Differences in Gambling Disorder Recovery Capital Toolkits in Mothers Versus Childless Women

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ABSTRACT

This study focuses on mothers and childless women who recover from gambling disorder (GD) in the context of risk society. Mothers in 'risk society' tend to be aware of their choices that might affect their children's future. Mothers with GD suffer from dual social stigma as gamblers and as women who risk their children. The recovery capital (RC) toolkit is comprised of internal and external resources (positive RC) and barriers (negative RC) enacted in recovery and treatment by the individual. This longitudinal study: a) compared the RC toolkit that mothers vs. childless women have, and its effects on these women's dropout and relapse rates; b) explored the resources and barriers that predict dropout and relapse in each group. Analysis of clinical data obtained from 211 women with GD (*N*=146 mothers) who received cognitive-behavioral therapy for 16 weeks in Spain. Mothers reported lower levels of education and were from more disadvantaged socioeconomic groups, were older, and had later age at onset of gambling-related problems. Mothers had significantly lower relapse rates, but not lower dropout rates. There were more personal predictors for dropout among childless women, whereas low levels of family support and the absence of gambling debts predicted dropout in the mothers' group. These findings were interpreted by combination of two concepts: the risk society and recovery capital in action. Therapists and policymakers should be aware of the differences in RC toolkits between women with and without children and its interplay with the context of motherhood as defined by the notions of risk society vs. childfree lifestyles.

Key words: women, gambling disorder, motherhood, dropout, relapse, risk society, recovery capital in action.

Public policy relevance statement

Women with gambling disorders cope with multiple challenges in their recovery, especially if they are also mothers. This study elucidates these women's (mothers vs. childless women) recovery capital toolkit, and the interplay between their toolkits with the socio-cultural contexts which the mothers and childless women encounter in their everyday lives. Policymakers and therapists should consider these contexts and the ways they may enhance or hinder the women's recovery from GD.

The Research Centres of Catalonia-CERCA Programme/Generalitat de Catalunya gave institutional support to this work. This work was additionally supported by two grants from the Delegacio´n del Gobierno para el Plan Nacional sobre Drogas (2019I47 and 2021I031 to Susana Jiménez-Murcia), Ministerio de Ciencia e Innovacio´n (2021-124887OB-I00), and Instituto de Salud Carlos III (PI20/00132 to Fernando Fernández-Aranda), and cofunded by European Regional Development Fund-ERDF/FEDER funds/(Susana Jiménez-Murcia), a way to build Europe. This study was also supported by the CITEIB22-001 project (Universidad Internacional de la Rioja). CIBERobn (Spanish Excellence Biomedical Research Network of Physiopathology of Obesity and Nutrition) is an initiative of Instituto de Salud Carlos III. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the article; or in the decision to publish the results. The authors thank the women who took part in this study.

INTRODUCTION

The notion of 'risk society' corresponds to a cultural view that future occurrences are a product of individual choices, responsibilities, and everyday activities and experiences in the present. Thus, the cultural locus shifts toward a discourse of human control over both nature and social worlds (Giddens, 2006). Motherhood is a gendered socio-cultural construct (Chodorow, 1978). In 'risk society', this gender role often forces mothers to constantly weigh their actions to avoid possible negative impacts on their children's future (Back, 1992). Mothers from marginalized groups such as women with addictions are also subjected to stigma and isolation (Reid et al., 2008). This is the case for women diagnosed with gambling disorders (GD) (Hanson et al., 2017), the first behavioral addiction recognized by the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). GD is manifested by maladaptive patterns of gambling behaviors that cause problems to the individuals, their families and the society at large (Grant et al., 2017).

Recovery from addictive behaviors is a challenging process that requires the individual to draw on internal and external resources (positive recovery capital: RC) while dealing with barriers and obstacles (negative RC) (Cloud & Granfield, 2008; Gavriel-Fried, et al., 2022a). The findings on mothers' resources and obstacles during the recovery process are mixed. A number of studies have reported that mothers with substance disorders are more motivated to seek treatment for their problems (Villegas et al., 2016), whereas other works have indicated that the burden of caring for their children constitutes an impediment to their ability to remain in treatment (Elms et al., 2018).

In their seminal work on internal and external RC elements that individuals employ to initiate and sustain recovery, Cloud and Granfield (2008) raised the question of whether gender, and specifically motherhood, served as a resource for seeking treatment and recovering from addictions (i.e., whether children constitute a motivation for recovery) or an obstacle (e.g., the fear of losing custody over their children) but provide no clear-cut response. 'RC in action' is a new concept derived from the notion of the RC toolkit (the internal and external positive and negative RC elements) enacted in recovery in different socio-cultural contexts (Gavriel-Fried et al., 2022b). The current study compared the RC toolkit of mothers

with gambling problems to the RC toolkit of non-mother women enrolled in a cognitive-behavioral therapy program in Spain.

