

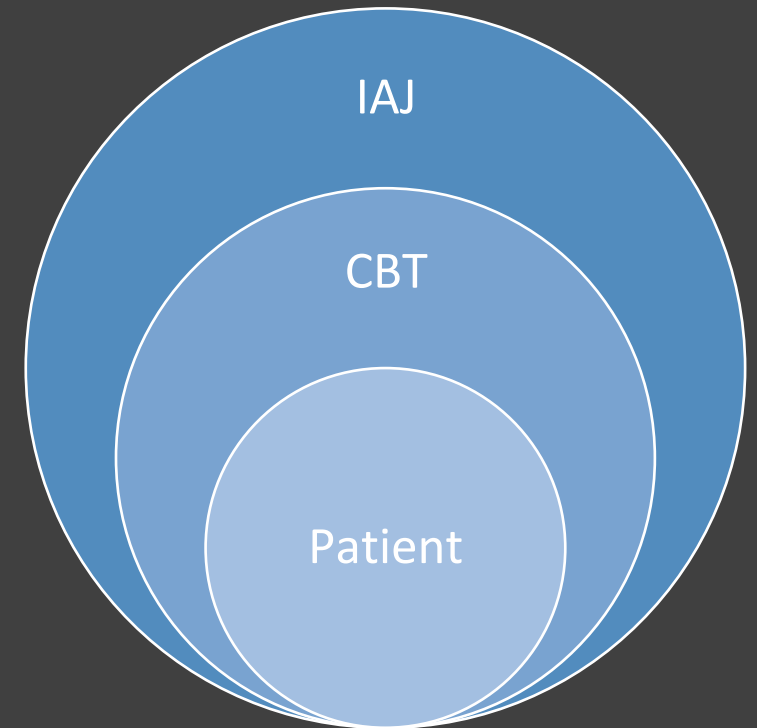


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Impact of CBT based treatment and therapeutical
contract on problem gambler treatment

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BACKGROUND

STUDY AIM

METHOD

RESULTS

DISCUSSION

SUGGESTIONS

LIMITATIONS

BACKGROUND

- Gambling disorder (both online and offline) is a **generalised public health problem with scarce treatment efficacy studies.**
- It incurs personal and family costs (e.g. problems with relationships, communication, finances and work) associated with psychiatric comorbidity (e.g. depression, anxiety, personality disorders) whether in at-risk or disordered gamblers (DG).
- Cognitive Behavior Therapy (CBT) shows good results in various areas related to behavior addictions (Patrão & Sampaio, 2016).
- As far as we know, **there are no CBT intervention studies using Portuguese gamblers** as a sample except for the previous one done by IAJ with a sample of 70 problem gamblers.

BACKGROUND



Portugal: National prevalence by SICAD using SOGS

📅 2012:

- Disordered gambling	= 0,3%	=	(+- 24.000 ?)	
- At-risk gambling	= 0,3%	=	(+- 24.000 ?)	Total = +- 48.000

2017

- Disordered gambling	= 0,6%	=	(+- 48 000 ?)	
- At-risk gambling	= 1,2%	=	(+- 96 000 ?)	Total = +- 144.000

- Portugal follows other European and “Western countries” in that it shows very similar results concerning the overall increase of gambling, both online and offline (i.e. prevalence of problem gambling, predictors, comorbidities) (Hubert, 2015).
- Covid pandemics contributed to the rise of persons gambling and **to the rise of PG but treatment possibilities/facilities(on/offline) didn't augment in the same proportion. One more reason for rising treatment efficacy levels.**
- We have little evidence of what works in Portugal.

BACKGROUND



- The Portuguese Gambler Support Institute (IAJ) is a private and independent organization centered on problem gambling treatment, helplines, training, supervision and research.
- The IAJ started to develop an individual intervention protocol, based on CBT techniques, that has been applied to online and offline gamblers since 2006 (Hubert, 2016).
- This study is ongoing, produced voluntarily by IAJ psychologists (4) and Nottingham Trent University (1) without any funding and we expect to have final data by the end of 2022.

STUDY AIM

This study aims to test **the efficacy** of a:

- **(CBT)** Cognitive Behavioral Therapy **combined with**
- **(TC)** an initial therapeutical contract with variables like; gambling abstinence, self-exclusion, limited access to money, psychotherapy sessions for problem gambler and significant others, Gamblers Anonymous attendance, therapeutical exercises, pre-determined consequences if relapse, among others
- **(PG)** in a Portuguese outpatient treatment center for Problem Gamblers and trying to better establish a
- **(RPP)** Relapse Prevention Program

METHOD

Procedure: The 24 participants were voluntarily recruited by the IAJ and fulfill an:

A) evaluation protocol/questionnaire before the CBT/TC intervention right **after the first session** (moment 1) and

B) the second evaluation after the intervention (**12 to 20 sessions-** moment 2) .

