Can Playing "Dungeons and Dragons" Be Good for You?

A Registered Exploratory Pilot Program Using Offline Tabletop Role-Playing Games reduce Social Anxiety and Problematic use of Video Games



COI Statement

- Member of the WHO task force on public health implications of behavioural addictions associated with excessive use of Internet, computers, smartphones and similar electronic devices.
- Contributor of ICD-11 CDDR (Clinical descriptions and diagnostic requirements for ICD-11 mental, behavioural and neurodevelopmental disorders) section on "substance use disorder and addictive behaviors"
- No other COI to declare

GAMING DISORDER in ICD-11

- 2019 Gaming Disorder Included in ICD-11
 - Functional impairment
 - Increasing treatment-seeking demand
 - Public health perspective



- 2024 Publication of ICD-11 CDDR
 - Clinical description and diagnostic requirement
- Controversies
 - Lack of data about efficient treatment
 - Overpathologization and false positive diagnoses
 - Etiological debate (e.g., addictive disorder VS maladaptive coping)

Billieux, J., Stein, D.J., Castro-Calvo, J., Higuchi, S., & King, D.L. (2021). Rationale for and usefulness of the inclusion of gaming disorder in the ICD-11. *World Psychiatry*, 20(2), 198-199. https://doi.org/10.1002/wps.20848

A LOT OF PROBLEMATIC GAMERS ARE ANXIOUS IN OFFLINE SOCIAL SITUATIONS



- ☐ 30 studies included in the systematic review
- Medium Strong correlation between social anxiety and problematic video game use
- ☐ Socially anxious people may perceive online video games <u>as safer social</u> <u>environments than face-to-face interactions</u>
- ☐ Support for the **dysfunctional coping** hypothesis

Can Playing "Dungeons and Dragons" Be Good for You? A Registered Exploratory Pilot Program Using Offline Tabletop Role-Playing Games reduce Social Anxiety and Problematic use of Video Games

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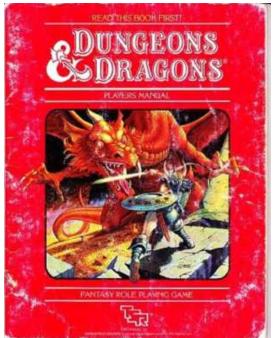


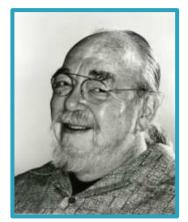




Daniel L. King, PhD (Flinders)





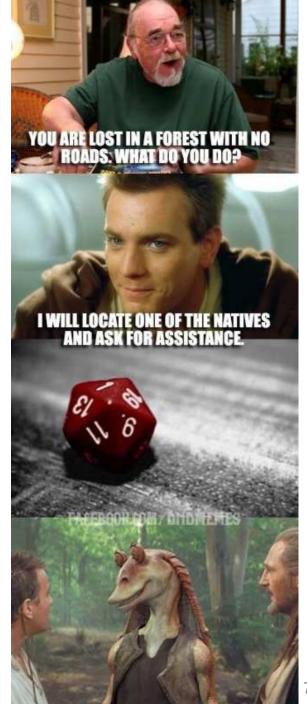


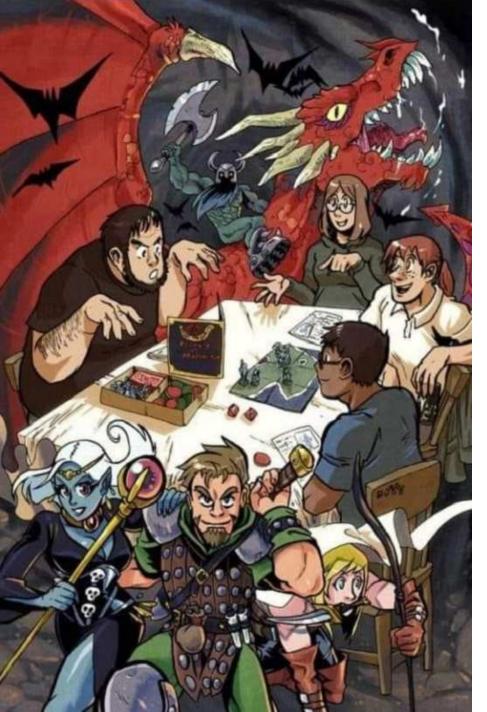
Gary Gygax Co-creator of DnD (1938-2008)

