants had experienced harm from gambling; b) that they had motivation for treatment and change; c) sufficient technical, reading and writing skills; d) a sufficient level of proficiency in Finnish; e) access to the Internet, phone and email.

Six of the interviewed client participants were male and two were women, the most prevalent age-range being 25 to 34 years old. All the client participants had at least a vocational education, most of them higher. Most of them were in working life, while some were currently studying.

Professional- participants

The professionals working on the RETS program (n=3), had an applicable education in social services. The duties of the professionals working in the RETS project and “Gambling Stop - program” were: a) to provide rehabilitation, support and guidance; b) to help the clients to complete the program; c) to supervise the program completion; d) to keep a track of the hours used in the program; and e) to direct the clients to a peer-support group, if the participant was motivated to do so.

Data collection

The data was collected through semi-structured individual interviews. The data consisted of two different sets of interview data from: 1) client participants (n=8) who had completed the Gambling Stop-program, and 2) professional participants (n=3), who assisted the client participants to go through the program. By giving both the clients and the professionals a chance to express their experiences of the program implementation, we wanted to gain a multidimensional view of the program practices and implications.

The interviews took place from March to October 2023. With the help of the RETS-project professionals (professional participants), client participants were recruited. The professionals contacted the participants using their confidential contacts. We applied a saturation-like procedure, in

which the interviewer and other author met to assess the range of content gathered after the 4th and then 8th interviews. After the 8th interview, the data was considered to be sufficient enough to inform the intended analysis, and the call for participants was stopped. As described by Leon et al. (2011), pilot studies are exploratory in nature, and their proposed sample size is typically based on practical considerations such as patient flow and budgetary constraints.

The confidentiality and privacy aspects of the client participants (i.e., interviews either face-to-face or remote on the Teams platform), were arranged by the RETS professionals. For remote interviews with the client participants, only the consent form (or recorded consent) and the recorded interview audio file were given to the researcher. The audio files were then transcribed verbatim and anonymized by an external company. A non-disclosure agreement was made with the company.

Positionality

One author conducted one-on-one interviews with the participants. The interviewer, a sociologist, had not met any of the interviewees prior but had collaborated with the professionals. The interviewer believed that following the treatment protocol would benefit the participants and that integrating the practitioners' perspectives would enhance the understanding of their needs. While these views may have influenced data generation and interpretation, this deep understanding of the subject, along with acknowledging diverse viewpoints, likely created an atmosphere of comfort and confidence for the participants.

Ethics

Ethical approval for the study was given by the Ethical Committee of the Finnish Institute for Health and Welfare (THL/702/6.02.01/2023). Participation in the study was voluntary, and the participants were given information about the research beforehand. The participants gave their written or recorded consent to participate in the study and were able to interrupt the interview at any time. All identifiable information was anonymized, and only the research team had access to the data.

Data analysis

The data was analyzed using a reflexive thematic analysis (see Braun & Clarke, 2006, 2019), using Word and ATLAS.ti (version 9.0.16.0, ATLAS.ti Scientific Software Development GmbH, 2020). The analysis followed Braun and Clarke's process: familiarization with the data through repeated reading of transcripts, dense line-by-line coding to capture relevant meanings and grouping of initial codes into broader themes. In an iterative process themes were then reviewed, refined, defined, and named to ensure coherence and distinction. The process was primarily inductive, allowing themes to emerge naturally from the data, but was also influenced by the structure of the interview guide, which had been developed based on

previous literature. The analysis also incorporated influences from the thematic content analysis approach (e.g., Nowell et al., 2017), particularly in how pre-established themes from the interview structure were considered alongside emergent themes from the data. Themes and subthemes, along with excerpts from the data, are presented in Supplementary File 2.

To ensure privacy and prevent client identifiability, we refrain from reporting specific frequencies aside from gender, particularly given the small number of interviewees and the sensitive nature of the interview topics.

Supplementary file 2.**Contents of the Peli Poikki -program**

Module	1	<ul style="list-style-type: none"> • Basic knowledge about games of chance and types of games in general • Readings that promote participants' awareness of ambivalence of making change, enhance their motivation, and support their goal setting based on Motivational Interviewing (MI). • Homework • Phone call from a therapist using the MI approach (at least 30 min)
Psycho-education and motivation to treatment		
Module	2	<ul style="list-style-type: none"> • Identification of high-risk gambling situations • Identification of specific triggers of gambling • Readings of gambling-related automatic thoughts • Homework: to identify gambling-related thoughts, feelings, actions and consequences • Discussion on economic burdens, and homework to practice handling one's financial situation • Phone call from a therapist using the MI approach (at least 30 min)
Recognition of high-risk situations and triggers		
Module	3	<ul style="list-style-type: none"> • Participants' significant others were identified and interviewed (questionnaire) about the participant's gambling and inquired how gambling affects their lives. • Participants' goal setting • Homework • Phone call from a therapist using the MI approach (at least 30 min)
Identification of social consequences of gambling AOs/CSOs		
Modules	4–5	<ul style="list-style-type: none"> • Identification of gambling-related erroneous thoughts and their relation to problem gambling • Practice of acceptance of present situation, setting a focus on the future to support the goals that were set • Homework • Phone call from a therapist using the MI approach (at least 30 min)
Working on identification of gambling-related erroneous thoughts using a framework of cognitive behavioural therapy (CBT)		

Modules**6–7****Practicing CBT with homework**

- Practice of identification and new alternative ways to respond to high-risk situations
 - Practice of managing one's financial situation
 - Homework
 - Phone call from a therapist using the MI approach (at least 30 min)
-

Module**8****Relapse prevention**

- Relapse prevention plan completed with the help of a therapist
 - Assessment of current situation and, if needed, referrals to appropriate services
-

Note. Each module includes short written exercises. Homework was allocated after each module. Telephone support consisted of enhancement of participants' motivation with a non-judgmental MI-approach. Each week homework and progress were discussed; if homework were not completed, extra time for that was allocated, prior to moving on to the next module.