Motherhood vs. the childfree lifestyle in risk society

Motherhood has been defined as a set of beliefs, ideals, values, norms, activities, and relationships involved in caring for children (Hays, 1996). In western countries, women, more than men, are expected to engage in countless ordinary and continuous forms of practical and symbolic work that socializes their children and cultivates affective relationships within their families (Bourdieu, 1998, p. 68). Motherhood is a broad socio-cultural concept that shapes women's parental activities. Mothering, the everyday experiences emanating from women's social role as mothers (Rich, 1976), places the social responsibility for their children's future welfare on mothers (Budds et al., 2017). Childless women, either by choice (Peterson & Engwall, 2019) or circumstances (Benyamini et al., 2017) are subjected to the social construct of the individualized society, i.e., a socio-cultural construct that places the individual at the center, focusing on his or her responsibility to act and choose and to account for the consequences of those choices (Beck & Beck-Gernsheim, 2002). These childless women's actions take place under the neoliberal regime, (Fine & Saad-Filho, 2017), namely, an ideological and philosophical agenda advocating for a free, calculating, and self-interested consumer that has a significant effect on people's material lives, social relations, and future prospects (Ganti, 2014). Studies show that the 'childfree lifestyle' that these women maintain (Stahnke et al., 2022) is associated with autonomy to choose from a variety of options and opportunities to travel, fulfill oneself professionally, enjoy hobbies, etc., while motherhood is perceived as a loss of identity, freedom, and independence (Gillespie, 2003)

In 'risk society', the everyday life practices, experiences, and choices of individuals are constantly evaluated in relation to their future consequences and possible outcomes (Giddens, 2006). In this framework, good motherhood is a moral choice (Schmied & Lupton, 2001) associated with 'risk-consciousness' (Beck, 1992; Giddens, 1999). It is defined by a scientific-medical discourse (Hays, 1996) that guides mothers to be vigilant (Tulloch & Lupton, 2003) and identify potential risks for their children, and to manage these risks by minimizing or eliminating them; for example, by breastfeeding (Knaak, 2010). Mothers are also expected to avoid compromising their children's development (Graham, 2018). Thus, their

everyday actions are subjected to a protective and self-limiting logic, and they are more likely to engage in a routinized risk-avoidance behavior when they experience the transition to motherhood (Moore, 2020).

Mothers who experience mental health problems usually strive to have meaningful and "normal" relationships with their children (Montgomery et al., 2006). They struggle with guilt and shame (Dolman et al., 2013) over being both mothers who are responsible for their children (van der Ende et al., 2016) and mental health patients (Vallido et al., 2010). They face stigmatization and alienation from mainstream society (Lacey et al., 2015), and fear losing custody of their children (Grant et al., 2011).

Mothers suffering from addictions experience an ongoing stigmatization and marginalization by society (Legrand et al., 2005; Litzke, 2005) for putting their children at risk (Hanson et al., 2017). Their everyday life is a continuous struggle to negotiate the prevailing attitudes, practices, and stigmas of being substance-using or addicted mothers (Reid et al., 2008) with the moral pressure to be "good mothers" (Virokannas, 2011). These women may experience an array of parenting deficits (Kelley, 1998). Studies show that mothers with a substance use disorder (SUD) may have difficulties interacting sensitively with their children and expressing empathy toward them (Suchman et al., 2010). In a study conducted in X among X findings show that their parental knowledge of healthy and stable child development were considered inadequate (Mayes & Truman, 2002). At times, if incarcerated or unable to care for their children themselves, these mothers depend on social services or their families to care for their children as it found in a study of ….. (Hanlon et al., 2005).

Women in recovery from addictive disorders

Women with addictive disorders are less likely than men to attend treatment due to interpersonal and structural reasons (Adams et al., 2021). For example, in studies about……. lack of childcare and their household commitments, lack of transportation to treatment centers, stigma, and guilt were found as barriers to SUD treatment among women (Frazer et al., 2019; Taylor, 2010).

Some of the studies on recovery from SUDs conducted among women have identified motherhood (Brownstein-Evans, 2001), the acquisition of parenting skills (Blunt, 2009), and successful mothering (Hiersteiner, 2004) as important resources for women attempting to overcome substance addictions (Radcliffe, 2011), and a critical pathway through which women can enact their recovered identity (Gunn &

Samuels, 2020). For example, mothers who were treated in drug treatment centers in Florida stated that their children were important sources of motivation for recovery (Villegas et al., 2016).

However, other studies have underscored the complexity of motherhood during recovery from SUDs, due to these mothers' ambivalent feelings towards their family and social relations as showed in ….. (Clarke et al., 2022). Studies show that mothers who struggle with addictions want the best for their children. However, being mothers may pose a risk factor to seeking and remaining in treatment (Adams et al., 2021). Mothers may tend to avoid seeking treatment, or be more prone to relapses (Cleveland et al., 2020), out of fear of losing their children if child protection services are involved. A lack of childcare for their children while they are in treatment is another barrier to seeking treatment (Elms et al., 2018).). Mothers who suffer from SUDs experience difficulties re-establishing relationships with people outside of their drug-use social circle. They feel socially isolated and stigmatized (Litzke, 2005). Studies have indicated that these mothers are more prone to relapses (Martin, 2011). A recent systematic review of the facilitators and barriers to treatment among mothers with SUDs (Barnett et al., 2021) concluded that motherhood both hinders and promotes the motivation for seeking and remaining in treatment.

Women in recovery from gambling disorder

In comparison to men, women generally start gambling later in life (Carneiro et al., 2020),but develop gambling problems faster, in what is called a telescoping effect (Potenza et al., 2001). Women's experiences with problem gambling is associated with their social and personal characteristics; e.g., unemployment, psychological distress, and childhood abuse (Merkouris et al., 2016; Potenza et al., 2019).

