

Cognitive Restructuring of Gambling- Related Thoughts : A Systematic Review

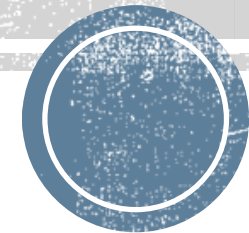
Maxime Chrétien (B.A.), Université Laval

Isabelle Giroux (Ph.D.), Université Laval

Annie Goulet (Ph.D.), Université Laval

Christian Jacques (M.Ps.), Université Laval

Stéphane Bouchard (Ph.D.), Université du Québec en Outaouais



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Presentation Outline

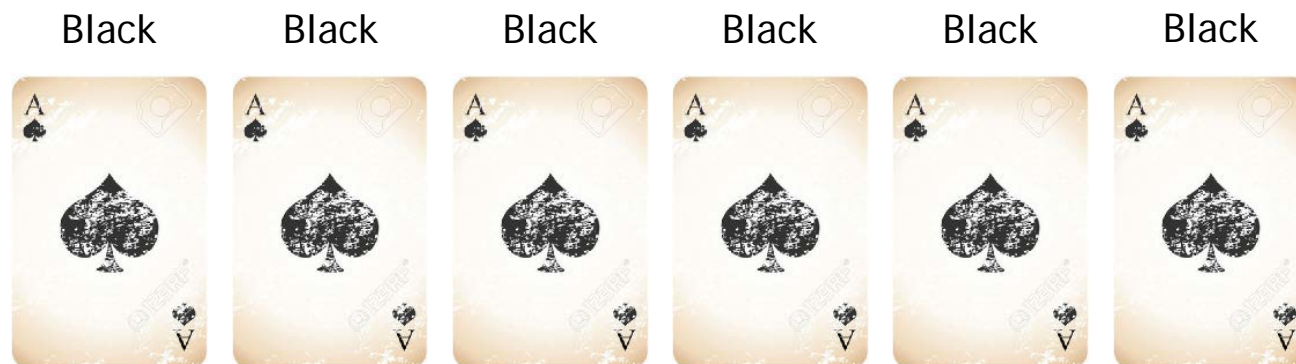
- Introduction
- Method
 - Search strategy
 - Study selection
 - Flow diagram
- Results and discussion
 - Terminology; treatment objectives; modalities; techniques; skill game-related thoughts
- Conclusion

Gamblers' Thoughts

- Key factor in the onset and maintenance of gambling disorder (Blaszczynski & Silove, 1995; Gaboury & Ladouceur, 1989; Ladouceur, 2004)
- Several terminologies (Barrault & Varescon, 2012)
 - E.g., erroneous thoughts, dysfunctional thoughts, cognitive distortions...
- Erroneous thoughts
 - Underly that the thought is false
 - Do not consider the notion of randomness

Gamblers' Thoughts

Black or red ?



Gamblers' Thoughts

- Important contribution to the development and maintenance of gambling disorder (Blaszczynski & Silove, 1995; Gaboury & Ladouceur, 1989; Ladouceur, 2004)
- Several terminology (Barrault & Varescon, 2012)
 - E.g., erroneous thoughts, dysfunctional thoughts, cognitive distortions...
- Erroneous thoughts
 - Underly that the thought is false
 - Do not consider the notion of randomness
- Some thoughts are not false, yet still harmful for the gambler's functioning (Bouchard et al., 2013; Kovacs & Beck, 1978)
 - E.g. « Gambling makes me forget my problems »

Treatment

- Cognitive restructuring (CR) = central component of CBT (Ladouceur et al. 2001)
 - CBT = gold standard for treating gambling disorder (Cowlshaw et al., 2012)
- Directly targets
 1. Identification
 2. Modification
- According to Lafond et Brisson (2007), only half of the therapists surveyed use CR on a regular basis:
 - Most therapists did not feel comfortable with the diversity and intensity of gamblers' thoughts
 - Perceived a lack of proper tools to identify and correct the thoughts

Many Questions Regarding CR

- According to Blaszczynski (2005), the objective of the treatment is often not cited
 - Target of the CR
 - To reduce gambling-related thoughts ? Or the number of DSM-5 gambling disorder criteria ?
- What are the guidelines with respect to the different treatment modalities ?
 - Individual vs Group
 - By Internet vs Face-to-face
- Skill game-related thoughts
 - Are there any specific findings or recommandations from the literature in regard to the correction of these thoughts ?