RESULTS

Psychosocial context: strain factors

Problem gambling and its role in life

Long-lasting problems with gambling were described in most client participant interviews. Along with problem gambling all the client participants had challenging situations with their relationships, which gambling had caused or intensified. The main crime for their current sentence was directly related to gambling for the majority of those who completed the program and over half had tried to win back losses caused by criminal activity (*PWI*).

Not all the client participants were convicted for a crime related to problem gambling. Rather, in these instances, gambling issues were concomitant with broader challenges, such as intense nightlife or engagement in social circles with criminal associations. Frequently, feelings of shame were prevalent, leading certain participants to conceal their struggles with problem gambling and even their involvement in criminal activities from their social networks, despite having well-established support systems in place.

Losing control over gambling and escaping everyday problems in the world of gambling was reported by the clients. All client participants maintained some distance while recounting their past. They described their behavior as nearly unrecognizable, as if they had taken on a different persona or been under the hypnotic influence of gambling, sometimes intensified by heavy substance use. Their memories appeared blurry and chaotic.

Additionally, the stress induced by problem gambling was occasionally managed through alcohol and substance use. Moreover, instances of gambling while under the influence were also reported. Furthermore, criminal conduct was portrayed as a form of living in the moment, akin to gambling behavior, or as a means of coping and releasing pent-up anxious energy, partly stemming from the effects of problem gambling itself.

Financial strains

All the client participants described severe financial troubles caused or sternly made worse by gambling. Gambling was prioritized over basic needs, which had led to borrowing money from relatives and friends. Paying this money back, however, was often considered very important.

Barriers to treatment

Stigma and shame

The data reveals a prevalent theme of stigma and shame. The client participants reported feeling stigmatized due to their gambling habits, and

in certain instances also because of their substance use and involvement in criminal activities. This stigmatization was observed in personal relationships as well as in various service settings.

Similar experiences and attitudes were encountered also towards gambling in various social and health services (e.g. mental health and addiction treatment providers). The client participants expressed heavy repentance and self-accusation. Self-destructive thoughts and behavior as well as actual suicide attempts were connected to this theme. Some participants described reaching a point of desperation during their cycle of crimes, where they no longer cared about the consequences and continued, for example, committing fraud and gambling until the police intervened and their accounts were closed.

Lack of emotional and qualified support

Sometimes, family or friends knew about the person's gambling because they had helped pay off their gambling debts. However, there were times when a partner knew about the gambling, but did not know about any crimes or legal trouble related to it. The participants expressed their feeling that they did not believe anyone truly comprehended the practical and emotional dimensions of their struggles and the nature of their challenges.

The participants frequently experienced apprehension when discussing their issues, influenced by past encounters with judgmental perspectives and a fear of being stigmatized. In certain instances, the necessity to conceal one's authentic life circumstances, including undisclosed turmoil and gambling habits, amplified the individual's sense of isolation and loneliness.

Experiences from the treatment program

Building motivation and trust

All the client participants considered calls with the professionals working in the program to be extremely valuable and as something that they looked forward to. The client participants felt that reciprocity and relaxed interaction was essential for building trust with the professionals. The first contact (via phone) with the professional was perceived as an important starting point for building a therapeutic alliance and trust. Additionally, the client participants felt a genuine, warm and respectful ambiance in those calls and appreciated it. Furthermore, it helped them to overcome their dual stigma of having committed a crime and needing help for their gambling.

The first contact gave the client participants an opportunity to honestly reflect on their past and to share their story, also from a non-gambling point of view. Additionally, the professional participants emphasized that a healing alliance (respect and empathy) was important.

A few of the inquiries during the initial assessment regarding substance use were perceived as intimidating by the client participants. This was due to their history of substance use and the prohibition of such activity during their sentence. Some participants said that they had first feared that

answering honestly to questions inquiring about substance use might lead to further sanctions. Being already convicted of a crime led certain clients to believe that they were being inherently viewed as a criminal and as someone untrustworthy. Some client participants also mentioned that previous negative experiences and perceived judgements in other instances increased their skepticism. Due to this context of fragility, building trust was essential for the program to work and it was considered important to emphasize that confidentiality was ensured, thus the answers were not shared with criminal sanctions professionals or the police. On the other hand, according to both some client participants and professional-participants, the telephone-based interaction and its' faceless anonymity was perceived well with clients who had issues with stigma and shame.

Additionally, a module where the client participants were asked to share and discuss their gambling problem with a close person, was regarded as helpful. The openness practiced in this module reduced the feelings of shame for most participants, and it brought the participants closer together with the significant others in their lives.

Client-centered flexibility and holistic approach

The most prevalent theme for all three professional-participants was client-centered flexibility: they all felt it was important to see the client and their situation as a unique and complex interplay of personality and life-events.

The professional participants revealed that their approach and the delivery of the Gambling Stop- program modules with the clients were tailored to their needs flexibly. The professional participants felt that it was beneficial to listen to the clients and discuss non-gambling related issues with them as well, to gain a holistic understanding of the clients' situation. According to the professional participants, once mutual trust and understanding was built, typically in the first call, the participants were motivated to work on their goals.

The clients' needs and vulnerabilities varied, thus multidisciplinary teamwork was essential during the treatment.

Understanding the background of the clients attending this program was considered important to deliver holistic and client-centered support during their process of change. Another noteworthy point raised by one of the professional participants was to explore the patterns related to emotion regulation and relaxation. Understanding and easing strain factors was believed to be helpful in the recovery process. These issues came up often in unstructured parts of the conversations between the clients and professionals during treatment.

In a similar vein, the client participants mentioned that a safe and empathetic alliance with the professionals and room given for other issues along with problem gambling-related issues was experienced by the clients in the sense that they were met as unique individuals. This approach was

perceived to be valuable in contextualizing both crime and problem gambling-related concerns.

A significant concern among the client participants was the sense of isolation, particularly in relation to PG, despite apparent social connections. Many participants faced multiple stigmas due to their criminal behavior and addictions, including PG. The data indicates that criminal justice clients struggling with PG may benefit from the program's stigma-reduction elements and engagement with professionals who comprehend the complexities of PG. However, having a criminal justice background may impede access to services designed for the general population. It is crucial to provide clients with ongoing support and introduce them to peer-support groups tailored for individuals with both PG and criminal justice involvement post-sentence. Follow-up calls after completing the Gambling Stop program were preferred by most of the client participants, and this was also narrated by the professionals. Additionally, all clients who had participated in the program were given contacts to problem gambling peer-support groups for people with a criminal-justice background.