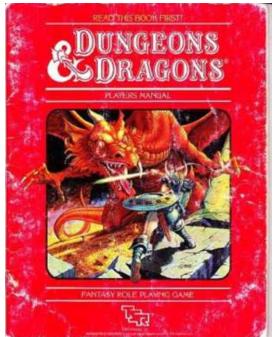


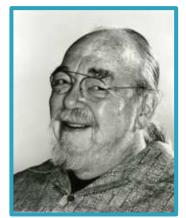










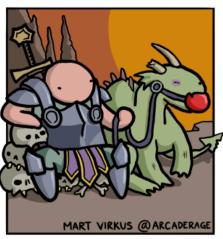


Gary Gygax Co-creator of DnD (1938-2008)

LEVEL 1



LEVEL 50



Therapeutic Use of
Role-Playing Game (RPG) in
Mental Health: A Scoping
Review

Daniel Luccas Arenas 1,2 , Anna Viduani , and
Renata Brasil Araujo 2

Simulation & Gaming 2022, Vol. 53(3) 285–311
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DOI: 10.1177/10468781211073720
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SAGE

- Results suggest potential use of TTRPGs as a complementary tool in psychotherapy
- Only 16% of included studies were experimental
- Great heterogeneity in definitions, outcomes and interventions using TTRPGs
- More robust, well-designed studies on the application of JDRs in mental health are needed [lack of open science]

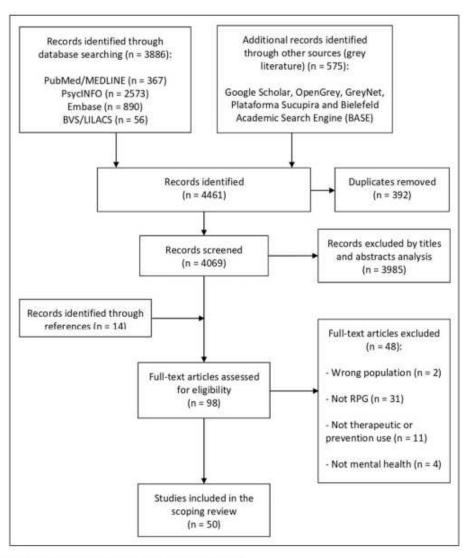
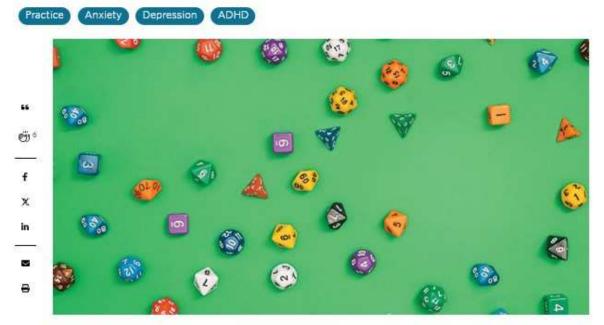


Figure 1. Flow chart of scoping review process.

https://journals.sagepub.com/doi/abs/10.11 77/10468781211073720

Improving treatment with role-playing games

Using games like Dungeons and Dragons in group therapy shows promise for treating anxiety, depression, trauma, ADHD, and more





Key points

- Tabletop role-playing games as a form of group therapy have shown promise for treating anxiety, depression, attention-deficit/hyperactivity disorder, and more.
- · Role-playing games require cooperation, which builds real-life coping skills.
- Group game therapy allows therapists to address symptoms in real time and encourages life skills such as collaboration, communication, and conflict management.

https://www.apa.org/monito r/2025/04-05/role-playinggames-therapy

Online role-playing games (RPG)





- Persistent virtual worlds
- Character creation
- Background
- Progression system
- Quests, missions, campaign
- Exploration, role-play
- Teamwork, competition
- Online social interactions (e.g., guilds, group of players)

Baldur's Gate 3 (released August 3, 2023)

Our Pilot Study

Testing the **feasibility** and **initial effectiveness** of an original intervention for people with excessive involvement in online role-playing games <u>and</u> social anxiety