This is agreed and embodied in a Therapeutic Contract during their first session.

➤ **Exclusion factors:** Having: less than 18, severe psychiatric disorder, done previous treatments in IAJ, having less than 12, or more than 20, sessions.

METHOD



During treatment, the central focus was on the following:

a) Therapeutic Contract + for client and family

b) CBT,

- Session 1-3: strategies regarding relationships with significant others, **life and gambling history, beliefs and cognitive distortions, behavior and patterns of gambling, triggers**, coping with urges,
- Session 4-7: **life skills** development like: **assertiveness, decision making**, management of stress and emotions communication, **building support network**, pre-symptoms of relapse,
- Session 8-12: patterns of behaviors, **feelings**, values and **general positive vs negative beliefs**, awareness, adopt new perspectives and attitudes,
- 12 and more: **abstinence maintenance** through working life skills, **relapse prevention, goals**, relaxation techniques, family sessions, coping with personality traits,

METHOD



Therapeutic Contract for 6 months	Goals/Guidelines		
	Yes	No	Maybe
1) Perform and comply with a debt repayment plan			
2) Total abstinence from any kind of (money) gambling			
3) Avoid people, places and situations related to gambling			
4) Self-exclusion from physical or virtual gambling (facilities/sites)			
5) Limit/control access to money /cards/checks, etc.			
6) Having significant others/family involved in the treatment			
7) Participate in individual and group psychotherapy sessions			
8) Read and write suggested therapeutic exercises			
9) Participate in meetings of self-help groups (Gamblers Anonymous groups)			
10) Exercise regularly (at least 3 x week)			

Consequence chosen by patient, if relapse or failure to fulfill contract terms during treatment:

Examples given: go to inpatient treatment, do not see the grandchildren, nor having the mobile, etc.

- 1) _____
- 2) _____
- 3) _____

Signature: _____

Date: _____

Sample Characterization

Participants – 24

Age: 35

SD – 14,62

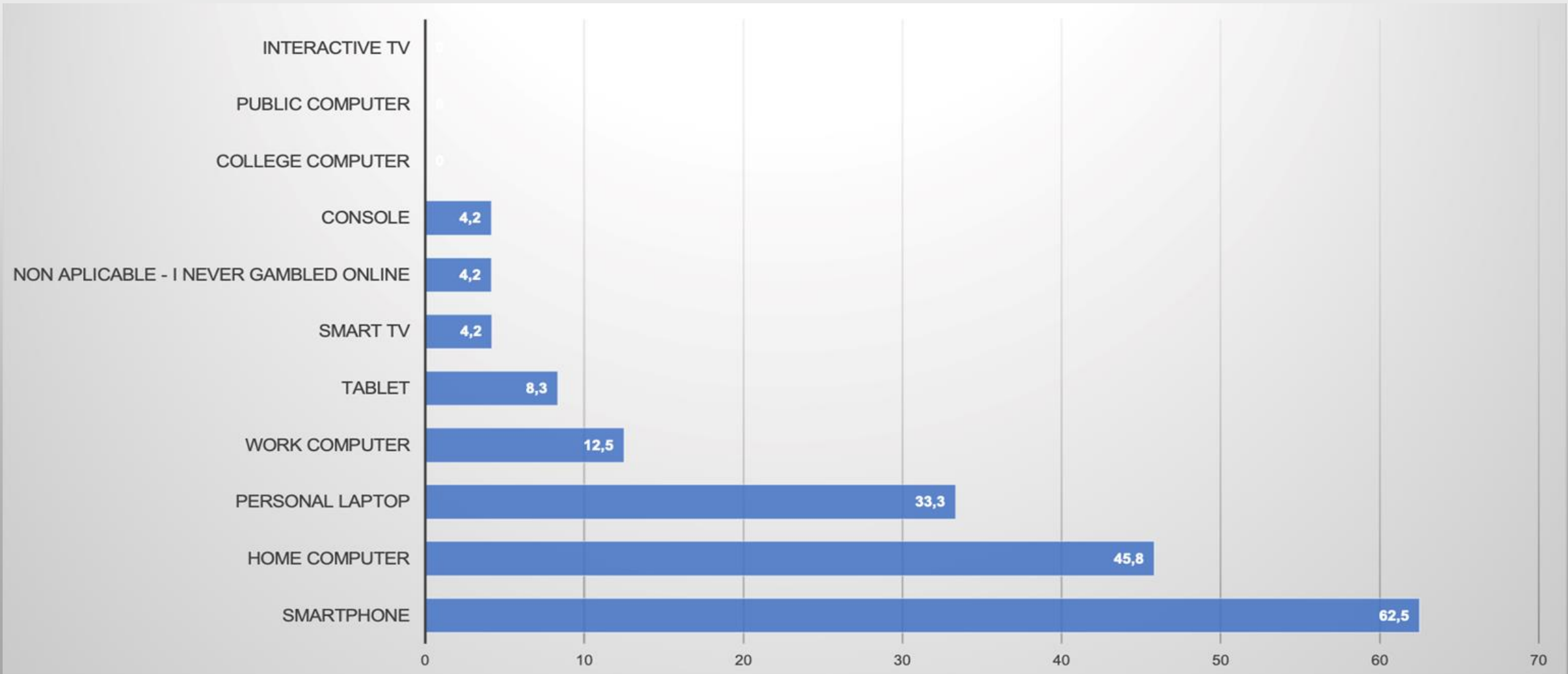
Min -19; Max – 70;