Psychoeducation and practical tools: gaining control

This theme contains references to practical tools received from the program. Learning to establish a distance from one's own action (gambling) helped to identify risky situations and to "*prepare for urges and temptations to gamble*". Psychoeducational information about gambling disorders as a behavioral addiction and illness/disorder that can be treated helped to take away the guilt, shame and stigma related to problem gambling as a phenomenon. However, one client participant, who had previous experience of gambling treatment, felt that the basic psychoeducational component was just "*entry-level information about problem gambling and addictions*".

Additionally, learning about how erroneous thoughts related to gambling fueled further gambling was perceived to be beneficial and helped to give strength and confidence to cope with one's own problems in the future.

Additionally, the clear and structured design of the Gambling Stop program helped those with a non-structured everyday life, the structure they experienced via the program brought structure to their routines.

Further, the component of the program addressing how to handle financial strains and having the courage to look at what gambling gives and takes (e.g., clarifying the true number of debts versus true amounts gambled) was experienced to be particularly helpful for those who were in the midst of an enforcement process. As an example, one client participant remarked: "*without the program, I would have never opened the letters from the loan companies*".

Moreover, the follow-up assessment (after the completion of all program modules) gave the client participants concrete evidence of personal success of overcoming gambling urges. This was stated both by the client participants and professional participants. A special notion raised by the

professional participants was that most of their clients' personal growth, increased insight, and self-reflection skills supported the clients towards a new self with a better outlook in life in general.

Dealing with Relapses

Different reflections were shared regarding relapses. Most client participants reported that they had been free from gambling during the intense Gambling Stop program and even after that.

In contrast, some participants continued gambling after completing the program, since their aim was to get their gambling under control, and not to quit gambling completely. For some client participants who felt that abstinence would have been the best choice, episodes of gambling occurred.

For some participants their gambling continued since the support no longer existed after the program ended and their old ways of living took over. However, such participants still felt that participation in the program was helpful, for example providing increased awareness of their gambling behavior, triggers for gambling, preventing relapses and finally being more open about their lives with significant others.

Technical feasibility and ergonomics

Feedback on the program's usefulness and suitability revealed many important considerations for the future. Some client participants felt it was useful when they were asked to estimate the amount of money spent on gambling, while most of the clients found this part of the exercise difficult and the user interface to be clumsy. Besides, the classifications for the amounts of debts were lower than the participants had experienced themselves, which caused shame and feelings of being in an exceptionally severe or dreadful situation.

A question where the client participants were asked to reflect back on their normal everyday life was perceived as confusing because the past everyday life had been the time they had served their sentence.

Initially, a module encouraging client participants to practice abstinence from gambling starting on a chosen day felt unnecessary and exaggerated. However, some participants later expressed that this module helped them prepare for specific times of vulnerability, such as payday and weekends.

The professional participants highlighted several practical issues: for instance, arranging appointment times, particularly in the morning, was challenging due to differing daily rhythms. Additionally, they noted that some clients struggled to concentrate and pay attention to tasks, indicating a need for more thorough pre-treatment assessments in the future. The professionals also suggested that linguistic modifications to use plain language should be considered moving forward. This approach is particularly important for distinguishing between similar questions and clarifying e.g. the differences in their associated timeframes, thereby reducing potential confusion (see quotes in Supplementary File 2, section

Technical Feasibility and Ergonomics). The data indicates misunderstandings surrounding treatment-related terms, vocabulary, and concepts. For instance, the Finnish translation of gambling-related cognitive error patterns was interpreted by participants as encompassing all forms of compulsive behaviors. Plain language modifications are necessary across various sections of the modules and should be developed collaboratively with individuals with lived experience and treatment providers, particularly those who work with populations under criminal sanctions.

DISCUSSION

This exploratory study provides insights from the client perspective on an assisted and tailored eight-week CBT-based Internet therapy program for clients under community sanctions, as well as the perceptions of professionals working with these clients. The clients' experiences revealed several common strain factors related to their gambling, such as the overpowering role of problem gambling as a means of escaping everyday challenges, loss of control, and severe financial difficulties. Several barriers to treatment were identified, including experienced stigma, shame, and a lack of qualified support. Both clients and professionals emphasized the importance of a holistic, client-centered approach during their interviews. This study also discusses the perceptions and experiences regarding the Gambling Stop program's content and its suitability for clients subject to criminal sanctions.

Our findings partially align with those of Jindani et al. (2021), who conducted interviews with experts to explore the optimal arrangement of treatment for criminal justice clients dealing with problem gambling. They identified certain barriers to treatment such as stigma, resistance and fear of repercussions, which we will address next.

Strain factors and stigma

Our study found psycho-social strain factors that are important to consider when planning treatment options for criminal justice clients. Firstly, there were long lasting problems which had led to multiple hindrances, some related to prolonged gambling that had resulted in financial strain (Grant & Chamberlain, 2023; Roberts et al., 2021). Secondly there was the uncontrolled role of gambling with identified motives being escapism, concealment of problem gambling, guilt, and shame (Holdsworth et al., 2013, Dickson-Swift et al., 2005; Langham et al., 2015), that had set barriers to seeking treatment earlier.

Stigma and shame were clearly identified as a barrier to treatment especially towards service providers. Existing comorbid problems such as substance use, having a criminal background, and poor accessibility to services (Suurvali et al., 2010, Bijker et al., 2022; Jindani et al., 2021) also contributed.

