

**PENGARUH *COGNITIVE BEHAVIOUR THERAPY* (CBT)
DALAM MENURUNKAN KECANDUAN *GAME ONLINE*
PADA REMAJA**

(LITERATURE REVIEW)

SKRIPSI



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**PROGRAM STUDI ILMU KEPERAWATAN
FAKULTAS ILMU KESEHATAN
UNIVERSITAS dr. SOEBANDI JEMBER
2022**

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(LITERATURE REVIEW)

SKRIPSI

Untuk Memenuhi Persyaratan
melakukan *literature review* dalam rangka menyelesaikan pendidikan Program
Studi Ilmu Keperawatan Universitas dr. Soebandi Jember



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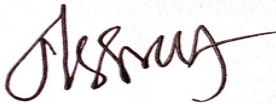
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2022**

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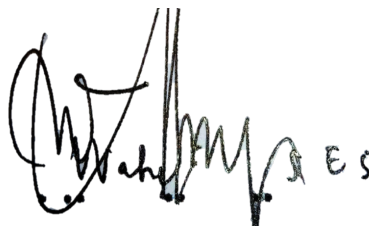
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HALAMAN PENGESAHAN

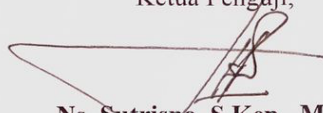
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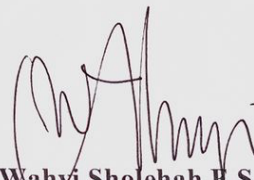
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Menyatakan dengan sesungguhnya bahan skripsi *Literature Review* saya yang berjudul “ Pengaruh *Cognitive Behaviour Therapy* dalam menurunkan kecanduan *game online* pada remaja *Literature Review*” adalah karya saya sendiri dan belum pernah diajukan untuk memperoleh gelar kesarjanaan suatu perguruan tinggi manapun. Adapun bagian-bagian tertentu dalam penyusunan Skripsi *Literature Review* ini yang saya kutip dari karya hasil orang lain telah dituliskan sumbernya secara jelas sesuai dengan norma, kaidah, dan etika penulisan ilmiah. Apabila kemudian hari ditemukan adanya kecurangan dalam penyusunan skripsi *Literature Review* ini, saya bersedia menerima sanksi sesuai dengan peraturan perundang - undangan yang berlaku.

Jember, 11 Juli 2022



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SKRIPSI

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DALAM MENURUNKAN KECANDUAN *GAME ONLINE*
PADA REMAJA**

LITERATURE REVIEW

Oleh:
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Dosen Pembimbing Utama : Susilawati, S.ST., M.Kes

Dosen Pembimbing Anggota : Ns. Wahyi Sholehah Erdah Suswati, M.Kep

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MOTTO

“fa inna ma’al - ‘usri yusra. Inna ma’al – ‘usri yusra.
Karena sesungguhnya sesudah kesulitan itu ada kemudahan. Sesungguhnya
sesudah kesulitan itu ada kemudahan”
(QS Al Insyirah :5-6)

“Barang siapa yang menempuh suatu jalan untuk
menuntut ilmu, Allah akan memudahkan baginya jalan ke surga”
(Hadits Riwayat Imam Muslim)

To get a succes, your courage must be greater than your fear
(Dzalu)

ABSTRAK

Edytia, Dzalu Ananda*, Susilawati**, Suswati, Wahyi Sholehah Erdah***.2022.
Pengaruh *Cognitive Behaviour Therapy* dalam menurunkan kecanduan *game online* pada remaja *Literature Review*. Program Studi Ilmu Keperawatan Universitas dr. Soebandi.