Descriptive statistics	Frquency	Percent%
Gender Male	21	87,5%
Female	3	12,5%
Employed	15	62,5%
Unemployed	9	37,5%
Education less than 10-12 years (no license)*	14	58,4%
more than 10-12 years (license or more)*	6	25%

* 4 missing values

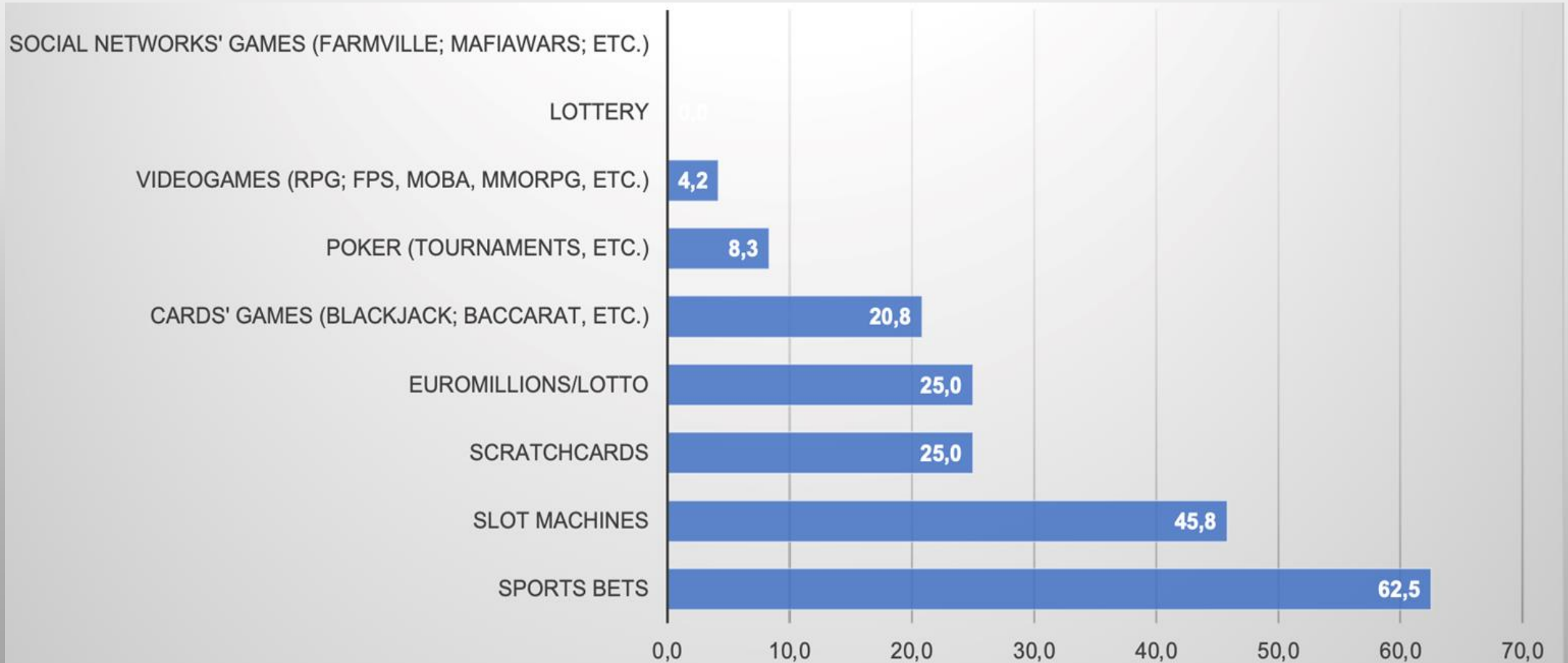
Sample Characterization

Which devices do you mainly use for online gambling? %



Sample Characterization

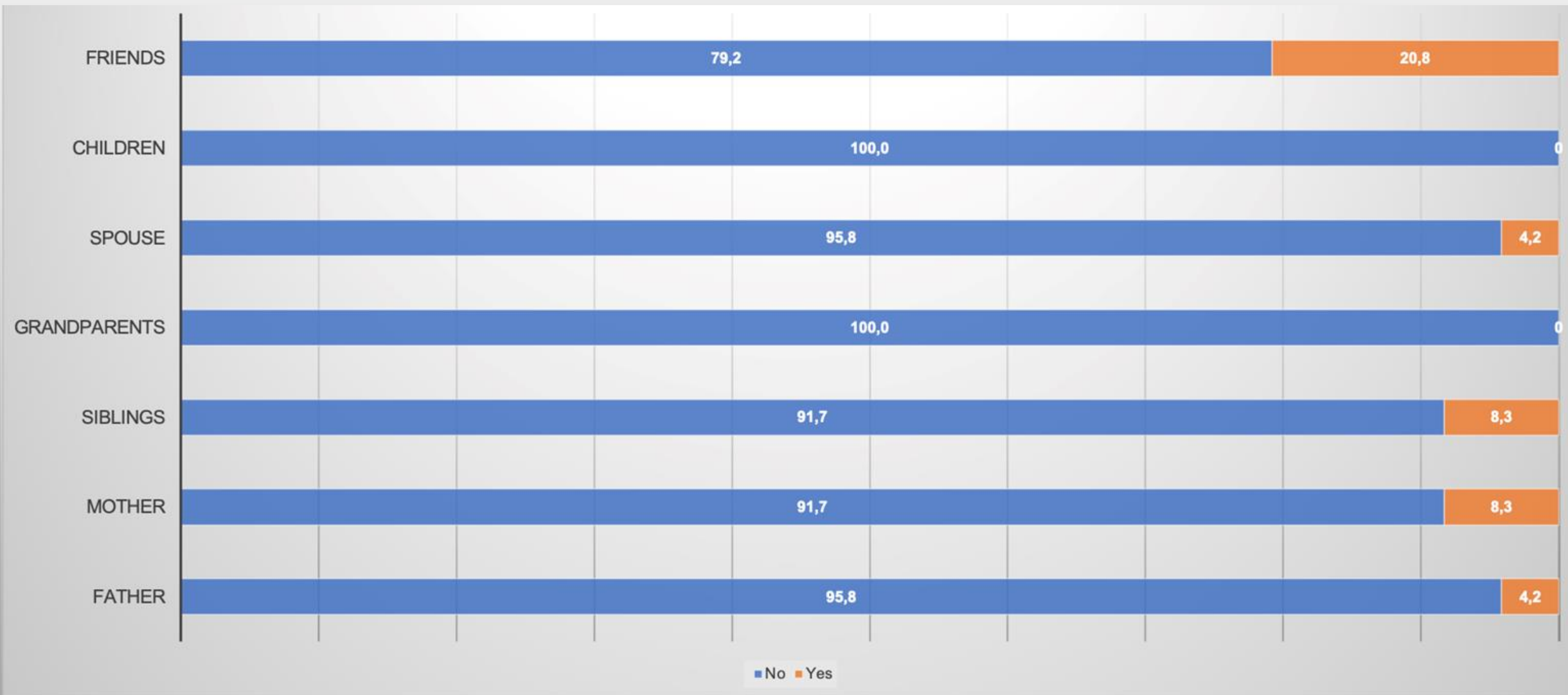
Which of these games did you engage in the most during the past year? %