Resistance to treatment

Identified by Jindani and colleagues (2021) was not clearly apparent with this sample, which is not surprising, since our sample was those individuals that were motivated to make changes to their gambling. It is noteworthy that most client participants received the treatment as a part of their community service or other sentence. It is unknown what the role/level of motivation (e.g. internal or external) was to attend to this pilot program, since we did not inquire about that in our interviews. Despite that, the retention rate of the in the RETS pilot program was high, according to one professional participant (PW1). One important issue when developing interventions for this group of clients is to understand the deeper barriers to making changes, as well as the noted resistance, which can be addressed by using empathy, collaboration, respect, compassion, encouragement, and acceptance, which are key elements of Motivational Interviewing (MI: Miller & Rollnick, 2012) and in supporting change (Milic et al., 2022; Yakovenko et al., 2015). *Fear of repercussion*, as noted by Jindani et al. (2021) was identified in our sample. Some participants were afraid to reveal their history of substance use, thinking that it may lead to sanctions. Another barrier to honesty concerning the background factors was the fear of being identified as a criminal, and consequently being deemed untrustworthy. Again, when developing interventions for this group, it is important to clarify the confidentiality and pay attention to the fear of judgement when building up the alliance with the client. It is noted that therapists being non-judgmental and accepting are validating and reflect a person's worth, thus reducing stigma and at its best increasing the motivation for change (Denton & Grenade, 2022). A further essential notion was that the treatment module, with the component of sharing problem gambling with significant others, was perceived as helpful and would be beneficial to include as a single component in upcoming interventions.

Another barrier to treatment identified by Jindani et al. (2021) was *lack of awareness (PG) among officials and professionals and the scarcity of treatment programs for this population*. This notion was apparent in the experiences of our client participants, along with stigma and shame, as noted earlier. In our study, some client participants felt that problem gambling treatment was often overshadowed by substance addiction treatment. Although both clients and professionals mentioned comorbid substance addictions, clients often perceived these as secondary to their primary gambling issues. There is a scarcity of detection of potential problem gambling within criminal sanction facilities in Finland. A previous study highlighted the need to raise awareness and enhance training for professionals in this area (Castrén et al., 2021). The development project of the RETS addressed this issue by aiming to train all employees working with clients in Finland's community sanctions offices. This training focuses on initiating conversations about gambling, recognizing problem gambling, and guiding clients to appropriate support and rehabilitation services. Looking to the future, it is crucial to continue the work that this project has

begun to further increase the awareness, understanding, confidence, and skills of criminal sanctions workers in addressing gambling issues among community sanctions clients. The ultimate goal is to ensure that at-risk and problem gambling behaviors are recognized during the sanction period, allowing clients to receive appropriate, timely support and rehabilitation.

Experiences of treatment program

The treatment that was delivered here was a structured CBT-based intervention targeting the reduction or abstinence of PG. The existing comorbidities or other psychiatric disorders were not clinically assessed or treated. The treatment was offered when PG was detected by the criminal sanctions professionals as a part of the sentence. The data shows that clients had multiple other issues, such as traumas, substance use problems, self-reported ADHD, as well as financial burdens in their lives. As this program was a pilot using an existing structure and modules of the Peli Poikki program, which is for non-criminal-sanctions clients, its suitability and adaptability for criminal-sanctions clients' needs critical evaluation. Studies that have evaluated the efficacy of the original program (Peli Poikki), which is freely offered in Finland, have shown that the intervention was less effective in the long term for participants with persistent symptoms of depression or without a sense of financial control (Palomäki et al., 2022) and that dissociative experiences reduced the effectiveness of the treatment (Koirvuo et al., 2023). Even the experiences of participating this program were positive with our sample, it could be that criminal sanction clients would benefit from longer follow-ups and referrals to treatments that could address other issues as well (Theule et al., 2019; Richard et al., 2020; Larsson & Håkansson, 2022).

The basic components of CBT were well received by the clients, aligning with the recommended treatment for gambling harm (Pfund et al., 2023). The clear structure and design of the modules were perceived as accommodating and valuable, especially for those lacking structure in their everyday lives. The psychoeducational component, which included information about gambling disorders and the role of cognitive distortions, was considered helpful by many clients. Additionally, learning to recognize triggers and motivations for gambling enabled clients to regain control over their behavior. While facing the reality of their financial burdens was challenging for many, doing so was viewed as beneficial in preventing relapses.

Interviews with the professionals involved revealed that multidisciplinary collaboration, particularly with social workers, supported their clients' situations. Criminal sanction clients might benefit from active collaboration with social workers to help facilitate their adjustment back to desistance after sentencing, as part of a holistic treatment approach and individually tailored planning in future treatment developments.

Relapse prevention is a crucial component of treatment, as understanding the role of relapses in recovery is vital. A study by Pickering

et al. (2023) found that participants viewed recovery as a turbulent process marked by ups and downs, including relapses. Factors associated with relapses include severe depression, financial difficulties, low self-efficacy, and substance use disorders (Oakes et al., 2019; Shirk et al., 2022). Relapse is often part of the recovery process from problem gambling and does not signify that change is impossible; rather, it presents an opportunity to identify triggers, address them, and develop new coping strategies (Ladouceur et al., 2002; Raylu & Oei, 2004). In practical terms, it is important to enhance clients' understanding of relapses as a common aspect of recovery, and this perspective should be integrated into therapeutic interventions. By doing so, clients can better recognize that setbacks are not failures but rather stepping stones toward lasting change and personal growth.

Based on our study, certain linguistic modifications into plain language were needed and some expressions need to be rephrased so that criminal sanction clients will not perceive them as being stigmatizing. Both project worker and a client observed that certain items related to obligations were phrased in ways that did not likely resonate with individuals from a criminal subculture or those with antisocial tendencies — particularly those who have almost never experienced a sense of obligation. This may also reflect a conceptual misunderstanding of gambling-related cognitive errors, such as intrusive thoughts about gambling, which were conflated here with general obsessive-compulsive behaviors. In Finnish, the term *pakko* can mean compulsive, intrusive, forceful, or compelled, and without contextual clarity, its interpretation can be easily distorted. This misinterpretation not only skewed the concept but also left the client feeling confused. Additionally, various items required clearer wording to account for conditions such as ADHD, and the response options needed to be adjusted to better reflect the typical severity of PG within the criminal justice system.