Our intervention: a <u>structured</u> and <u>standardized</u> protocol of 10 group sessions involving <u>tabletop role-playing game</u>

Main ingredients

- Exposure to situations of (<u>face to face</u>) group social interactions
 - Self-affirmation (progressive difficulty)
 - Group problem solving
 - Fun



This is NOT about designing a serious game, this is about actually playing Dungeons & Dragons

Dungeons & Dragons Pilot Program

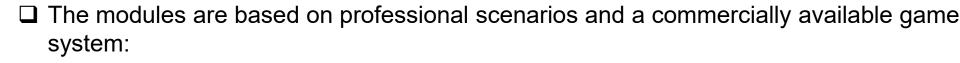
- ☐ Groups of 5 players and 1 game master (professional)
- ☐ Non-clinical participants(with sub-clinical social anxiety + problematic gaming)
- ☐ 10 sessions (2h) organized into 3 progressive modules

Module 1: Wanderer (sessions 1-3)

Module 2: Adventurer (sessions 4-7)

Module 3: Hero (sessions 8-10)

For details of modules and sessions: https://osf.io/hzyva



- Lost Mine of Phandelver (https://www.dndbeyond.com/sources/lmop)
- Game system used = Chonique Oubliées Fantasy [simplified version of DnD] (https://black-book-editions.fr/catalogue.php?id=13)



Jonathan Bloch Venerable Game Master

Exemple: Module 1 – Session 1

Week	Session title and synopsis	Description of the session and TTRPG aspects	Objectives	Outcomes assessed by the GM†	
1	Let's get started [Introductory session]	 Welcome of the participants and summary of the project and its objectives Participants are invited to quickly present themselves Introduction about TTRPGs in general Presentation of the "X card" Presentation of the Medieval-Fantasy ("medfan") universe Basic presentation of the rule system and character progression Character creation with the participants guiding them through the choice of a race, class, characteristics, and talents 	present oneself briefly to a group of unknown persons	provided] o partially reached [only very basic details like their name] o not reached [not able to speak up]	

CHRONIQUES OUBLIÉES • FEUILLE DE PERSONNAGE

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	Niveau Race	Sexe Age Taille Doid			
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CON 11. 0	A DISTANCE +2+4	4 9 DELINGERMENT			
DINI 43 +1	MAGIQUE +2 +4	RD RD			
5AG 24 +2	DEFENSE	Tota			
CHA 12 +4	DEF 10+ 4-3	BOUGHA 41 Dress #14			
Binnell	ARME	ATTAQUE DM SPECIAL			
MELVIN OF PRINCIPLE		1020 6 56 +2			
O A G OUR WOLL	The state of the s	1d20 - 5 D8 +2			
	1	1d30+			
*\					