Sample Characterization



Which of the following people have gambling related problems? %



METHOD



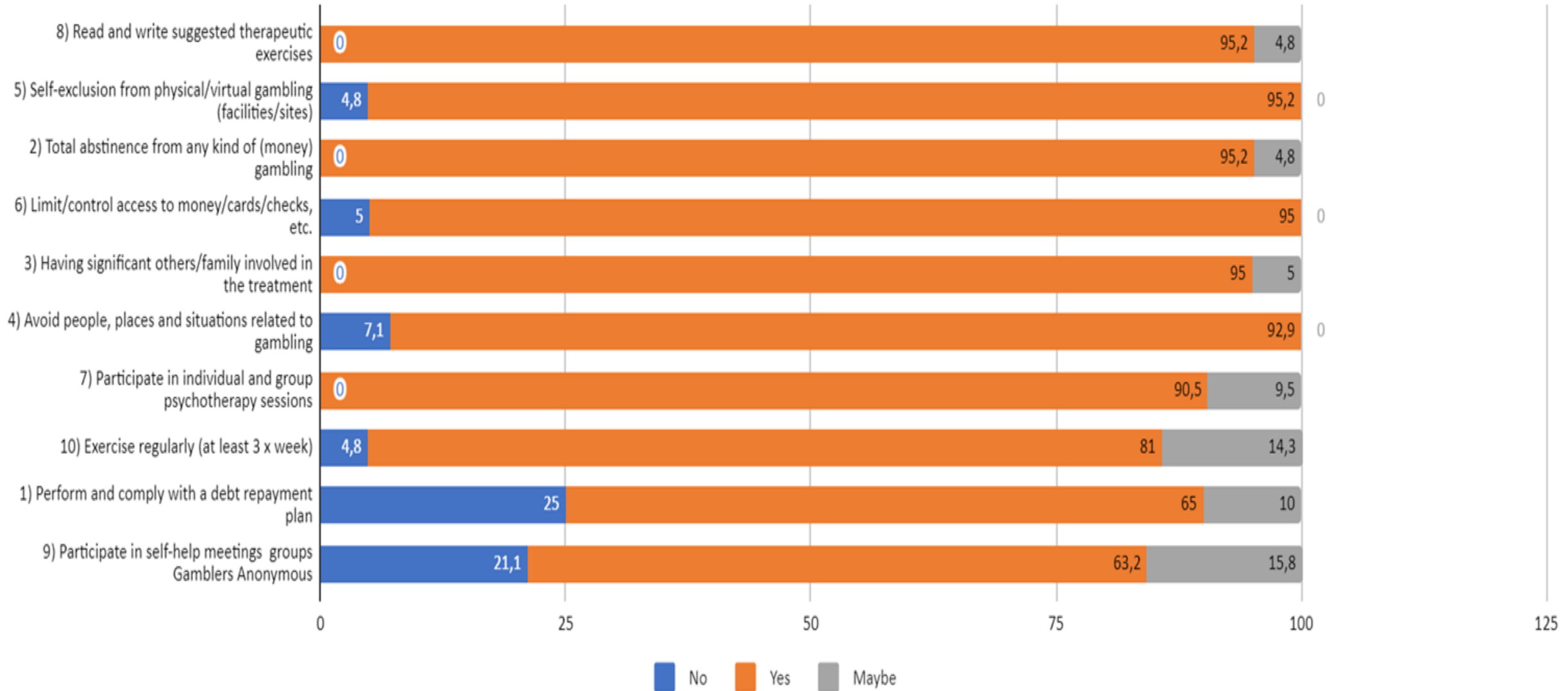
Instruments:

- 1- The evaluation protocol: Sociodemographic and Gambling Behavior Questionnaire (Hubert, 2015);
- 2- Therapeutic Goals Contract (Hubert, 2010)
- 3) **SOGS** (Lesieur & Blume, 1987) + **DSM-5** (APA,2013) for disorder gambling
- 4) BSI The Brief Symptom Inventory, **short version of the SCL-R-90** (Derogatis, 1977) covering wide diversity of symptoms,
- 5) BIS – The Barratt **Impulsiveness** Scale (BIS-11; Patton et al., 1995) designed to measure impulsivity,
- 6) WHOQOL-BREF - a shorter version of the WHOQOL-100 developed by the World Health Organisation covering four domains for **quality of life**: Physical health, Psychological, Social relationships and Environment,
- 7) EPQ-R short scale- The **Eysenck Personality Questionnaire**- Revised Short Scale is a 48 item-self-report questionnaire. The Portuguese version (Almiro, P.A. & Simões, M. R., 2013) is composed by 70 items and contains a fourth dimension, measuring Lie/Social Desirability scale (L), and
- 8) EDS 20 (Simões, Almiro & Sousa, 2014) is an unidimensional **social desirability scale**, with 20 items.