Individuals within the criminal justice context have special requirements for the online platform

The study by Jindani et al. (2021) also noted structural issues in arranging support for the criminal justice clients, such as strict security measures hindering online participation. The Gambling Stop-program modules were delivered via phone or the Internet. Online treatments have benefits of being flexible and allowing people in need even in the remote areas to reach services (Gainsbury et al., 2015; Monaghan & Wood, 2010), and they are good at maintaining anonymity and tackling the barriers of stigma (Cooper, 2004), and were perceived positively by the clients in our study, but their efficacy requires more research (van Der Maas et al., 2019), especially for these clients. In our study, access to the online platform and the Internet was arranged with the help of RETS professionals, but the delivery of such online treatment in a prison setting requires still more work. In recent years, the Finnish Prison and Probation Service has taken steps to improve the accessibility to digital services for its clients and to implement

technical changes aimed at preventing their digital exclusion. This may also increase the availability of online treatments for them in the future.

As noted by Jindani et al. (2021), there is a need for increased awareness among professionals and officials. In the future, the early detection of problem gambling through screening and easier access to treatment are crucial for incarcerated and ex-offender populations to prevent problem gambling from escalating into criminal behavior (Abbott et al., 2005; Binde et al., 2016). Ensuring equal access to health services and treatment for prisoners is essential, with scholars emphasizing the importance of treatment over punishment (Welsh & Farrington, 2000; Banks et al., 2020; Blaszczynski, 1996). This aligns with the treatment-focused, rehabilitative, and restorative approaches that are favored in the Finnish (and Nordic) criminal justice system.

Problem gambling significantly increases the risk of suicidality, particularly when it is compounded by heavy financial losses and criminal activity (Marionneau & Nikkinen, 2022; Andreeva et al., 2022; Wardle et al., 2020; Blaszczynski & Farrell, 1998). Judicial bodies should take problem gambling into account when making referrals for treatment to help reduce reoffending (Blaszczynski & Silove, 1996; Jindani et al., 2022; Binde et al., 2021).

Implementing social innovations and cognitive-behavioral interventions can effectively mitigate financial distress, which is a major risk factor for criminal behavior (Ward, 2004; Kroner, 2013). Notably, the inclusion of a problem gambling screening in a nationwide prisoner health survey in Finland has generated valuable insights and heightened professionals' awareness of the prevalence of problem gambling. This data can further inform evidence-based interventions and policies within the prison system (Rautanen et al., 2023).

In criminal justice settings, our results indicate that life situations often encompass more stigmatizing elements and perceived moral accusations, leading to feelings of frustration. Tailored support is essential, taking into account comorbidities and criminal history, while also recognizing the diverse network of individuals, services, and technologies available to facilitate recovery. Programs should thoroughly assess individuals' situations and align their social environments with recovery efforts, promoting recovery capital and making the problem visible in a non-stigmatizing manner across various services and personal lives (see, e.g., Bormann, 2023). Additionally, peer support groups for individuals with problem gambling (PG) and criminal justice backgrounds are likely to be beneficial when helping them reorganize their lives toward recovery (Penfold & Ogden, 2023; Turner et al., 2017).

Finally, Jindani et al. (2021) discuss the barriers to implementing gambling-specific courts. While the Finnish criminal justice system is inherently restorative and rehabilitative, the need for such courts may not be as apparent within this and similar systems. Individuals with both problem gambling (PG) and a criminal history often face a combination of

legal, financial, social, and psychological challenges that significantly complicate their path to recovery compared to those with PG but without a criminal background. These challenges may include the loss of support networks and employment issues.

Many clients also contend with substantial debts, which can hinder their motivation. According to the Finnish Decree on the Adjustment of the Debts of a Private Individual (58/1993), debts resulting from criminal activity usually block access to debt restructuring. This means that if someone is under investigation, charged, or convicted of a crime that has led to financial obligations, they may not qualify for debt restructuring. However, a recent decision by Finland's Supreme Court (KKO:2023:80) may help alleviate this pressure. The court ruled that a diagnosed gambling disorder reduces culpability for committing fraud to obtain money. In this context, efforts to repay debts and pursue social rehabilitation were taken into account, enabling access to debt restructuring for the first time in such cases. This ruling sets a precedent for future cases involving crimes driven by gambling addiction and debt.

LIMITATIONS

Our study was qualitative in nature and its participants represent a hard-to-reach population, due to aspects such as the stigma related to deviance and distrust in institutions (Duvnjak & Fraser, 2013). The analysis was conducted by a single researcher, which may introduce potential bias in the interpretation of the data. The data uniquely consists of Finnish criminal justice clients. The client participants could participate in the Gambling Stop program without a thorough assessment of the gambling severity or other possible comorbid issues, which might have affected their current experiences. A larger group of participants may have different experiences, and related research should be carried out to better understand the diversity of experiences. Follow-up research could build further on our findings in this regard. The translation of quotations into English was performed by researchers, which can also be seen as a limitation.

CONCLUSIONS

Clients within the criminal justice system experience several strain factors related to their gambling, including the overpowering influence of gambling and severe financial problems. Feelings of shame, stigma, and the lack of qualified treatment were significant issues. The CBT-based online treatment program was well received, with its structured components perceived as helpful. A non-judgmental, client-centered approach was deemed important. However, the suitability and adaptability of this online treatment program for the broader criminal sanction setting require modifications in pre-treatment assessments to address comorbidities, as well as linguistic adjustments to simplify language and the provision of an online platform.

Note 1: Interviewee codes are constructed using gender (M for male or F for female), followed by the age group (e.g., 25 to 34 is represented as 2534), and a unique identifier (a, b, c, etc.). For example, M2534_A refers to a male interviewee aged 25 to 34 with the identifier 'A.'" PW refers to project worker.

Note 2: An example of misunderstanding gambling-related cognitive errors (e.g., intrusive thoughts about gambling) involves conflating them with general obsessive-compulsive behavior. In Finnish, the word *pakko* has multiple meanings, including compulsive, intrusive, forceful, and the sense of being compelled to act. Accurate interpretation of the term requires contextual awareness, which was lacking in this instance. This misunderstanding not only distorted the concept but also left the client feeling more confused. Treatment manuals typically use this term in programs designed for non-criminally sanctioned client populations. For this specific population, it is essential to prioritize plain and accessible language to avoid such confusion.