ì	Voit 1	Voit 2	Voir 3
ũ	Voie de l'archer	Voie du compagnon animal	Voie de l'escarmouche
	M Sens ethatés: Four chaque Rang clans cette Voir, le rédeur gagere un bonus de 42 à tous ses texts de SAG d'estinés à simulér la perception (voir, oule, vigilance, etc.). De plus, il ajoute son Mod, de SAG aux drights qu'il vivilige à fart. SAG (perception)	McOdoret i Le rédeur obtient un loug commu compagnon animal. Celui-ci détecte les adeurs des animaux et des creatures 18 du 98 sont passes. Le rédeur obtient un bonus de x5 ses tests de SAG pour pièter et suivre des traces. SAG (posser et suivre des traces)	☐ Chasseur émérite : un rédeur obtient un bonus de +2 en straque et aux DM uniful « comitat des animaux et un bonus de +2 par Rang dans cette. Voie pour poter ou retrouver leurs traces. Frober les animities.
	QCTs averygle (b.) i in rüdeur peut attaquer à distante un ennemit qu'il né voir pas (par exemple un ennemit invisible ou plungé dans le noir total) comme s'il le veyait et donc sans males.	IRSorveillance Grâce à son loups quand en tente de l'attaques par surpcise, le chileur ubblient +5-en initiation et aux tents de SAG (surprise), Lorquis' est surpris, à peut faire une attaque à distance AVANT le premier sour de combigliciative (surprise), SAG (surprise)	Traquenard (I.) Le 10deur gagne un bonut de +2 en attaque et +268 aux DM sur sa première arthque contre une créature s'il possède un multeur voore d'initiative.
3	The regide (L): Le rôdeur pout faire 2 attaques a distance pendant ce tour	SpCombat: Le toup du rôdeur peut décormais se battre comme un véritable personnage. 8 attaque en même temps que le rôdeur (cour : Init 13, DEF,14) Prôchesux 4, Attaque au contact = (nhesau), DM 146+1, FOR+1, DEX+1, CON+1*, INIT 3, SAG+2*, CHA-3	☐ Attaque éclair (L): Le rédeur peut effectuer sine attaque au contact très percurante. Il apouls son Most, de OEX en attaque et aux OAA pour catte offensive.
4	☐ Flighte de mort (k) i Le rédeur lance drus (200 pour son ettaque et conserve le medieur résultat, Les dégits des fliches Lont doublés.	Disrepathle animale: Le rodeur pout parter aux animaus, il peut également communiques avec son sous par titispathir et le guérir à distance en dépendant ses propres PV (1 PV du rèdeur pour 1 PV octroyé au touje).	D Repti (L) i La ròdeur se deplace de 40 m en tradit set à resignant de ses annemes. La journe fait un test de DEX defreunte 10, en Las de succès, à disparait de la voe de ses poursuivants il peut à étiganer ou rester caché sans risque il être retrouvé.
5	Dans le mille : Pour une attaque à distance, le rédeux peut choose d'utiliser 1/12 en attaque au leur de d'20 habituer (et à ajoute normaisment ; aon soone d'attaque à d'attaque est réducer, j. ajoute 2/16 aux DM.	C: Animal fabuleus: Le loup devient un spécimen particulièrement publiant. Adde ophie : Init 13, DEF 16, EV [nivello 4.4]. Attaque au contact v (niveau +2), DM 186+3, FOR +3, DER +1, CON +3*, INIT 3, SAG +2*, CHA -2	Destirité hérolique : la rodeur augmente us valeur de DIX de -2 et à peut décement tence deux d'O à théaper locs qu'en test de DEX su et demandé et conserver le meilleur résultat.

Ordnassel le rôdeur demi-elfe

Example from Module 2, Session 4-5

A new element brought in this module is interaction with NPC (i.e., characters played by the DM). In the ruins of Thundertree, the participants encounter three NPCs: (1) Reidoth the druid (nice and collaborative); (2) Favric the cultist (neutral and non-collaborative); and (3) Venomfang the young green dragon (hostile and noncollaborative)



Reidoth the druid



Reidoth the Druide

Nice # Collaborative # Friendly # Helpful # Shy

He is the good guy ...

Example from Module 2, Session 4-5

Objective 3: Interacting with a collaborative NPC (Reidoth the druid). The GM ensures that all participants have an occasion to interact with the druid



Ordnassel the ranger interacts with Reidoth the druid ...

- reached [direct, proactive and efficient interaction with the druid]
- partially reached [undirect, basic or DM-solicited interaction with the druid]
- not reached [no interaction with the druid]





Our GM plays Reidoth, the NPC, and assesses whether the objectives have been met.



Venomfang the young green dragon

Hostile
Narcissistic
Selfish
Deceiving
Powerful

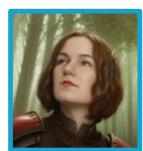
Fighting is not really an option ...

Participants

Inclusion criteria (online screening)

- 18+ gamers and fluent French speakers
- ☐ Currently playing or having played MMORPGs / online RPGs
- ☐ No or minimal experience of tabletop role-playing games (TTRPGs)
- ☐ At least 1 criterion met but less than 5 (DSM-5 threshold score) on the Internet Gaming Disorder Test (Kiraly et al., 2019)
- Score ≥ 30 but ≤ 95 on the French Liebowitz Social Anxiety Scale (Heeren et al., 2012)
- ☐ No current treatment for a psychological disorder

These criteria were verified in an individual interview before starting the program, in which participants received more information about the study and signed the consent form