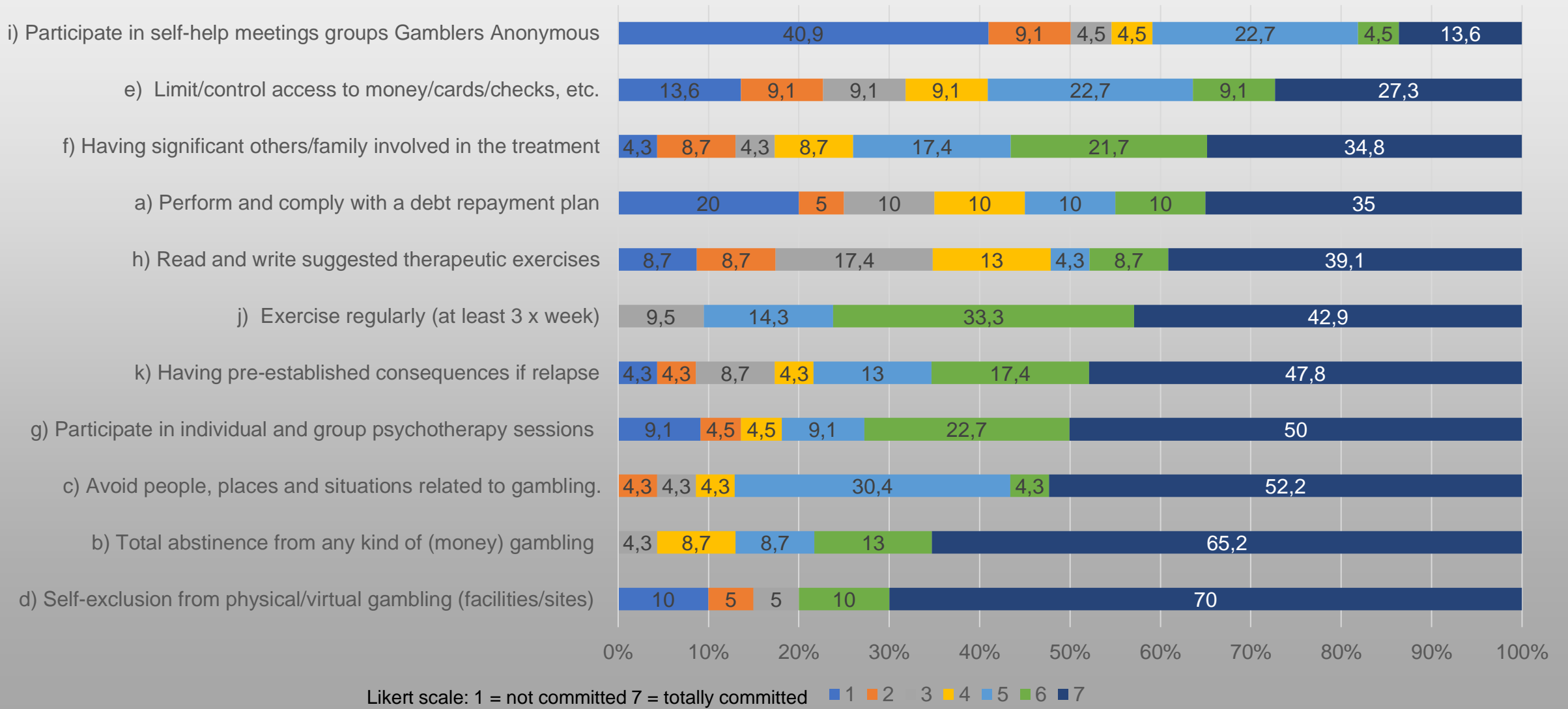
Results: Abstinent vs relapsed

- Average number of psychotherapy sessions = 16
- Total abstinence from gambling = 19 (74%)
- Relapsed = 5 (26%) and kept coming to sessions...
- Good results but nevertheless the **sample is still too small** to establish conclusions and we know how **volatile** abstinence vs relapse can be.