Latar Belakang: Persoalan *game online* disebabkan banyak remaja memainkan *game online* secara berlebihan dan digunakan sebagai pelarian serta realita kehidupan remaja yang menyebabkan kecanduan *game online*, faktor resiko yang menyebabkan remaja mengalami kecanduan *game online* diantaranya, depresi, pengaruh lingkungan, kurangnya aktivitas, dan gaya pengasuhan. Menurut data yang dihimpun dari MPL (*mobile premier league*) pengguna aktif *game online* di Indonesia bermain setiap hari dan didominasi oleh kelompok pada rentang umur 10-22 tahun sebanyak 65%. Tujuan penelitian ini adalah untuk mengetahui pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja melalui *literature review*. **Metode:** Desain penelitian ini menggunakan *literature review* dengan pencarian *database* menggunakan *google scholar*, *pubmed*, *proQuest* tahun 2018-2022, didapatkan tujuh artikel yang sesuai melalui analisis menggunakan metode analisa PICOS (*Population, intervension, Comparasion, Outcome and study*) dan Prisma Checklist yang sesuai kriteria inklusi. **Hasil:** Kecanduan *game online* pada remaja sebelum diberikan CBT berdasarkan tingkatkategori berada pada kategori sedang dan tinggi, artikel yang menggunakan nilai mean menunjukkan angka 67,50 yang berarti skor kecanduan *game online* masih tinggi. Kecanduan *game online* pada remaja setelah diberikan CBT memiliki tingkat kecanduan *game online* dengan kategori rendah dan tidak kecanduan, artikel yang menggunakan nilai *mean* menunjukkan penurunan dengan nilai *mean* terendah 7,53. Hasil *review* pada penelitian CBT berpengaruh dalam menurunkan kecanduan *game online* pada remaja. **Diskusi:** Analisis menunjukkan ada pengaruh signifikan antara sebelum dan sesudah diberikan CBT dalam menurunkan kecanduan *game online* pada remaja.

Kata Kunci: *Cognitive Behaviour Therapy*, Kecanduan *game online*, Remaja

*Peneliti

**Pembimbing I

***Pembimbing II

ABSTRACT

Edytia, Dzalun Ananda *, Susilawati**, Suswati, Wahyi Sholehah Erdah ***.2022.
Effect of Cognitive Behaviour Therapy On Reducing Online Game Addiction In Adolescents Literature Review. Nursing Science Study Program, University Of dr. Soebandi.

Background: The problem of online games is that many teenagers play online games excessively and are used as an escape and the reality of adolescent life that causes addiction to online games, the risk factors that cause teenagers to become addicted to online games include depression, environmental influences, lack of activity, and parenting styles. According to data compiled from MPL (mobile premier league) active users of online games in Indonesia play every day and are dominated by groups in the age range of 10-22 years as much as 65%. The purpose of this study was to determine the effect of CBT in reducing online game addiction in adolescents through a literature review. **Methods:** This research design uses a literature review by searching the database using google scholar, pubmed, proQuest in 2018-2022, obtained seven appropriate articles through analysis using the PICOS analysis method (Population, intervention, comparison, outcome and study) and the appropriate Prisma Checklist. inclusion criteria. **Results:** Online game addiction in adolescents before being given CBT based on the category level was in the medium and high categories, the article using the mean value showed the number 67.50 which means the online game addiction score is still high. Online game addiction in adolescents after being given CBT has a low level of online game addiction and is not addicted, articles using the mean value show a decrease with the lowest mean value of 7.53. The results of the review on CBT research have an effect on reducing online game addiction in adolescents. **Discussion:** The analysis shows that there is a significant effect between before and after being given CBT in reducing online game addiction in adolescents.

Keywords: Cognitive Behaviour Therapy, Online Game Addiction, Adolescents

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**Preceptor I

***Preceptor II

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Jember, 8 Juli 2022

Penulis

DAFTAR ISI

HALAMAN JUDUL	i
HALAMAN JUDUL DALAM	ii
LEMBAR PERSETUJUAN	iii
LEMBAR PENGESAHAN	iv
PERNYATAAN ORISINALITAS	v
HALAMAN PEMBIMBINGAN SKRIPSI	vi
HALAMAN PERSEMBAHAN	vii
MOTTO	viii
ABSTRAK	ix
<i>ABSTRACT</i>	x
KATA PENGANTAR	xi
DAFTAR ISI	xii
DAFTAR TABEL	xv
DAFTAR GAMBAR	xvi
DAFTAR SINGKATAN	xvii
DAFTAR LAMPIRAN	xviii
BAB 1 PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Rumusan Masalah.....	4
1.3 Tujuan Penelitian	5
1.4 Manfaat Penelitian	5
1.4.1 Manfaat Teoritis	5
1.4.2 Manfaat Praktis	6
BAB 2 TINJAUAN TEORI	7
2.1 Remaja	7
2.2.1 Definisi Remaja	7
2.2.2 Ciri-Ciri Remaja	8