Iliyana Georgieva Apprentice Mentalist

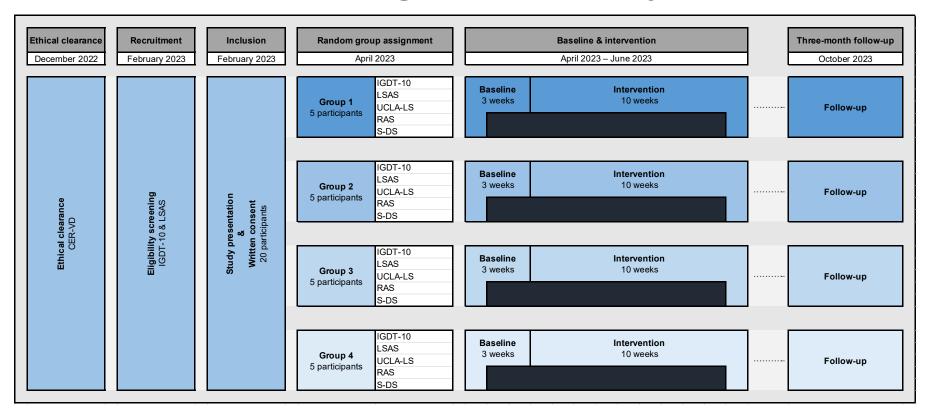
Methodology - Single Case

- Methodology recognized as scientifically valid by influential international evidence-based groups (Oxford Centre for Evidence-Based Medicine)
- Statistics on the rise in recent years
- Suitable for testing new interventions with a limited number of people
- Advantages of single-case (VS RCT) to evaluate treatment efficacy (Tate et al., 2015)
 - longitudinal (typically between 10 and 20 measurement points)
 - focus on intra-subject variability
 - close to clinical reality (taking heterogeneity into account)
 - examine the efficacy of different treatment components



Lucien Rochat
Herald of the Single Case

Design of the Study

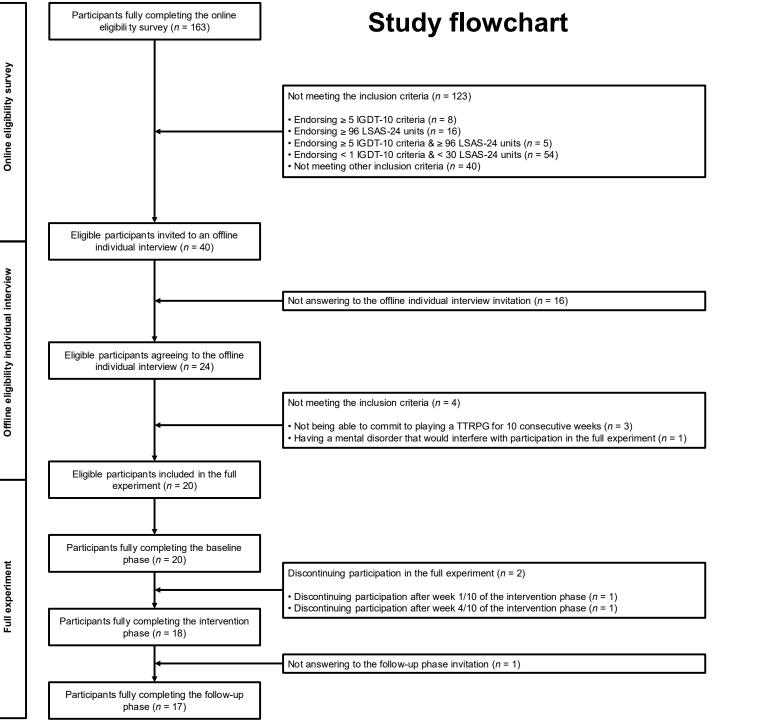


Psychological Assessment

- ☐ Gaming Disorder symptoms (IGDT-10; Kiraly et al., 2019)
- ☐ Social Anxiety symptoms (LSAS; Heeren et al., 2012)
- ☐ Loneliness (UCLA-LS; de Grâce et al., 1993)
- ☐ Self-Discrepancy Scale (SDS; Philippot et al., 2018)
- ☐ Assertiveness (Rathus Assertiveness Scale; Bouvard et al., 1986)