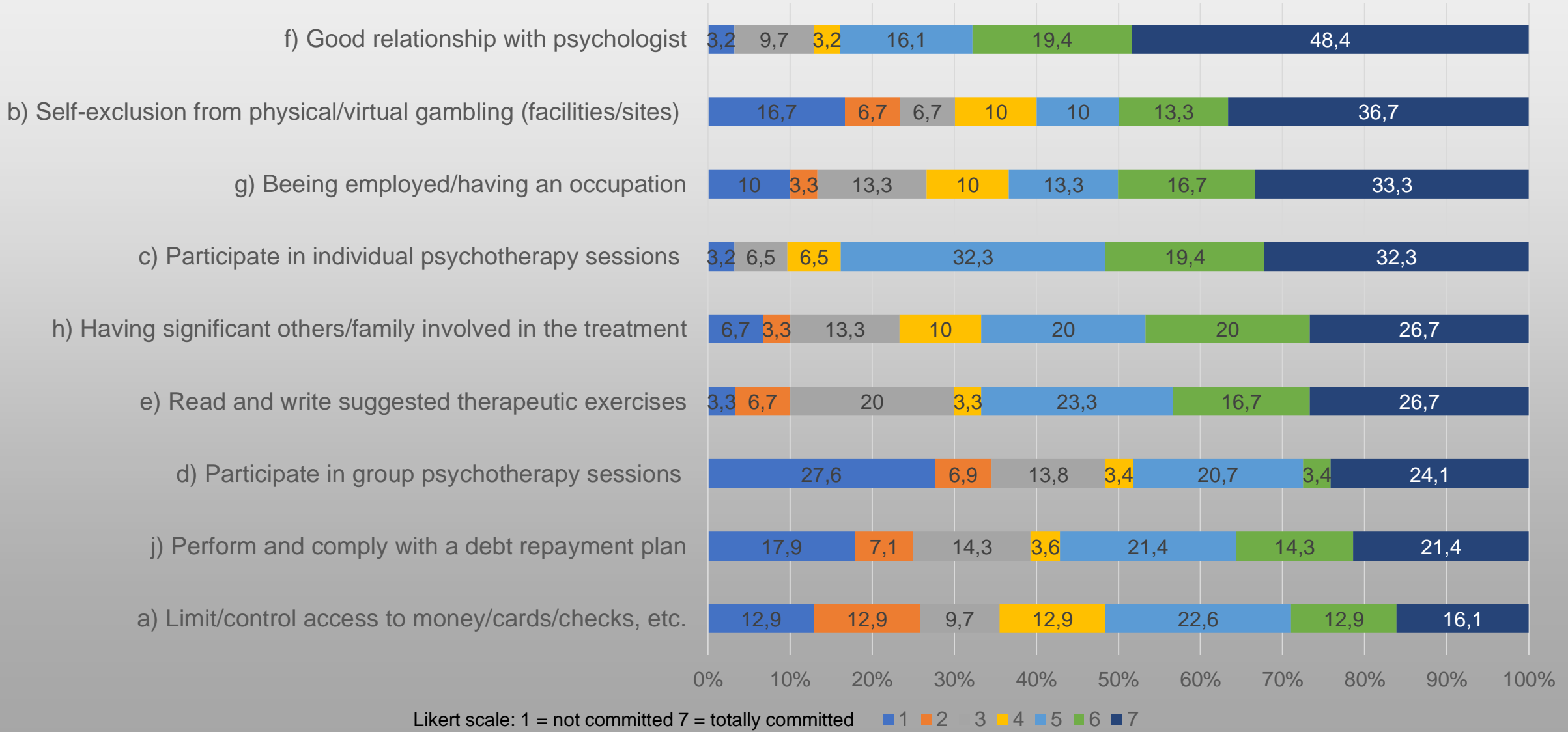
Therapeutic Contract Agreement



During the treatment, how do you rate your commitment to the previous suggestions of TC in %?



What was more beneficial to your treatment?



Therapeutical Contract (Moment 1) correlation treatment impact (Moment 2)



Therapeutical Contract Moment 1	Correlation	Impact of treatment Moment 2
<u>Agreed to total abstinence</u>	with	Problems with alcohol p=.040*;R=.467
	with	Drugs p=.000***;R=.792
	with	Addictive behaviours P=,000***;R= .792
	with	Depression p=,026*;R=,523
	with	Peer pressure to relapse p=.005**;R=.619
	with	Legislation that facilitates gambling P=.034*;R=488
	with	Culture that facilitates playing p=.048*;R=.459
	with	Willingness to play EuroMillions p=,000***;R=1
	with	Willingness to play scratchcards p=,000***;R=1
<u>Agreed to join Gamblers Anonymous</u>	with	Difficulties with parents in treatment p=.011*;R=.602
	with	Participate in group therapy P=.041*;R= .500

Therapeutical Contract (Moment 2) correlation treatment impact (Moment 2)



Avoided people, places and situations

- with Difficulties in the profession $p=,014^*$; $R= (-.614)$
- with Difficulties with tobacco $p=,043^*$; $R=.0446$
- with **Need for medication** $p=,012^*$; $R=, (-551)$
- with **Positive to have done physical exercise** $p=,021^*$; $R=.448$
- with **Having practiced hobbies** $p=,007^{**}$; $R=.555$
- with Pressure with games like slots $p=,034^*$; $R= (-634)$,
- with Pressure with games like poker $p=,024^*$; $R= (-775)$
- with Pressure with games like roulette $p=,024^*$; $R= (-775)$