2.2.3 Tahapan Masa Remaja	8
2.1.4 Karakteristik Pertumbuhan Remaja	9
2.1.5 Tugas Perkembangan Remaja	11
2.1.6 Latar Belakang Bermain <i>Game Online</i>	12
2.2 Konsep Kecanduan <i>Game Online</i>	13
2.2.1 Pengertian <i>Game Online</i>	13
2.2.2 Definisi Kecanduan <i>Game Online</i>	13
2.2.3 Jenis <i>Game Online</i>	14
2.2.4 Faktor Resiko Kecanduan <i>Game Online</i> Pada Remaja.....	15
2.2.5 Ciri-Ciri Pecandu <i>Game Online</i>	17
2.2.6 Dampak Kecanduan <i>Game Online</i>	18
2.2.7 Pencegahan Kecanduan <i>Game Online</i> Pada Remaja	20
2.2.8 Penatalaksanaan Kecanduan <i>Game Online</i>	22
2.2.9 Alat Pengukuran Kecanduan <i>Game Online</i>	23
2.2.10 Tingkatan Kecanduan <i>Game Online</i>	25
2.3 Konsep CBT	26
2.3.1 Definisi CBT.....	26
2.3.2 Tujuan Pendekatan CBT	27
2.3.3 Karakteristik CBT	27
2.3.4 Aspek CBT	28
2.3.5 Keefektifan CBT pada kecanduan <i>game online</i>	29
2.3.6 Prosedur CBT	30
2.3.7 Kerangka Teori	33
BAB 3 METODE	34
3.1 Strategi pencarian <i>literature</i>	34
3.2 Kriteria Inklusi dan Eksklusi.....	35
3.3 Seleksi studi dan penilaian kualitas	38
BAB 4 HASIL DAN ANALISIS.....	40
4.1 Karakteristik Studi	40
4.2 Karakteristik Responden Studi	45
4.3 Karakteristik <i>Cognitive Behaviour Therapy</i>	47

4.4 Analisis	50
4.4.1 Kecanduan <i>game online</i> pada remaja sebelum diberikan CBT	50
4.4.2 Kecanduan <i>game online</i> pada remaja sesudah diberikan CBT	51
4.5 Pengaruh CBT dalam menurunkan kecanduan <i>game online</i>	52
BAB 5 PEMBAHASAN	55
5.1 Kecanduan <i>Game Online</i> Sebelum diberikan CBT	55
5.2 Kecanduan <i>Game Online</i> Sesudah diberikan CBT	56
5.3 Pengaruh CBT dalam menurunkan kecanduan <i>game online</i>	59
BAB 6 KESIMPULAN DAN SARAN.....	63
6.1 Kesimpulan	63
6.2 Saran.....	64
DAFTAR PUSTAKA	65
LAMPIRAN	69

DAFTAR TABEL

Tabel 3.1 Kata Kunci Pencarian.....	35
Tabel 3.2 Kriteria Inklusi dan Eksklusi <i>Literature Review</i>	37
Tabel 4.1 Karakteristik Studi	41
Tabel 4.2 Karakteristik Responden Berdasarkan Jenis Kelamin	45
Tabel 4.3 Karakteristik CBT.....	47
Tabel 4.4.1 Kecanduan <i>Game online</i> sebelum diberikan CBT.....	50
Tabel 4.4.2 Kecanduan <i>Game online</i> sesudah diberikan CBT.....	51
Tabel 4.5 Pengaruh CBT dalam menurunkan kecanduan <i>game online</i>	52

DAFTAR GAMBAR

Gambar 2.1 Kerangka Teori.....	33
Gambar 3.3 Diagram Flow <i>Literature Review</i>	39