Objectives

- The aim of this study is to review research on cognitive restructuring with gamblers

- ➔ a) Identify the terms used to refer to gamblers' thoughts
- ➔ b) Identify the objectives and outcome measures of CR
- ➔ c) Describe CR modalities
 - Availability (face-to-face, self-help treatment, etc.)
 - Format (individual, group)
 - Duration (e.g., number of session, hours)
- ➔ d) Describe tools and techniques used to identify and correct gambling-related thoughts
- ➔ e) Describe how skill game-related thoughts are identified and corrected

Method – Search Strategy

- Identify cognitive treatment studies or studies that include CR sessions
 - Published between 1980 and 2014 in PsycINFO, PubMed and FRANCIS

- Two different search strategies
 1. Keywords in the abstracts combining two themes
 - a) Gambling
 - b) Treatment

(gambling OR gambler*) AND (treatment* OR intervention* OR therapy OR therapies)

Method – Search Strategy

2. Thesaurus from PsycINFO and PubMed

- PsycINFO

{Gambling} AND {Psychotherapy} OR {Cognitive Behavior Therapy} OR {Cognitive Restructuring} OR {Cognitive Therapy} OR {Cognitive techniques}

- PubMed

("Gambling"[Mesh]) AND ("Cognitive Therapy"[Mesh])

- Gray literature

- Google and Google Scholar

- Unpublished studies from addiction treatment or research centers in Canada

Method – Inclusion Criteria

| | Inclusion criteria | Exclusion criteria |
|---------------------|--|--|
| Population | Primary gambling problem | Primary disorder other than problem gambling |
| Intervention | Psychological cognitive treatment or psychological treatment that includes one or more CR sessions | Other types of treatment (e.g., pharmacological treatment) or not including CR (behavioral treatment only) |
| Type of publication | Treatment studies (randomized trial or not) | Others : review and meta-analysis, survey, prevention studies |
| Language | French or English | Other languages |