have been in abstinence

- with Frequency of Anonymous Gamblers $P=.019^*$; $R=.519$

Had a relapse

- with **Difficulties in facing others** $P=.000^{***}$; $R=.979$
- with **Feel frustration** $p=.041^*$; $R=.728$
- with Willingness to play EuroMillions $p=,000^{***}$; $R=1$
- with Willingness to play scratch cards $p=,000^{***}$; $R=1$

Therapeutic Contract (Moment 2) correlated with treatment impact (Moment 2)



Have limited access to cash/money

with Been positive to have less access to money $p=,015^*$; $R=.448$

with Have made/fulfilled debt plan $p=,047^*$; $R=.448$

with Have solved financial problems $p=,016^*$; $R=.543$

Having had significant others in treatment

with (not) having children $p=.008^{**}$; $R=(-.657)$

with Having complied with rules $P=.030^*$; $R=.453$

with Having practiced hobbies $P=.024^*$; $R=.479$

with Have maintained good relationship with psychologist $P=.039^*$; $R=.453$

with Have solved financial problems $P=.050^*$; $R=.543$

Attended Gamblers Anonymous

with Attended group therapy $P=.002^{**}$; $R=.642$

with Attended Gamblers Anonymous $P=,000^{***}$; $R=,771$

with Gamblers Anonymous useful as relapse prevention $P=.000^{***}$; $R=.896$

with Legislation that facilitates gambling $P=.033^*$; $R=.491$

with Tobacco problems $P=.009^{**}$; $R=.566$

World Health Organization- Quality of Life Assessment



WHOQOL-BREF	Variable - Normative Value	Moment 1	Moment 2	Sig. P
Quality of life assessment (WHOQOL)	Psychological domain- M=72,38;DP=13,5	M=19,33; DP=4,29	M=21 DP=4,23	0,021*