Women who are excessively involved in gambling behaviors, experience gambling problems, or are diagnosed with GD and are mothers suffer a dual socio-cultural stigma. They are labeled as being disordered gamblers and as "bad mothers", since they pose a risk to their children's welfare (Gedge & Querney, 2022; Lee et al., 2010) by failing to meet traditional gender roles expectations (Lesieur & Blume, 1991). They are often portrayed by the media as anti-mothers or irresponsible madonnas (Assessment, 2022; Mark & Lesieur, 1992; Schull, 2002) who have abandoned their children because of their gambling (Darbyshire et al., 2001). Some studies have shown that their children are exposed to nutritional deficits due to these mothers' poor household functioning (Schluter et al., 2007), and to psychological shortcomings because of

their mothers' indifference and alienation (Darbyshire et al., 2001). Other studies have argued that mothers with GD are constantly concerned that their gambling problems can cause lasting damages to their children (Brown & Coventry, 1997), and they suffer from shame and guilt as a consequence (Gavriel-Fried, 2017). A qualitative study conducted in Israel showed that mothers suffering from GD were conscious of these social stereotypes as bad mothers, but that they made considerable efforts to negotiate this labeling by presenting themselves as good mothers in interviews (Gavriel-Fried et al., 2015).

In terms of women's recovery from GD, the literature has addressed several recovery related issues (Gavriel-Fried et al., 2022b; Granero et al., 2018) pointing to the specific challenges faced by women with GD during their recovery (Rogers et al., 2020), such as the need to participate in women-only treatment settings (Piquette-Tomei et al., 2007), limited accessibility to treatment centers and groups (Morvannou & Kairouz, 2021) due to family obligations (Kaufman et al., 2017).

A recent study that combined qualitative and quantitative methods explored how women and men with GD understand and employ gender during their recovery (Gavriel-Fried et al., 2022b). The authors proposed the theoretical concept of *RC in action*, which posits that individuals have their own toolkit for recovery comprised of various resources and barriers. The interplay between the resources and barriers in the RC toolkit with these individuals' socio-cultural contexts is likely to impact the individual's choice in which recovery element to use along their recovery .

The current study

This study is the first attempt to test this theoretical concept of RC in action in relation to motherhood in what is defined as a 'risk society'. Specifically, this study explored how the mothers' toolkit influences the therapeutic response of women with GD in Spain, from a RC perspective. Spain is a country characterized by its shift from a high birth rate (Gómez-Acebo et al., 2020) to one of the lowest fertility rates in the world (*Fertility Statistics*, 2022). This decline in fertility can be ascribed to social, political, and economic rather than biological factors (Douglass, 2005). For the past few decades, Spanish women have tended to postpone motherhood or not have children at all as a result of structural factors including job inequalities, the lack of affordable housing, as well as meager government support for families and specifically for mothers (Tanturri et al., 2015). Institutional feminist discourses in Spain have argued that

motherhood prevents women from developing as autonomous professional individuals. Childcare is considered a private and intimate social construction (Alvarez & Marre, 2021). Hence, Spanish women frequently choose to have children at an older age, or not have children at all (Alvarez, 2018).

This study examined the toolkit (e.g., family support, personal characteristics) of mothers with gambling problems and compared their toolkit for the recovery process (in this case relapses and dropouts) to the toolkit of childless women. The aims were to (1) compare the toolkit (e.g., sociodemographic and clinical profile) at baseline of mothers with GD vs. childless women with GD, and its effects on these women's treatment response, by assessing dropout and relapse rates; and (2) explore the resources and barriers that predict dropout and relapse in each group. We hypothesized that: (1) the RC toolkit of mothers would differ from the RC toolkit of childless women; (2) mothers in risk society would be more motivated to adhere to treatment, and therefore would have lower levels of dropouts and relapses than childless women; and (3) mothers' dropout and relapses rates would be more affected by social factors whereas childless women' dropout and relapses rates would be more affected by individual factors.

METHOD

Participants and procedure

A sample of 211 female patients diagnosed with GD in the Department of Psychiatry at a University Hospital were recruited between January 2005 and April 2019. Because women are less likely to seek treatment, in order to achieve a sufficiently large clinical sample, the data were collected over several years. All the women were referred to the Gambling Disorder Unit through general practitioners or via other healthcare professionals. Exclusion criteria were male gender, a diagnosed mental disorder (i.e., schizophrenia or other psychotic disorders) or intellectual disability.

Experienced psychologists and psychiatrists conducted the first face-to-face clinical interview. In addition to a comprehensive clinical and psychological evaluation, which included the use of the instruments described in the next section, demographic data were also obtained at the beginning of treatment. These same therapists conducted the cognitive-behavioral therapy (CBT).

The current study was conducted in accordance with the latest version of the Declaration of Helsinki. The University Hospital Clinical Research Ethics Committee approved this study, and signed informed consent was obtained from all participants.