Ethics approval

Ethical approval for the study was given by the Ethical Committee of the Finnish Institute for Health and Welfare (THL/702/6.02.01/2023) on February 16th 2023.

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Relative Contributions

Conceptualization: KL, SC; formal analysis: KL; interpreting results: KL, SC; writing original draft: KL; review and editing: SC, KL. All authors have read and agreed to the published version of the manuscript.

Competing interests

None.

Research Promotion

This study explores the experiences of criminal justice-involved individuals participating in the Finnish Gambling Stop program, an online CBT-based therapy for problem gambling. Findings highlight the significant connections between gambling, crime, and financial difficulties, and highlights treatment barriers such as stigma and limited support. The study underscores the need for holistic, client-centered interventions to aid recovery, reduce recidivism, and supporting successful reintegration into society.

References

- Abbott, M. W., & McKenna, B. G. (2005). Gambling and problem gambling among recently sentenced women in New Zealand prisons. *Journal of Gambling Studies*, 21, 559-581. <https://doi.org/10.1007/s10899-005-5563-5>
- Adolphe, A., Khatib, L., van Golde, C., Gainsbury, S. M., & Blaszczynski, A. (2019). Crime and gambling disorders: A systematic review. *Journal of Gambling Studies*, 35(2), 395-414. <https://doi.org/10.1007/s10899-018-9794-7>
- Andreeva, M., Audette-Chapdelaine, S., & Brodeur, M. (2022). Gambling-related completed suicides: a scoping review. *Addiction Research & Theory*, 30(6), 391-402. <https://doi.org/10.1080/16066359.2022.2055001>
- April, L. M., & Weinstock, J. (2018). The relationship between gambling severity and risk of criminal recidivism. *Journal of Forensic Sciences*, 63(4), 1201-1206. <https://doi.org/10.1111/1556-4029.13662>
- Australian Institute of Criminology & Price Waterhouse Coopers. (2003). Serious fraud in Australia and New Zealand. *Research and Public Policy Series*, no. 48. Canberra: Australian Institute of Criminology. URL: <https://www.aic.gov.au/sites/default/files/2020-05/rpp048.pdf>
- Banks, J., Waters, J., Andersson, C., & Olive, V. (2020). Prevalence of gambling disorder among prisoners: a systematic review. *International Journal of Offender Therapy and Comparative Criminology*, 64(12). <https://doi.org/10.1177/0306624x19862430>
- Bijker, R., Booth, N., Merkouris, S. S., Dowling, N. A., & Rodda, S. N. (2022). Global prevalence of help-seeking for problem gambling: a systematic review and meta-analysis. *Addiction*, 117(12). <https://doi.org/10.1111/add.15952>
- Binde, P. (2016). Gambling-related embezzlement in the workplace: A qualitative study. *International Gambling Studies*, 16(3), 391-407. <https://doi.org/10.1080/14459795.2016.1214165>
- Binde, P., Cisneros Örnberg, J., & Forsström, D. (2021). Criminogenic problem gambling: a study of verdicts by Swedish courts. *International Gambling Studies*, 22(3), 344-364. <https://doi.org/10.1080/14459795.2021.2002383>
- Binde, P., Cisneros Örnberg, J., & Forsström, D. (2022). Violating trust: a study of court verdicts in cases of gambling-driven economic crimes in the workplace. *Nordic Journal of Criminology*, 23(2), 212-230. <https://doi.org/10.1080/2578983X.2022.2139473>
- Blaszczynski, A., & Silove, D. (1996). Pathological gambling: Forensic issues. *Australian & New Zealand Journal of Psychiatry*, 30(3), 358-369. <https://doi.org/10.3109/00048679609065000>
- Blaszczynski, A., & Farrell, E. (1998). A case series of 44 completed gambling-related suicides. *Journal of Gambling Studies*, 14(2), 93-109. <https://doi.org/10.1023/a:1023016224147>
- Bormann, N.L., Weber, A.N., Miskle, B., Arndt, S., & Lynch, A.C. (2023). Recovery Capital Correlates With Less Methamphetamine Use and Crime in the Community. *Journal of Addiction Medicine*, 17, 361-366. <https://doi.org/10.1097/ADM.0000000000001200>
- Bourgon G., Armstrong B. (2005). Transferring the principles of effective treatment into a “real world” prison setting. *Criminal Justice and Behavior*, 32(1), 3–25. <https://doi.org/10.1177/0093854804270618>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>

- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Carlbring, P., & Smit, F. (2008). Randomized trial of internet-delivered self-help with telephone support for pathological gamblers. *Journal of Consulting and Clinical Psychology*, 76(6), 1090-1094. <https://doi.org/10.1037/a0013603>
- Castrén, S., Lind, K., Järvinen-Tassopoulos, J., Alho, H., & Salonen, A. H. (2021). How to support prison workers' perceived readiness to identify and respond to possible gambling problems: a pilot study from two Finnish prisons. *International Journal of Mental Health and Addiction*, 19, 478-493. <https://doi.org/10.1007/s11469-019-00083-4>
- Cooper, G. (2004). Exploring and understanding online assistance for problem gamblers: The pathways disclosure model. *International Journal of Mental Health and Addiction*, 1(2), 32-38. URI: <http://hdl.handle.net/1880/47864>
- Denton, D., & Grenade, L. (2022). Connecting with clients: Building therapeutic alliances with people who are incarcerated. *Psychotherapy and Counselling Journal of Australia*, 10(1). <https://doi.org/10.59158/001c.71198>
- Dickson-Swift, V. A., James, E. L., & Kippen, S. (2005). The experience of living with a problem gambler: Spouses and partners speak out. *Journal of Gambling Issues*, 13(13), 1-22. <https://doi.org/10.4309/jgi.2005.13.6>
- Duvnjak, A., & Fraser, H. (2013). Targeting the 'hard to reach': re/producing stigma? Critical and Radical Social Work, 1(2), 167-182. <https://doi.org/10.1332/204986013X673245>
- Grant, J. E., & Chamberlain, S. R. (2023). Illegal behaviors as a consequence of gambling disorder. *The American Journal on Addictions*, 32(1), 40-46. <https://doi.org/10.1111/ajad.13360>
- Hilbrecht, M., Baxter, D., Abbott, M., Binde, P., Clark, L., Hodgins, D. C., ... & Williams, R. J. (2020). The conceptual framework of harmful gambling: A revised framework for understanding gambling harm. *Journal of Behavioral Addictions*, 9(2), 190-205. <https://doi.org/10.1556/2006.2020.00024>
- Hing, N., Breen, H., Gordon, A., & Russell, A. (2014). Gambling among indigenous men and problem gambling risk factors: An Australian study. *International Journal of Mental Health and Addiction*, 12, 491-508. <https://doi.org/10.1007/s11469-014-9480-7>
- Holdsworth, L., Nuske, E., Tiyce, M., & Hing, N. (2013). Impacts of gambling problems on partners: Partners' interpretations. *Asian Journal of Gambling Issues and Public Health*, 3(1), 1-14. <https://doi.org/10.1186/2195-3007-3-11>
- Hurwitz, J., & Smithey, S.I. (1998). Gender Differences on Crime and Punishment. *Political Research Quarterly*, 51, 115-189. <https://doi.org/10.2307/448831>
- Jindani, F., Cook, S., Shi, J., McAvoy, S., Myers, C., Matheson, F. I., van der Maas, M., Sanchez, S., Ferentzy, P., & Turner, N. E. (2021). Exploring the gaps in programming for men and women with a gambling disorder in the correctional system in Canada. *International Journal of Offender Therapy and Comparative Criminology*. Advance online publication. <https://doi.org/10.1177/0306624X211013743>
- Korvuo, T., Palomäki, J., & Castren, S. (2023). Dissociative experiences reduce online problem gambling treatment effectiveness. *Comprehensive Psychiatry*, 127, 152414. <https://doi.org/10.1016/j.comppsy.2023.152414>
- Kroner, D.G., & Yessine, A.K. (2013). Changing risk factors that impact recidivism: in search of mechanisms of change. *Law and Human Behavior*, 37(5), 321-336. <https://doi.org/10.1037/lhb0000022>

- Ladouceur, R., Sylvain, C., Boutin, C., Lachance, S., Doucet, C., Leblond, J., & Jacques, C. (2001). Cognitive treatment of pathological gambling. *The Journal of nervous and mental disease*, 189(11), 774-780. <https://doi.org/10.1097/00005053-200111000-00007>
- Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2015). Understanding gambling related harm: A proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health*, 16, 1-23. <https://doi.org/10.1186/s12889-016-2747-0>
- Larsson, L., & Håkansson, A. (2022). Mental illness and socio-economic situation of women and men diagnosed with gambling disorder (GD) in Sweden-nationwide case-control study. *Plos One*, 17(10), e0274064. <https://doi.org/10.1371/journal.pone.0274064>
- Leon, A. C., Davis, L. L., & Kraemer, H. C. (2011). The role and interpretation of pilot studies in clinical research. *Journal of Psychiatric Research*, 45(5), 626-629. <https://doi.org/10.1016/j.jpsychires.2010.10.008>
- Lind, K., Salonen, A. H., Järvinen-Tassopoulos, J., Alho, H., & Castrén, S. (2019). Problem gambling and support preferences among Finnish prisoners: a pilot study in an adult correctional population. *International Journal of Prisoner Health*, 15(4), 316-331. <https://doi.org/10.1108/IJPH-07-2018-0041>
- Lloyd, C. D., Chadwick, N., & Serin, R. C. (2014). Associations between gambling, substance misuse and recidivism among Canadian offenders: a multifaceted exploration of poor impulse control traits and behaviours. *International Gambling Studies*, 14(2), 279-300. <https://doi.org/10.1080/14459795.2014.913301>
- Milic, J., Lohan, A., Petch, J., Turner, W., & Casey, L. (2022). The Effectiveness of a Motivational Interviewing Treatment for Help-Seeking Problem Gamblers in a Community Organization. *Journal of Gambling Studies*, 38(2), 607-626. <https://doi.org/10.1007/s10899-021-10045-y>
- Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change* 3rd Edition, Guilford Press.
- Monaghan, S., & Wood, R. T. (2010). Internet-based interventions for youth dealing with gambling problems. *International Journal of Adolescent Medicine and Health*, 22(1), 113-118. PMID: 20491421. URL: <https://pubmed.ncbi.nlm.nih.gov/20491421/>
- Oakes, J., Pols, R., & Lawn, S. (2019). The ‘merry-go-round’ of habitual relapse: A qualitative study of relapse in electronic gaming machine problem gambling. *International Journal of Environmental Research and Public Health*, 16(16), 2858. <https://doi.org/10.3390/ijerph16162858>
- Palomäki, J., Heiskanen, M., & Castrén, S. (2022). Online 8-week cognitive therapy for problem gamblers: The moderating effects of depression symptoms and perceived financial control. *Journal of Behavioral Addictions*, 11(1), 75-87. <https://doi.org/10.1556/2006.2021.00091>
- Penfold, K. L., & Ogden, J. (2023). The Role of Social Support and Belonging in Predicting Recovery from Problem Gambling. *Journal of Gambling Studies*, 1-18. <https://doi.org/10.1007/s10899-023-10225-y>
- Perrone S., Jansons D., Morrison L. (2013). *Problem Gambling and The Criminal Justice System*. Victorian Responsible Gambling Foundation, Melbourne, Victoria, Australia. URL: <https://responsiblegambling.vic.gov.au/documents/131/Problem-Gambling-Criminal-Justice.pdf>
- Pfund, R. A., Forman, D. P., Whalen, S. K., Zech, J. M., Ginley, M. K., Peter, S. C., ... & Whelan,