Loïs Fournier
Psychometrician
Knight



MAIN RESULTS



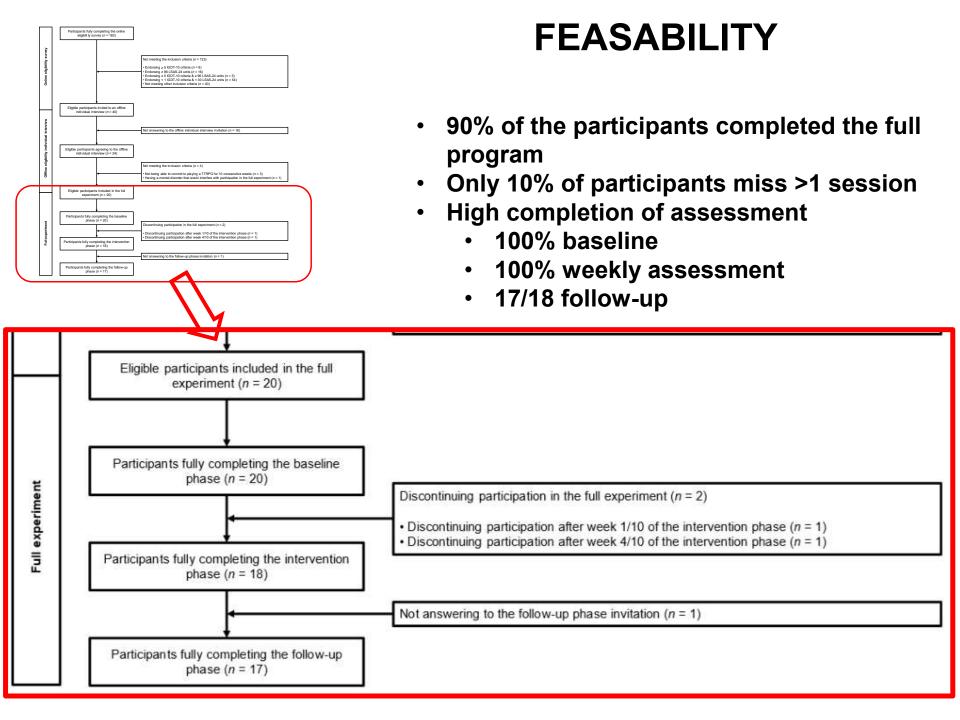


Table 3. Between Case-Standardised Mean Differences (BC-SMD): A global effect size per dependent variable, N=18

Variable	BC-SMD	SE	95% CIs	Effect size1
			(Lower, upper)	
Gaming disorders (IGDT-10)	-0.39	0.17	-0.73; -0.04	small
Fear (LSAS)	-0.20	0.11	-0.44; 0.03	small
Avoidance (LSAS)	-0.47	0.14	-0.76; -0.19	small to medium
Loneliness (UCLA-LS)	-0.38	0.23	-0.85; 0.08	small
Time spent gaming (h/w)	-0.15	0.14	-0.44; 0.15	null

Note. IGDT-10 = Internet Gaming Disorder Test-10 (Király et al., 2019); LSAS = Liebowitz Social Anxiety Scale (Heeren et al., 2012);

UCLA-LS = UCLA Loneliness Scale (de Grâce et al., 1993). h/w = average hours per week,

Between Case-Standardized Mean Difference (BC-SMD): Global effect size per DV Cohen (1988): Effect sizes

■ .20: small

■ .50: medium

■ .80: large

According to Cohen (1988): .20 (small effect size), .50 (medium effect size), .80 (large effect size).