Treatment

The CBT group treatment program examined in this study consisted of 16 weekly outpatient sessions at a University Hospital, lasting 90 min each. The CBT groups were led by an experienced clinical psychologist as well as a licensed co-therapist. To ensure treatment fidelity, the treatment providers were trained to adhere closely to the treatment manual (Jiménez-Murcia et al., 2006). The aim of this intervention was to educate patients on ways to implement CBT strategies to minimize all types of gambling behavior and eventually achieve full abstinence. The topics addressed in the treatment plan included psychoeducation about the disorder (its course, vulnerability factors, diagnostic criteria, etc.), stimulus control (money management, avoidance of potential triggers, self-exclusion programs, etc.), response prevention (alternative and compensatory behaviors), cognitive restructuring focused on illusions of control over gambling and magical thinking, emotion-regulation skills training, and other relapse prevention techniques. This treatment program has been described elsewhere (Jiménez-Murcia et al., 2006) and its short and medium-term effectiveness has been reported in other studies (Jiménez-Murcia et al., 2012; Jiménez-Murcia et al., 2007). Throughout treatment, attendance at treatment sessions, control of spending and the occurrence of relapses were recorded weekly on an observation sheet. In the present study, a relapse was defined as the occurrence of a gambling episode once treatment had begun. Dropout was defined as failure to attend three consecutive CBT sessions.

Instruments

Diagnostic Questionnaire for Pathological Gambling (according to DSM criteria) (Stinchfield, 2003)

This questionnaire includes 19 items coded in a binary scale (yes-no), originality designed for diagnosing GD according to the DSM-IV-TR (APA, 2010). The scoring of the tool was next adapted to measure DSM-5 diagnostic criteria for GD (American Psychiatric Association, 2013) by ignoring the illegal

acts criterion and fixing the cutoff score of four. This questionnaire has demonstrated very good to excellent psychometrical properties (Stinchfield et al., 2016): internal consistency (Cronbach's alpha between α=0.87 to α=0.98), temporal reliability (intraclass correlation IC=0.71for 1-week test-retest), convergent validity with external measures of the gambling severity (Pearson's correlation with the SOGS was R=0.97), and discriminative accuracy to differentiate between clinical versus population-based samples (hit rate range from 0.90 to 0.99, sensitivity range from 0.88 to 0.98, and specificity range from 0.83 to 0.99). The Spanish adaptation of the questionnaire used in this work obtained good psychometrical properties (Cronbach's alpha equal to 0.81 for general population and 0.77 for clinical sample; Jiménez-Murcia et al. 2009). In this study, this instrument was used for measure: a) the presence of the GD diagnosis based on the DSM-5 taxonomy; and b) the GD severity level, through the sum for the DSM-5 criteria.

South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987)

This 20-item screening questionnaire discriminates between probable pathological, problem, and non-problem gamblers based on the frequency and nature of gambling behavior. The Spanish validation used in this work showed excellent internal consistency (α = 0.94) and test-retest reliability (r = 0.98) (Echeburúa et al., 1994).

Symptom Checklist-Revised (SCL-90-R; Derogatis, 1992)

The SCL-90-R evaluates a broad range of psychological problems and psychopathological symptoms. This questionnaire is composed of 90 items and measures nine primary symptom dimensions: somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. It also includes three global indices: (a) a global severity index (GSI), designed to measure overall psychological distress; (b) a positive symptom distress index (PSDI), to measure the symptom intensity; and (c) a positive symptom total (PST), which reflects self-reported symptoms. This scale was validated in a Spanish population, with a mean internal consistency of 0.75 (Cronbach's alpha) (Derogatis, 2002).

Temperament and Character Inventory-Revised (TCI-R; Cloninger, 1999)

This questionnaire consists of 240 items that assess personality traits according to 7 personality factors. They are divided into four temperamental traits (novelty seeking, harm avoidance, reward dependence, and persistence) and three character traits (self-directedness, cooperation and self-transcendence). An adapted Spanish version was used. The personality dimensions demonstrated adequate reliability-validity in Spanish samples with Cronbach's alphas ranging from .77 to .84 (Gutiérrez-Zotes et al., 2004).

Other Socio-Demographic and Clinical Variables

Other demographic, clinical, and social variables related to gambling were measured during a semi-structured face-to-face clinical interview, described elsewhere (Jiménez-Murcia et al., 2006). The gambling behavior variables included the number of previous treatment attempts, the type of problem gambling, the age of onset of gambling behavior and gambling-related problems, the average monetary investment in a single gambling episode, the maximum amount bet in a single episode, and the total amount of accumulated debts. The type of game (or gambling preference) was classified into three groups, as usual in the GD research area (Bischof et al., 2016): non-strategic (betting systems involving little or no skills or decision making, with the outcome depending basically on chance [lotteries, slot-machines and bingo]), strategic (betting systems which allow individuals use their skills or knowledge that can impact on the game outcome [poker, blackjack, sports betting, …]), and mixed. In addition, the interview explored maintaining factors such as gambling to cover one's losses or to avoid negative emotional states, magical thinking and illusions of control, ritualistic behavior, the characteristics of the patient's last gambling episode prior to visiting the Unit, and the interpersonal/family consequences of gambling behavior (Gómez-Peña et al., 2012). Likewise, in this first clinical interview conducted by the psychologists and psychiatrists of the unit, each patient's pre-contemplative, contemplative, preparation, or action stage was defined (Gómez-Peña et al., 2012).

Throughout treatment, patient attendance, control of spending and gambling behavior, and the occurrence of relapses were recorded on an observation sheet. Patients were also instructed to carry out tasks such as homework in preparation for the following session. At the end of each session, these records were compared to assess the level of inter-rater agreement.

Statistical analysis

Stata17 for Windows (Stata-Corp, 2021) was used for the statistical analysis. The comparison between the groups for the sociodemographic variables, the gambling profile, the clinical state at baseline, and the motivational stage clinical implemented chi-square tests (χ^2) for the categorical variables and T-TESTs for the quantitative measures.