- **The psychological domain** refers to: self-image, negative thoughts, positive attitudes, self-esteem, mentality, learning ability, memory concentration, religion and the mental status

BSI - Brief Symptom Inventory, SCL-R-90 short version



Variable - Normative Value	Moment 1	Moment 2	Sig. P
Interpersonal Sensitivity	M=1,37; DP=0,85	M=0,98;DP=0,83	0.017*
Depression	M=1,78; DP=0,96	M=0,95;DP=1	0,001**
Anxiety	M=1,25; DP=0,83	M=0,76; DP=0,89	0,024*
Psychoticism	M=1,33; DP=0,92	M=0,85;DP=1,06	0,032*
Somatization	M=0,49; DP=0,62	M=0,45;DP=0,71	0,737
Hostility	M=0,49; DP=0,62	M=0,80;DP=0,92	0,18

- **Interpersonal Sensitivity** - Feelings of personal inadequacy and inferiority in comparison with others.
- **Depression** - Symptoms of dysphoric mood and affect, lack of motivation and loss of interest in life.
- **Anxiety** - Nervousness and tension as well as panic attacks and feelings of terror.
- **Psychoticism** - Withdrawn, isolated, schizoid lifestyle as well as first rank symptoms of schizophrenia such as thought control.
- **Somatization** - Distress arising from perceptions of bodily dysfunction
- **Hostility** - Thoughts, feelings or actions that are characteristic of anger

Discussion and Therapeutical Contract

- Sample is too small at this moment to be able to compare abstinent and relapse group although we can figure some future directions as...
- CT (mom1) measures like; total abstinence, self exclusion, avoiding “dangerous” situations, doing therapy (and others) are **variables/concepts that are accepted by almost all patients**, (breaking denial and preparing motivational interview)

.....When clients and significant others, know **what to** do (awareness).... the focus becomes **on how to** manage/proceed to achieve it on their personal context, and it helps to the “**involvement/motivation**” shown by the reported adhesion and positive impact to the different variables of **CT in moment 2**, with CBT approach help

Discussion and Correlations

Correlations show **significant therapeutical directions** to better explore as sample will get larger:

Exemples:

- a) Agreement to **total abstinence** related to **severity of gambling**, other comorbidities and cravings
- b) Those that **avoided** most people places and situations **felt more cravings, difficulties** in their profession, with tobacco and felt need for medication,
- c) Those who had **significant others participation** in treatment **practiced more** hobbies, followed more rules, solved financial problems and maintained good relationship with psychologist.

Discussion and Symptoms/Quality of Life

- CBT+ CT treatment seems to be effective as **anxiety and depression** (that were 16,7% and 20,8% of the sample respectively and it is known as PG's comorbidities that often lead to relapse) **had significant improvement**, as well as the **interpersonal sensitivity scale** that also often refers to the **guilt and shame** that problem gamblers feel, or also withdrawn or feeling isolated in the psychoticism scale that diminished.
- The increase in **life quality** (the best relapse prevention...) seems also to be confirmed by the psychological domain of the WHOQOL- BREF that refers to an **improvement in self-esteem, self-image and positive attitude** of the sample subjects, as well as diminution concerning negative thoughts.

Conclusion

- From this data, it seems that **cognitive behavioral strategies, and the agreement of a therapeutic contract are effective strategies that need to be incorporated in the treatment of problematic gambling**, however, there are some aspects of the contract that seems more effective than others, and that more people seem to adhere better.
- The findings suggests that this intervention **was effective in promoting psychological adjustment, and in improving quality of life.**
- The findings of this study stress the importance of conducting further research on the efficacy of interventions in the treatment of problematic gambling among adults.
- Although these studies can be costly and time consuming, they generate very **relevant insights that could be very useful in informing the design of future treatments"**

SUGGESTIONS



- More focus on the reasons for **relapses**.
- More research concerning the Therapeutic Contract guidelines that may be **predictors of treatment success** should be conducted.
- Research on: How non-motivated patients may be attracted to treatment following TC guidelines and treatment goals (dropouts).
- More longitudinal research with **different evaluation's moments** 15-20 sessions, 35-40, more than 60 or 6 months 12 months, 24 months.

LIMITATIONS

- These were self report questionnaires
- More focus should have been given to patients with prescribed (or unprescribed) medication.
- Reduced N in the sample



Contacts

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Thank You, for your attention!