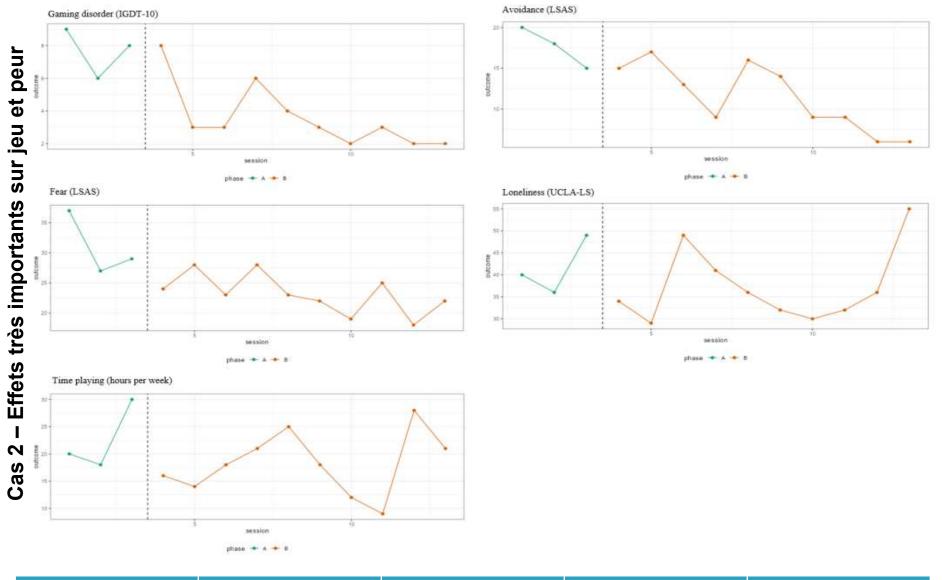
Table 1. Synthesis of the results with the non overlap index (A vs B) using Tau-U, N (%)

Variable	Min/Max Tau-U ¹	Very large	Large	Moderate	Small	Null/negative
		effect size				
Gaming disorders (IGDT-10)	-0.57/0.87	2 (11.11)	3 (16.67)	8 (44.44)	2 (11.11)	3 (16.67)
Fear (LSAS)	-0.40/1.03	5 (27.78)	5 (27.78)	5 (27.78)	2 (11.11)	1 (5.56)
Avoidance (LSAS)	-0.83/1.00	9 (50.00)	4 (22.22)	3 (16.67)	0 (0)	2 (11.11)
Loneliness (UCLA-LS)	-0.90/0.97	4 (22.22)	2 (11.11)	5 (27.78)	0 (0)	7 (38.89)
Time spent gaming (h/w)	-0.67/0.67	0 (0)	2 (11.11)	6 (33.33)	2 (11.11)	8 (44.44)

Note. N = 18. IGDT-10 = Internet Gaming Disorder Test-10 (Király et al., 2019); LSAS = Liebowitz Social Anxiety Scale (Heeren et al., 2012); UCLA-LS = UCLA Loneliness Scale (de Grâce et al., 1993). h/w = average hours per week.

Non overlap (A vs B) effect size (Tau-U): Intra-Individual Variability for each dependent variable

According to Vannest and Ninci (2015): >0.80 (very large effect size), 0.80 to 0.61(large effect size), 0.60 to 0.20 (medium effect size), < 0.20 (small effect size), 0 or < 0 (no effect or negative effect).



Jeu problématique	Anxiété - Peur	Anxiété - Evitement	Solitude	Temps de jeu
(IGDT-10)	(Fear-LSAS)	(Avoidance-LSAS)	(UCLA-LS)	(heures/sem)
0.83	0.83	0.73	0.47	

Conclusion and next steps

Testing the **feasibility** and **initial effectiveness** of an original intervention for people with excessive involvement in online role-playing games and social anxiety



NEXT STEPS

- Clinical pilot (with patients endorsing ICD-11 GD criteria)
 - → Started in March 2025 (currently session 8/10; 1 drop out)
- Obtaining funding for an RCT (planned 2026)

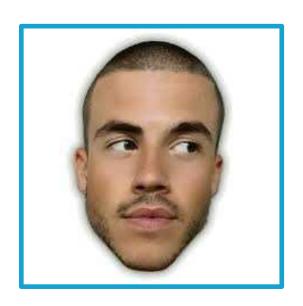
A pilot program using Tabletop Role-Playing Games to reduce social anxiety and addiction symptoms in online gamers



Maurane Bosson (UNIL & CHUV) [Clinical Psychologist]



Jonathan Bloch (GHOL) [MD and GM]



Loïs Fournier (UNIL) [PhD student in psychometrics]

Acknowledgements

Compulsive and Addictive Behaviors Lab









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Cite this article: Billieux J et al. 2025 Can playing Dungeons and Dragons be good for you? A registered exploratory pilot programme using offline tabletop role-playing games to mitigate social anxiety and reduce problematic involvement in multiplayer online video games. R. Soc. Open Sci. 12: 250273.

https://doi.org/10.1098/rsos.250273

Received: 11 February 2025 Accepted: 16 February 2025

Subject Category:

Psychology and cognitive neuroscience

Subject Areas:

Psychology

Keywords:

gaming disorder, MMORPG, problematic gaming, registered report, role-playing game, social anxiety treatment, TTRPG

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Can playing Dungeons and Dragons be good for you? A registered exploratory pilot programme using offline tabletop role-playing games to mitigate social anxiety and reduce problematic involvement in multiplayer online video games

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Merci de votre attention ©

Slides: https://osf.io/e9nqv

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Expanding the Intervention Potential of Tabletop Role-Playing Games

Veli-Matti Karhulahti based on reviews by Charlotte Pennington, Matūš Adamkovič and Matti Vuorre

A recommendation of:



Can playing Dungeons and Dragons be good for you? A registered exploratory pilot program using offline Tabletop Role-Playing Games (TTRPGs) to mitigate social anxiety and reduce problematic involvement in multiplayer online video games

Joël Billieux, Lois Fournier, Lucium Rochat, Wyana Georgieva, Charlotte Eben, Marc Malmidorf Anderson, Claniel L. King, Olivier Simon, Vasser Khazaal, Andreas Lieberoth, Josathan Bloch https://doi.io/fichiem

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READ REPORT ON SERVER

Registered Report:

https://rr.peercommunityin.org/articles/rec?id=889

Pilote en Population Clinique

Critères d'Inclusion:

- 18 ans et Francophone
- Trouble du Jeu Vidéo (critères CIM-11)
- Anxiété Sociale élevée (LSAS > 30)

Genre	Age	Prof	Jeux favoris	Temps Semain e	Temps Weeken d	Comorbidité(s)
Н	23	Sans emploi	MMORPGs	14	19	Trouble de la Personnalité Antisociale
Н	19	Etudia nt	MMORPGs	3	15	
Н	34	Sans Emploi	MMORPGs	6	13	Phobie Sociale, Dépression
F	21	Etudia nte	FPS	5	7	Phobie Sociale
Н	21	Sans Emploi	MMORPGs	16	18	

Calendrier de l'Etude							
Phases de l'étude	Entretien d'admission	Lignes de Base (avant le programme)	Programme	Sulvi à trois mois			
Modalité prise de données	Papier -crayon	En ligne (Qualtrics)	En ligne (Qualtrics)	En ligne (Qualtrics)			
Temporalité	Avant l'étude	Pendant 5 semaines, 1x par semaine	Pendant 10 semaines (le temps de l'intervention) 1 x par semaine	3 mois après la fin de l'étude (à une seule reprise)			
Nombre d'évaluation	1	5	10	3			
Signature consentement	×						
Données sociodémographiques	×	65					
Données sur jeu de rôle et jeu vidéo	x						
Critères de jugement principal							
Symptômes en lien avec le jeu : Temps de jeu rapporté et IGDT-10	x	x	×	x			
Symptômes en lien avec le ieu – complément : C-DOG		х	x	х			
Symptômes en lien avec l'anxiété sociale : Echelle d'anxiété sociale de Liebowitz - LSAS	×	х	х	х			
Critères de jugement secondaires	s						
Affirmation de soi (2 items)	3	х	x	х			
Kessler Psychological Distress Scale (K6)		х	х	x			



Maurane Bosson
Sorcière des Arcanes
Logistiques

Evaluation Psychologique

- ☐ Symptômes de jeu problématique (IGDT-10; Kiraly et al., 2019)
- ☐ Symptômes d'anxiété sociale (LSAS; Heeren et al., 2012)
- ☐ Compensatory-Dissociative Online Gaming scale (C-DOGs; Giardina et al., 2024)
- Affirmation de soi
- ☐ Symptômes anxio-dépressifs (K6; Kessler et al., 2010)

Essai Pilote en Population Clinique

Lignes de Base (5 semaines) - Complétion des questionnaires

Phase pre-intervention									
S1	S2	S3	S4	S 5	S6				
Oui	Non	Oui	Oui	Non	Oui				
Oui	Non	Non	Non	Oui	Oui				
Oui	Oui	Oui	Oui	Oui	Non				
Non	Oui	Oui	Oui	Oui	Oui				
Oui	Oui	Oui	Oui	Oui	Oui				

<u>Intervention (10 semaines) – Présence et complétion des questionnaires</u>