The comparison of the treatment outcomes involved logistic regression (dropout and relapses), and negative binomial regression (number of sessions attended, and amount of money spent in the relapses), adjusted for the covariates' age, age of onset of the gambling problems, GD severity at baseline and psychological distress at baseline.

The cumulate survival functions for the rate of dropout and relapses were subjected to Cox's regression, adjusted for age, onset of the gambling problems, GD severity and psychopathology distress. This procedure also compared the curves obtained for mothers vs. childless women.

Two predictive models were calculated to determine the risk of dropout and relapses during the treatment, with stepwise logistic regression. The list of potential predictors included the sociodemographic variables (age, levels of education, civil status, employment, and social position), age at onset of gambling problems, game preference, GD severity (SOGS-total and debts related to gambling activity), psychological distress at baseline (SCL-90-R GSI), motivation stage profile, family support and personality profile (TCI-R scales). The Hosmer-Lemeshow test was used to assess the goodness-of-fit and the Nagelkerke's coefficient was employed to verify the global predictive capacity.

In this study, the estimation of the effect size of the relationships was obtained with the standardized Cohen's coefficients for the comparison of proportions (Cohen's-*h*) and means (Cohen's-*d*). For these coefficients, thresholds 0.50 and 0.80 were considered to represent a mild-moderate and a large-high effect size respectively (Kelley & Preacher, 2012). In addition, an increase in the type-I error due the use of multiple statistical tests was controlled with Finner's method, a familywise error procedure (k-FWER) (Finner, 1993). Controlling the *k*-FWER supposes that a fixed number of *k-1* of erroneous rejections is

tolerated, and under the assumption that all the null hypotheses tested are equal, controlling the FWER at level α is equivalent to the problem of combining *p*-values to obtain a null-hypothesis single testing fixed at level α. Finner's method consists of sorting from smallest to largest the p(unadjusted)-values and next applying the next correction: p(adjusted) = (1 – (1-p(non-adjusted))^(total tests / position within the ordered tests).

RESULTS

Comparison of sociodemographic and clinical state at baseline

Table 1 depicts the descriptive features of the sample: sociodemographic variables, age at onset and duration of GD, gambling preference, and perceived family support for the GD therapy. Most participants reported low levels of education, were either single or married, and came from relatively low socioeconomic backgrounds. The mean age was approximately 49, and mean age at onset and duration of the GD were roughly 38 and 6 years, respectively. Most women indicated a preference for non-strategic games and reported perceiving support for treating GD related problems.

--- Insert Table 1 about here ----

Compared to the group of childless women, mothers reported lower levels of education, a higher likelihood of being married and belonging to more disadvantaged socioeconomic groups, were older, and had a later age of onset of gambling-related problems.

Table 2 compares both groups for psychological state (SCL-90-R) at baseline, personality traits (TCI-R), GD severity and motivational stage. The only differences between mothers and childless women were the somatization score (higher mean score for mothers) and the motivational stage (higher likelihood being in advanced stages in mothers).

--- Insert Table 2 about here ----

Analysis of dropout and relapses

The first part of Table 3 shows the results of the logistic regressions (adjusted for age, onset, GD severity and psychopathological distress at baseline) comparing the risk of dropout and relapses during treatment. No differences between mothers and childless women were found for dropout from the program although mothers reported a lower cumulate incidence of relapses. The results for the negative binomial regressions in Table 3 also indicated that the amount of money spent during episodes of relapse (mean euros per gambling-episode and total euros in relapses) was lower among mothers.

--- Insert Table 3 about here ----

Figure 1 shows the cumulate survival functions for the rate of dropout and relapses. After adjusting for age, age at GD onset, GD severity, and psychopathological distress at baseline, the toolkit for the recovery of mothers compared to childless women was not related to dropouts: the dropouts had a similar trend in both groups, and all occurred during the first seven weeks of the intervention. However, childless women had a higher number of relapses, and these episodes started earlier in the intervention.

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Table 4 depicts the results of the models selecting the best predictors for the risk of dropout and relapses. Separate stratified models were obtained for the subsamples of mothers and childless women, based on the potential moderating role of motherhood in the identification of the predictors. In the group of childless women, the risk of dropout was higher for women with lower levels of harm avoidance and self-directedness. In this subsample, the risk of relapses was higher for women from lower SES women with a more severe psychopathological condition, lower GD severity levels and lower cooperativeness scores.

--- Insert Table 4 about here----

For mothers, higher risk of dropout was predicted by lower SES and less family support. The likelihood of relapses was higher for women with fewer years of education, higher GD severity, and an absence of debts related with the gambling activity.

DISCUSSION

The findings can best be accounted for through a combination of two theoretical lenses. The first is risk society (Beck, 1992; Giddens, 1999) and the individualized society (Beck & Beck-Gernsheim, 2002) under the neoliberal regime (Fine & Saad-Filho, 2017), and the second is the notion of *recovery capital in action* (Gavriel-Fried et al., 2022b).