DAFTAR SINGKATAN

APA	: <i>American Psychiatric Association</i>
BPS	: Badan Pusat Statistik
CBT	: <i>Cognitive Behavioural Therapy</i>
DSM	: <i>Diagnostic and Statistical Manual of Mental Disorder</i>
FPS	: <i>First person shooter</i>
GAS	: <i>Game addiction scale</i>
IGD	: <i>'Internet Gaming Disorder'</i>
IGOC	: <i>Indonesia Online Game Questionnaire</i>
MeMS	: <i>Medical Subject Heading</i>
Riskesdas	: Riset Kesehatan Dasar
REBT	: <i>Rational Emotive Behavior Therapy</i>
RPG	: <i>Role playing game</i>
RTS	: <i>Real Time Strategy</i>
WHO	: <i>World Health Organization</i>

DAFTAR LAMPIRAN

Lampiran 1 Jurnal Jurnal	69
Lampiran 2 Konsultasi.....	145
Lampiran 3 Rencana Penyusunan Skripsi	148
Lampiran 4 <i>Curriculum Vitae</i>	149

BAB I

PENDAHULUAN

1.1 Latar Belakang

Game online merupakan permainan yang bisa diakses oleh pengguna *game* dan dihubungkan oleh jaringan internet. Bermain *game online* memungkinkan untuk menguasai tantangan *game online* dan menciptakan kepuasan sendiri setelah mencapai hasil dalam *game online* tersebut, kepuasan yang menyenangkan dapat menyebabkan ketidakberdayaan atau tidak berhenti dari aktivitas bermain *game online* yang pada akhirnya memengaruhi aktivitas lain dalam pekerjaan sehari-hari (Sari et al., 2020). Persoalan yang berhubungan dengan *game online* telah mendapat perhatian publik, disebabkan banyak remaja memainkan *game online* secara berlebihan dan digunakan sebagai pelarian dari realita kehidupan remaja yang menyebabkan kecanduan *game online*. Mengingat betapa meluasnya permainan, terutama dengan prevalensi di kalangan generasi muda, kekhawatiran telah muncul mengenai perilaku permainan yang tidak terkendali, membuat *American Psychiatric Association* (APA) memasukkan '*Internet Gaming Disorder*' (IGD) dalam Bagian III dari revisi kelima Manual Diagnostik dan Statistik (*Association Psychiatric American*, 2021).

WHO mengemukakan kecanduan *game online* atau *internet game disorder* dalam edisi terbaru *International Statistical Classification of Disease* (ICD), sebagai gangguan mental (*mental disorder*) pada 2018 dan merupakan *disorders due to addictive behavior* atau gangguan yang timbul oleh hal yang berlebihan

atau kecanduan (WHO, 2018). Menurut data statistik yang dihimpun dari *global web index*, kurang lebih 80% pengguna internet di umur 16-64 tahun bermain *game* setiap bulannya dengan total pemain sebanyak 3,4 miliar orang (Kemp, 2020). Dalam survei *game online* Maret 2020 yang dilakukan oleh *Rakuten Insight*, 50% responden Indonesia berusia antara 16 hingga 24 tahun mengatakan bahwa mereka bermain *game online* setiap hari. Menurut survei yang sama, kebanyakan *gamer* Indonesia biasanya bermain *game online* di ponsel mereka (Insight, 2020). Menurut survei yang dilakukan MPL (*Mobile Premier League*) Indonesia pada tahun 2019 pengguna aktif *game online* sebanyak 34 juta pengguna dalam 1 bulan dan didominasi oleh kelompok dalam rentang umur 10-22 tahun sebanyak 65%, 23-30 tahun sebanyak 23% dan umur 31-40 tahun sebanyak 12 %. Berdasarkan data statistik yang dihimpun dari Badan Pusat Statistik (BPS), menunjukkan proporsi individu tertinggi yang menggunakan internet berdasarkan kelompok umur berada di rentang umur 15-24 tahun sebanyak 83,58% dan Provinsi Jawa Timur menjadi daerah dengan proporsi individu menggunakan internet tertinggi ketiga di Indonesia (47,10%), setelah Provinsi Jawa Barat (53,94%) dan Jawa Tengah (47,74%) (Badan Pusat Statistik, 2019).