- J. P. (2023). Effect of cognitive-behavioral techniques for problem gambling and gambling disorder: A systematic review and meta-analysis. *Addiction*, 118(9), 1661-1674. <https://doi.org/10.1111/add.16221>
- Pickering, D., Spoelma, M. J., Dawczyk, A., Gainsbury, S. M., & Blaszczynski, A. (2020). What does it mean to recover from a gambling disorder? Perspectives of gambling help service users. *Addiction Research & Theory*, 28(2), 132-143. <https://doi.org/10.1080/16066359.2019.1601178>
- Raylu, N., & Oei, T. P. (2004). The gambling urge scale: Development, validation, and psychometric properties. *International Gambling Studies*, 4(2), 105-120. <https://doi.org/10.1037/0893-164x.18.2.100>
- Richard, J., Fletcher, E., Boutin, S., Derevensky, J., & Temcheff, C. (2020). Conduct problems and depressive symptoms in association with problem gambling and gaming: A systematic review. *Journal of Behavioral Addictions*, 9(3), 497-533. <https://doi.org/10.1556/2006.2020.00045>
- Roberts, A., Sharman, S., King, M., Bayston, A., & Bowden-Jones, H. (2021). Treatment-seeking problem gamblers: characteristics of individuals who offend to finance gambling. *International Journal of Mental Health and Addiction*, 19, 824-836. <https://doi.org/10.1007/s11469-019-00192-0>
- Rosenthal, R. J., & Lesieur, H. R. (1996). Pathological gambling and criminal behavior. *Explorations in criminal psychopathology: Clinical syndromes with forensic implications*, 149-169. <https://doi.org/10.1037/11469-015-9604-8>
- Rudd, C., & Thomas, S.D. (2016). The Prevalence, Mental Health and Criminal Characteristics of Potential Problem Gamblers in a Substance Using Treatment Seeking Population. *International Journal of Mental Health and Addiction*, 14, 700-714. <https://doi.org/10.1007/s11469-015-9604-8>
- Shirk, S. D., Muquit, L. S., Deckro, J., Sweeney, P. J., & Kraus, S. W. (2022). Mindfulness-based relapse prevention for the treatment of gambling disorder among US military veterans: Case series and feasibility. *Clinical Case Studies*, 21(1), 3-17. <https://doi.org/10.1177/15346501211020122>
- Smith, L. R., Sharman, S., & Roberts, A. (2022). Gambling and crime: An exploration of gambling availability and culture in an English prison. *Criminal Behaviour and Mental Health*. <https://doi.org/10.1002/cbm.2266>
- Stark, S., Zahlan, N., Albanese, P., & Tepperman, L.J. (2012). Beyond description: Understanding gender differences in problem gambling. *Journal of Behavioral Addictions*, 1(3), 123-134. <https://doi.org/10.1556/JBA.1.2012.3.5>
- Suurvali, H., Hodgins, D. C., & Cunningham, J. A. (2010). Motivators for resolving or seeking help for gambling problems: A review of the empirical literature. *Journal of Gambling Studies*, 26, 1-33. <https://doi.org/10.1007/s10899-009-9151-y>
- Theule, J., Hurl, K. E., Cheung, K., Ward, M., & Henrikson, B. (2019). Exploring the relationships between problem gambling and ADHD: A meta-analysis. *Journal of Attention Disorders*, 23(12), 1427-1437. <https://doi.org/10.1177/1087054715626512>
- Turner, N. E., McAvoy, S., Ferentzy, P., Matheson, F. I., Myers, C., Jindani, F., ... & Malat, J. (2017). Addressing the issue of problem gambling in the criminal justice system: A series of case studies. *Journal of Gambling Issues*, 35(35), 74-100. <https://doi.org/10.4309/jgi.2017.35.4>
- Turner N. E., Preston D. L., Saunders C., McAvoy S. (2009). The relationship of problem

- gambling to criminal behavior in a sample of Canadian male offenders. *Journal of Gambling Studies*, 25, 153–169. <https://doi.org/10.1007/s10899-009-9124-1>
- Turner N. E., Preston D. L., McAvoy S., Gillam L. (2013). Problem gambling inside & out: The assessment of community and institutional problem gambling in the Canadian correctional system. *Journal of Gambling Studies*, 29(3), 435–451. <https://doi.org/10.1007/s10899-012-9321-1>
- Van Der Maas, M., Shi, J., Elton-Marshall, T., Hodgins, D. C., Sanchez, S., Lobo, D. S., ... & Turner, N. E. (2019). Internet-based interventions for problem gambling: Scoping review. *JMIR Mental Health*, 6(1), e65. <https://doi.org/10.2196/mental.9419>
- Victorian Responsible Gambling Foundation (2024). Reducing stigma: A guide for talking about gambling harm. Retrieved: 18.12.2024 from: [chrome-extension://efaidnbnmnibpcjpcglclefindmkaj/https://responsiblegambling.vic.gov.au/documents/1266/FINAL - Gambling harm language guide - March 2024.pdf](chrome-extension://efaidnbnmnibpcjpcglclefindmkaj/https://responsiblegambling.vic.gov.au/documents/1266/FINAL_-_Gambling_harm_language_guide_-_March_2024.pdf)
- Wardle, H., John, A., Dymond, S., & McManus, S. (2020). Problem gambling and suicidality in England: secondary analysis of a representative cross-sectional survey. *Public Health*, 184, 11-16. <https://doi.org/10.1016/j.puhe.2020.03.024> PMID: 32409100
- Welsh, B.C., & Farrington, D.P. (2000). Correctional Intervention Programs and Cost-Benefit Analysis. *Criminal Justice and Behavior*, 27, 115-133. <https://doi.org/10.1177/0093854800027001007>
- Widinghoff, C., Berge, J., Wallinius, M., Billstedt, E., Hofvander, B., & Håkansson, A. (2019). Gambling disorder in male violent offenders in the prison system: Psychiatric and substance-related comorbidity. *Journal of Gambling Studies*, 35, 485-500. <https://doi.org/10.1007/s10899-021-10102-6>
- Williams, R. J., Royston, J., & Hagen, B. F. (2005). Gambling and problem gambling within forensic populations: A review of the literature. *Criminal Justice and Behavior*, 32(6), 665-689. <https://doi.org/10.1177/0093854805279947>
- Yakovenko, I., Quigley, L., Hemmelgarn, B. R., Hodgins, D. C., & Ronksley, P. (2015). The efficacy of motivational interviewing for disordered gambling: systematic review and meta-analysis. *Addictive Behaviors*, 43, 72-82. <https://doi.org/10.1016/j.addbeh.2014.12.011>