The mothers in this study were older than the childless women. They started gambling at an older age, tended to be married, came from lower socioeconomic backgrounds, were less educated, and more prone to somatization. The sociodemographic characteristics of these mothers are consistent with a series of studies on women's education and fertility rates in different countries and sub-national regions in Europe (Impicciatore & Tomatis, 2020; Nisén et al., 2021) which found a negative association between motherhood and education. Women with higher levels of education who pursue a career delay or perhaps even forego maternity to avoid what is known as the 'child penalty' (Esping-Andersen, 2016). Mothers, compared to childless women, tend to be engaged in the everyday life of mothering and caring for their children (Budds et al., 2017). At times conflict between family and career results in leaving the labor market (Arora & Kumari, 2021), lower overall wages (Abendroth et al., 2014; Cukrowska-Torzewska & Matysiak, 2020), and lower levels of well-being (Keldenich, 2022). Once their children are school age and they do not spend the bulk of their time caring for them, or when their children are grown (Palmer du Preez et al., 2019), mothers are described as experiencing the "empty nest syndrome" (Park & Mendoza, 2022). Previous studies in the gambling field have linked the empty nest with gambling behaviors and found that women often use gambling behavior as a maladaptive coping strategy in the face of negative emotions (Schull, 2002) to fulfill their lives (Casey, 2006), feel happiness (Casey, 2008), and compensate for years spent in parenting (Thomas, 1995). Calling in mind Betty Friedan's seminal work "The feminine mystique" (1963), the problems that these women experience are typical for mothers who experience symptoms of an illness without a disease (Firoozabadi et al., 2015; Hotopf, 2004), a mental condition that might be characterized in the psychiatric discourse as somatization (Kleinman, 2020).

In the context of a risk society, individuals aspire to control the future, and in particular to manage the potential impact of present practices on future events (Giddens, 2006). The mothers in the current study

were more motivated to change than childless women in terms of motivational stage score. They were less likely to experience relapses, and during their relapse episodes they spent less money on gambling. These findings are consistent with studies suggesting that mothers are more motivated to break out of the maladaptive cycle of addiction (Villegas et al., 2016), due to their fear of the negative consequences for their children's future (Seay & Kohl, 2015) who face "packages of risk" (Giordano & Copp, 2015). For example, these children may develop problematic behaviors (Azar & Hetzel-Riggin, 2020), physical health problems (Dowling et al., 2014), and their overall wellbeing may be negatively affected (Suomi et al., 2022).

Based on these findings, we deduce that in this socio-cultural context of a risk society, the mothers with GD in the current study were concerned about their children's future and they aimed to minimize the "packages of risks" that their children might face if they continued in the cycle of addiction. Thus, they had fewer relapses than childless women while attending treatment for their addiction and spent less money on gambling when they experienced relapse episodes.

The trends in dropout rate, however, were similar for the dropouts of mothers and childless women, and all occurred during the first seven weeks of the intervention. These findings are consistent with studies on other behavioral addictions, especially compulsive buying-shopping disorder, in which lower relapse rates were observed in mothers, but similar rates of dropout were observed with the non-mother group (Mestre-Bach et al., 2022). Future studies should further explore these findings, perhaps by using qualitative methods.

Finally, the findings provide the first empirical evidence confirming the theoretical concept of *RC in action* (Gavriel-Fried et al., 2022b), by illustrating two pivotal aspects of this concept. The first is that the resources and barriers in the recovery toolkit of individuals recovering from addictions interact with different socio-cultural contexts and this interplay can enhance or hinder the recovery process. In the current study, when mothers in a risk society (Smeyers, 2010) have gambling problems , those with more severe GD were more likely to experience relapses. In contrast, in the case of a childfree lifestyle under a neoliberal regime (Harrington, 2019), childless women with more severe GD were less likely to experience relapse episodes. According to the RC in action theoretical concept both mothers and childless women had the same

recovery resources in their daily lives and encountered the same barriers but depending on the socio-cultural context they choose different recovery elements. This interplay had different outcomes during the recovery process. Future studies should explore how mothers vs. childless women define and legitimate different "lines of action" (Swidler, 1986) based on their "recovery toolkit" in specific socio-cultural contexts. Specifically, researchers should inquire how mothers in a risk society vs. women living a childfree lifestyle draw upon available recovery resources, face diverse barriers, organize their actions, and explain their choices during this process in different countries and socio-cultural contexts; e.g., in Eastern and Southern European countries compared to Northern European countries (Coale & Cotts Watkins, 2017).

The second, individuals from different socio-cultural backgrounds recognize, appreciate, understand, and employ different resources in the recovery process, and they reject or do not recognize other available resources. For example, consistent with previous studies (Gavriel-Fried & Damari, in press), the mothers in the current study relied on family support in their recovery process, while for the childless women, personal traits such as higher levels of harm avoidance and self-directedness predicted lower rates of dropout. These findings are consistent with the ideological notion of the self-focused and self-sufficient individual living under the neoliberal regime (Beck & Beck-Gernsheim, 2002) who creates his or her "risk biography" based on an individual calculation of possible risks for his or her individual future (Peterson, 2015). The childless women in the current study living a childfree lifestyle in a Spanish context of lower rates of fertility and an ideology of individual fulfillment (Lebano & Jamieson, 2020), may rely more upon themselves to secure their individual future, and consider personal risks as motivating factors and resources for recovery from GD.