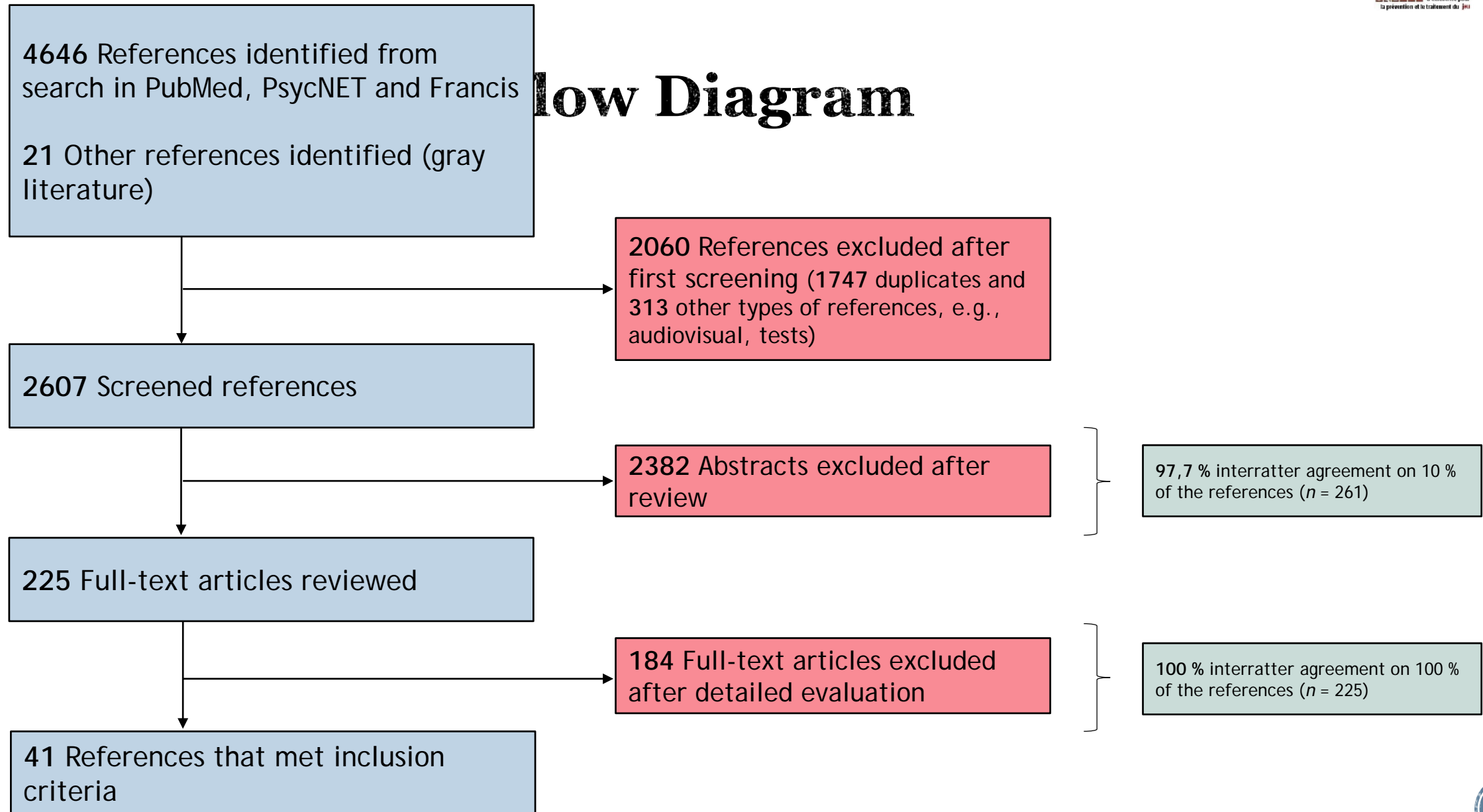


Figure 1. Flow diagram (The PRISMA Group, 2009)

Results - Terminology

- 61 % of the studies used several terminologies to refer to gamblers' thoughts
 - 14.6 % used 3 or more
 - 24.5 % used 2
 - 14.6 % used 2
 - 19.5 % used 1
 - 14.6 % do not refer to gamblers' thoughts

Erroneous
thoughts (56.1 %)

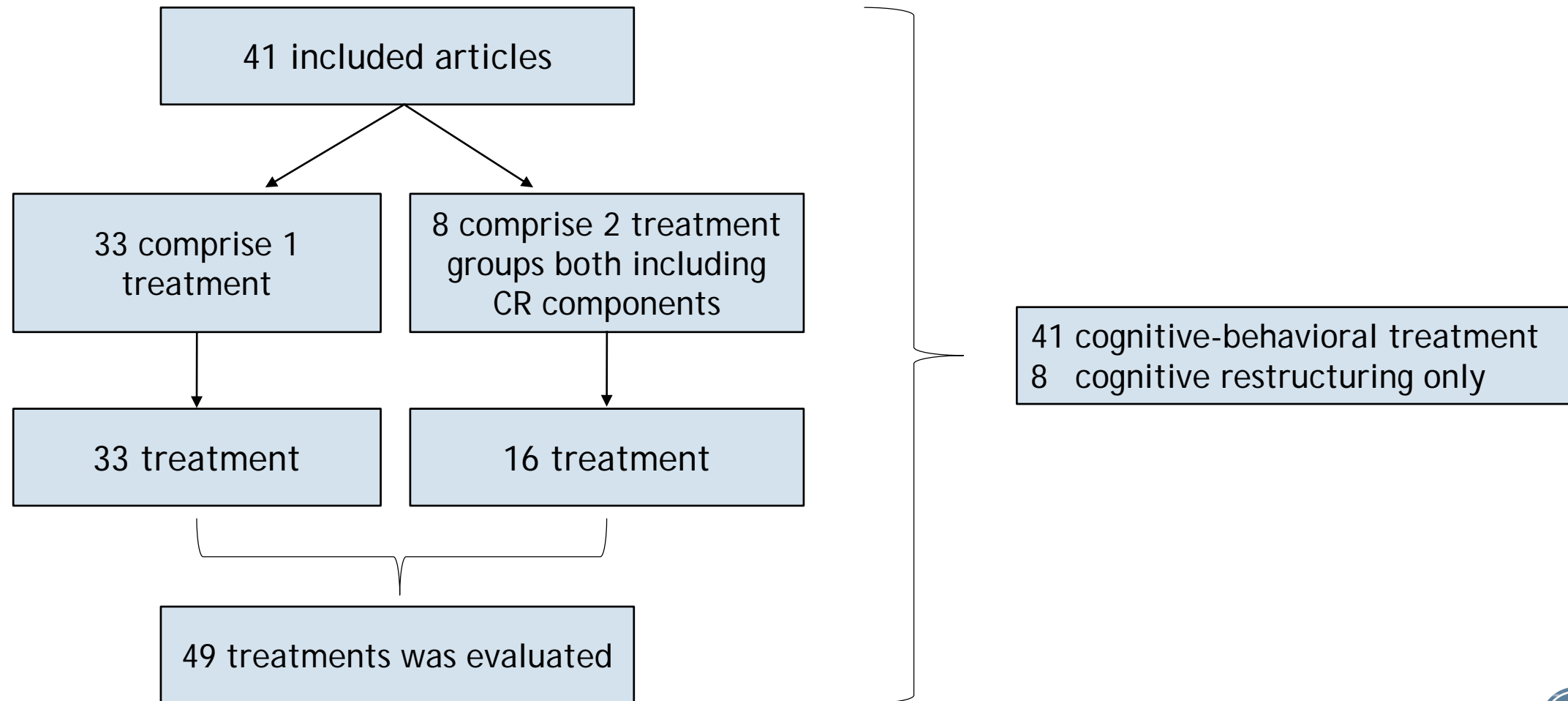
Cognitive
distortions (29.3 %)