Implications for practice and policy

The findings suggest that for both mothers, and childless women, the socio-cultural context has a profound effect on the recovery process. Hence, policy makers and therapists should be aware of the socio-cultural contexts of individuals suffering from addictions and the interplay between these contexts and the resources and barriers in the individuals' recovery toolkits. In therapy, women (mothers and childless women) should be encouraged to recognize, understand, and employ the full range of available resources for

their recovery, by taking into consideration their needs as well as the socio-cultural constructs that can enhance or hinder a holistic recovery from addictions. Specifically, women should be aware to the logic and social massages they encounter and internalize in the wider context of a neo-liberal regime of motherhood in risk society. In this context therapists should use social awareness as one of the RC elements that enlarge the women's toolkit. Hence, for women with GD who are mother's awareness to the potential risk of theirs children, and recognition and understanding the meaning of being a mother in risk society, would be motivated to stay in treatment and enhance their recovery. For childless women having gambling problems risks their ability to maintain free life. We also recommend to policymakers to obligate the gambling industry to integrate the concept of future risks inherent in gambling as part of their responsible gambling policy.

Limitations and further directions

The present study was conducted in Spain, a country characterized by low fertility rates (Alvarez, 2018), and substantial cuts to welfare support (Rajmil et al., 2015). Future studies should replicate this study in different socio-cultural contexts; for example, in countries with a pro-natalist culture such as Israel (Anson & Meir, 2017), and in countries that offer a better welfare package such as government funding and institutional support to mothers and families as found in Scandinavian countries (Eydal et al., 2018). Furthermore, in the present study, features associated with motherhood, such as the number of children or the age of the children were not controlled for, and women participated in the study only if they sought treatment. Hence the results are not generalizable to women with GD who do not seek treatment. Future studies should consider exploring this issue on women with GD who didn't actively approach treatment, and screen for these social characteristics as well.

CONCLUSION

The findings highlight the effects of socio-cultural context on the recovery process and constitute the first empirical evidence toward validating the concept of recovery capital in action. While the toolkit for recovery entails the same resources and barriers (Gavriel-Fried et al., 2022a), individuals understand, recognize, and employ them differently according to their socio-cultural contexts (Gavriel-Fried et al.,

2022b). The results illustrate the differences in the recovery toolkit of mothers and childless women and suggest that in the context of a risk society, mothers cope differently with the challenges and obstacles during the recovery process than women living a childfree lifestyle under the neoliberal regime. They hint that to some extent mothers may be better equipped for recovery from GD.

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Table 1 Descriptive features of the sample

		Total sample (*n*=211)		Motherhood=No (*n*=65)		Motherhood=Yes (*n*=146)			
		n	*%*	*n*	*%*	*n*	*%*	*p*	|*h*|
Education level	Primary	130	61.6%	33	50.8%	97	66.4%	**0.048***	0.32
	Secondary	69	32.7%	29	44.6%	40	27.4%		0.36
	University	12	5.7%	3	4.6%	9	6.2%		0.07
Civil status	Single	91	43.1%	49	75.4%	42	28.8%	**<0.001***	**1.06†**
	Married -	79	37.4%	10	15.4%	69	47.3%		**0.73†**
	Divorced or separated	41	19.4%	6	9.2%	35	24.0%		0.40
Employment	Unemployed	103	48.8%	28	43.1%	75	51.4%	0.266	0.17
	Employed	108	51.2%	37	56.9%	71	48.6%		
SES	Mean-high or high	9	4.3%	3	4.6%	6	4.1%	**0.042***	0.02
	Mean	25	11.8%	11	16.9%	14	9.6%		0.22
	Mean-low	34	16.1%	15	23.1%	19	13.0%		0.26
	Low	143	67.8%	36	55.4%	107	73.3%		0.38
		Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*p*	|*d*|
Age in years		49.08	12.35	42.75	11.56	51.90	11.66	**<0.001***	**0.79†**
Age at onset of GD		37.54	12.09	32.66	11.99	39.71	11.53	**<0.001***	**0.60†**
Duration of GD		5.71	5.70	4.63	5.19	6.19	5.87	0.066	0.28
		n	*%*	*n*	*%*	*n*	*%*	*p*	|*h*|
Gambling type	Non-strategic	180	85.3%	54	83.1%	126	86.3%	0.748	0.09
	Strategic	10	4.7%	3	4.6%	7	4.8%		0.01
	Mixed	21	10.0%	8	12.3%	13	8.9%		0.11
Family support for therapy	*No*	71	33.6%	18	27.7%	53	36.3%	0.222	0.19
	Yes	140	66.4%	47	72.3%	93	63.7%		

Note. *Bold: significant comparison (.05 level). †Bold: effect size into the mild-moderate to large-high range.

Table 2 Between group comparison for clinical profile and motivational stage (baseline)

		Motherhood=No (*n*=65)		Motherhood=Yes (*n*=146)			
Psychopathology (SCL-90R)		*Mean*	*SD*	*Mean*	*SD*	*p*	|*d*|
Somatization		1.46	0.79	1.72	0.94	**0.049***	0.30
Obsessive/compulsive		1.57	0.84	1.57	0.83	0.959	0.01
Interpersonal sensitive		1.41	0.75	1.45	0.92	0.752	0.05
Depressive		2.08	0.85	2.17	0.91	0.510	0.10
Anxiety		1.51	0.84	1.56	0.94	0.692	0.06
Hostility		0.98	0.74	1.15	0.86	0.175	0.21
Phobic anxiety		0.87	0.82	0.98	0.97	0.416	0.13
Paranoid Ideation		1.17	0.77	1.31	0.83	0.233	0.18
Psychotic		1.09	0.66	1.23	0.80	0.213	0.19
GSI score		1.45	0.67	1.57	0.77	0.300	0.16
PST score		56.20	18.16	56.86	18.52	0.809	0.04
PSDI score		2.19	0.54	2.31	0.62	0.187	0.20
Personality traits		*Mean*	*SD*	*Mean*	*SD*	*p*	|*d*|
TCI-R Novelty seeking		110.75	13.00	109.29	12.03	0.428	0.12
TCI-R Harm avoidance		111.51	15.30	110.43	16.07	0.649	0.07
TCI-R Reward dependence		99.18	11.50	102.27	13.37	0.108	0.25
TCI-R Persistence		104.32	17.24	103.99	17.53	0.899	0.02
TCI-R Self-directedness		118.32	19.58	117.67	17.49	0.810	0.04
TCI-R Cooperativeness		132.22	11.52	133.36	14.07	0.567	0.09
TCI-R Self-transcendence		66.68	14.44	69.80	15.68	0.173	0.21
GD symptom severity		*Mean*	*SD*	*Mean*	*SD*	*p*	|*d*|
DSM5 total criteria		6.75	1.90	6.98	1.60	0.374	0.13
SOGS total score		10.09	3.41	10.23	3.08	0.778	0.04
Bets gambling-episode (max, euros)		561.8	891.0	528.3	978.5	0.814	0.04
Bets gambling-episode (mean, euros)		65.8	92.8	73.4	118.3	0.647	0.07
GD related financial problems		*n*	*%*	*n*	*%*	*p*	|*h*|
Debts due to GD	Yes	31	47.7%	62	42.5%	0.480	0.11
	No	34	52.3%	84	57.5%		
Motivational stage		*n*	*%*	*n*	*%*	*p*	|*h*|
Pre-contemplative		4	6.2%	8	5.5%	**0.037***	0.03
Contemplative		52	80.0%	98	67.1%		0.30
Preparation		8	12.3%	30	20.5%		0.22
Action		1	1.5%	10	6.8%		0.27

Note. SD: standard deviation. *Bold: significant comparison (.05 level).

†Bold: effect size in the mild-moderate to large-high range.

Table 3 Comparison of the therapy outcomes (adjusted for age, onset, GD severity and psychological distress)

		Motherhood=No (*n*=65)		Motherhood=Yes (*n*=146)			
		n	%	n	%	*p*	|*h*|
[1]Dropout during therapy	Yes	27	41.5%	62	42.5%	0.780	0.02
	No	38	58.5%	84	57.5%		
[1]Relapses during therapy	Yes	27	41.5%	49	33.6%	**0.049***	0.17
	No	38	58.5%	97	66.4%		
		Mean	SD	Mean	SD	*p*	|*d*|
[3]Number of sessions attended		9.02	4.79	8.90	4.87	0.935	0.03
[3]Number of relapses		1.30	2.55	0.90	2.42	0.141	0.16
[3]Mean euros (gambling-episode)		54.5	183.0	31.2	108.8	**0.009***	0.16
[3]Total euros in relapses		159.5	419.8	47.9	179.3	**<0.001***	0.35

Note. [1]Logistic regression. [2]a poor CBT response is defined as the presence of relapses or dropout.

[3]Negative binomial regression. SD: standard deviation. *Bold: significant comparison (.05 level).

[†]Bold: effect size in the mild-moderate to large-high range.

Table 4 Predictive models for the risk of CBT responses: stepwise logistic regressions stratified by motherhood

		Subsample: Childless women *(n=65)*							
Criterion	*Predictors*	*B*	*SE*	*p*	*OR*	*95%CI OR*		*H-L*	R^2
Dropout	TCI-R Harm avoidance	-0.047	0.024	0.036	0.954	0.911	0.999	0.978	0.117
	TCI-R Self-directedness	-0.039	0.019	0.024	0.962	0.927	0.997		
Relapses	SES (low)	0.753	0.370	0.026	2.123	1.028	4.386	0.962	0.267
	GD severity (SOGS-total)	-0.185	0.091	0.032	0.831	0.695	0.993		
	Psychopathological distress	1.006	0.516	0.033	2.734	1.001	7.511		
	TCI-R cooperativeness	-0.056	0.028	0.033	0.945	0.895	0.999		
		Subsample: Mothers *(n=146)*							
Criterion	*Predictors*	*B*	*SE*	*p*	*OR*	*95%CI OR*		*H-L*	R^2
Dropout	SES (low)	0.471	0.233	0.033	1.601	1.014	2.530	0.711	0.118
	Family support	-1.087	0.363	0.002	0.337	0.165	0.687		
Relapses	Education level (high)	-0.978	0.375	0.004	0.376	0.180	0.785	0.299	0.136
	GD severity (SOGS-total)	0.185	0.068	0.004	1.203	1.054	1.374		
	Debts due to the GD	-0.797	0.402	0.042	0.451	0.205	0.991		

Note. List of potential predictors: socio-demographics (education, civil status, employment status, social position index, age), age at onset of GD, GD subtype, GD severity (SOGS-total and debts related to gambling activity), psychopathological distress (SCL-90R GSI), motivation stage, family support and personality traits (TCI-R scores). H-L: Hosmer-Lemeshow test (*p-value*). R2: Nagelkerke's pseudo R-squared coefficient.

Figure 1

Cumulate survival function for dropout and relapse rates (Cox's regression adjusted for age, age at onset of GD, GD severity and psychopathological distress)