Irrational
thoughts (19.5 %)

Unadapted
thoughts (9.8 %)

Dysfunctional
thoughts (9.8 %)

Results – Study Characteristics



Results – Treatment Objectives and Outcome Measures

- Treatment objective reported in 95.1 % of studies
 - 17 (41.5 %) have specific objectives with respect to gamblers' thoughts
- Treatment objectives are mainly based on indicators
 - Gambling disorder is manifested by indicators such as:
 - "reduce the number of gambling-related thoughts" (time spent gambling)
 - "increase the number of adequate thoughts related to chance" (effectiveness of treatment)
 - No diagnostic criteria related to gambling disorder
- Only 5 studies (12.1 %) report effectiveness
- Thoughts - Behaviors - Emotions are interdependent (Beck, 1963)
- Gambling-related thoughts = risk factor (Blaszczynski & Silove, 1995; Gaboury & Ladouceur, 1989; Ladouceur, 2004)

Results – Treatment Modalities

- Availability
 - Face-to-face : 83.7 %
 - All CR-only treatment are performed in face-to-face ($n = 8$)
- Format
 - Individual : 65.9 %
 - Group : 31.7 %
 - Both : 2.4 %
 - Among the 8 CR-only treatment, 6 are performed in individual
- Duration
 - CR in CBT makes up for 10 to 50 % of sessions
 - CR-only treatment : short to medium term (6 sessions to 20 hours of intervention)

Results – Techniques and Tools

- 74.2 % of studies identify techniques and tools to perform CR
 - Psychoeducation
 - Explain the true odds of winning and the concept of randomness
 - Exposure to access gamblers' thoughts
 - Imaginal
 - *In vivo*
 - Different types of worksheets (visual support) to confront gamblers' thoughts
 - Teach links between thoughts, feelings and behavior (Node-Link-Mapping)
 - *ABCD* exercise
 - Cue-cards (thought checklist)

Results – Skill game-related Thoughts

- Of the 41 studies included, 59.4 % recruited skill game gamblers
- None provides explanation about how to identify or correct their thoughts
- None provides information about a possible adaptation of CR
 - Did therapists perform CR with these gamblers the same way they did with chance game gamblers ?
 - If so... is this because their thoughts do not differ from those of chance game gamblers ?
- According to Delfabbro (2004), these gamblers have different thoughts
- Lack of knowledge concerning skill game-related thoughts:
 - Contribute to the therapists' difficulties applying CR with skill game gamblers (Papineau et al., 2005) ?

Conclusion & Recommendations

- Terms used to designate gambling-related thoughts should be properly defined across studies
- Difficult for therapist to learn CR from the reading of studies
 - No extensive treatment description and few examples on how to use the tools
 - Several constraints by journals (number of words and tables, appendices, etc.)
- Therapists who wish to use evidence-based interventions should have access to the treatment manuals

Strengths & Limitations

- Limitations
 - No effect size was calculated to evaluate effectiveness of CR-only
 - Need for a meta-analysis
 - No descriptive evaluation of treatment manuals
- Strengths
 - First review on that subject
 - Systematic review with a rigorous methodology
 - Interrater agreements for the study selection and for the data extraction
- Future studies should compare the effectiveness of CR applied to chance game vs. skill game gamblers
 - Is CR as effective with skill game gamblers, in comparison with chance game gamblers?
 - If not, how should CR be adapted?

Thank you !

Any questions ?

maxime.chretien.1@ulaval.ca