Remaja diduga lebih mudah menjadi pecandu *game online* daripada orang dewasa dan selama periode transisi cenderung terjerumus dalam mencoba hal-hal baru (Jordan & Andersen, 2016). Masa remaja juga lekat dalam masa-masa sulit yang memungkinkan mereka mencoba hal-hal baru yang dapat menjadi masalah (Hurlock, 2010). Akibatnya, remaja yang memiliki antusiasme tinggi

dengan *game online* kurang tertarik dengan aktivitas lain dan timbul perasaan cemas ketika tidak bisa bermain *game online*, mengakibatkan hal-hal seperti prestasi akademik, hubungan sosial, dan kesehatan akan cenderung menurun (Ghuman & Griffith, 2012). *Game online* memiliki dampak positif jika digunakan untuk hiburan, dimana kepenatan dan stress bisa diatasi dengan memainkan *game online*. Namun yang terjadi kini, *game online* banyak dimainkan secara berlebihan dan menjadi tempat untuk menjauhkan diri dari realitas kehidupan terutama oleh remaja, sehingga yang terjadi yaitu kecanduan *game online* (Novrialdy, 2019).

Faktor resiko yang menyebabkan remaja mengalami kecanduan *game online* diantaranya, kurangnya perhatian dari orang terdekat, depresi, pengaruh lingkungan, kurangnya aktivitas, kurangnya kontrol orangtua, dan gaya pengasuhan (Hardiansyah & Dian, 2016). Kecanduan *game online* mempunyai dampak negatif pada kesehatan fisik, mental dan sosial. Dampak negatif pada tubuh antara lain gangguan tidur, sering kelelahan (*fatigue syndrome*), bahu dan otot kaku, bahkan terkena *Carpal Turner Syndrome*. Selain itu, kecenderungan untuk memprioritaskan permainan diatas jadwal kegiatan harian seperti melupakan waktu makan mengakibatkan pecandu *game online* mengalami dehidrasi, kekurangan nutrisi, berat badan berkurang, atau sebaliknya (obesitas). Kecanduan *game online* juga mempunyai dampak buruk bagi mental dan lingkungan sosial seperti penurunan dalam berekspresi dan kepekaan dalam emosi, anti sosial, penurunan kemampuan dalam memusatkan perhatian dan gangguan dalam melakukan tindakan (Kemenkes RI, 2018).

Salah satu intervensi yang dapat membantu mengatasi kecanduan *game online* dinamakan CBT (McHugh et al., 2010; Griffiths, 2015). *Cognitive Behaviour Therapy* (CBT) merupakan jenis terapi perilaku yang berfokus pada masalah. CBT membantu pecandu menjadi sadar akan emosi dan perilaku adiktif, dengan mempelajari keterampilan koping baru untuk mencegah kekambuhan. CBT bertujuan untuk membantu pecandu menangani hubungan antara keyakinan, pikiran, emosi dan untuk mengikuti tindakan serta pola perilaku (Stevens M. et al., 2018). Keefektifan CBT terhadap remaja yang mengalami kecanduan *game online* dibuktikan oleh hasil penelitian yang dilakukan oleh Ansar, dkk (2020) menunjukkan bahwa setelah diberi CBT terdapat pengaruh terhadap kecanduan *game online* sebelum dan sesudah diberikan CBT dengan nilai p value $(0,00) <$ dari nilai $0,05$ (Ansar et al., 2020).

Berdasarkan latar belakang diatas, peneliti menyimpulkan bahwa *game online* masih menjadi masalah serius bagi remaja, peneliti mereview artikel penelitian terdahulu yang membahas tentang Pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja.

1.2 Rumusan Masalah

Peneliti merumuskan masalah penelitian dalam *literature review* ini adalah “Adakah pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja berdasarkan *literature review*?”.

1.3 Tujuan Penelitian

1.3.1 Tujuan Umum

Tujuan umum dalam penelitian ini adalah untuk mengetahui Pengaruh *Cognitive Behaviour Therapy* dalam menurunkan kecanduan *game online* pada remaja berdasarkan *Literature Review*.

1.3.2 Tujuan Khusus

Tujuan khusus dalam penelitian secara *literature review* ini adalah:

- a. Mengidentifikasi kecanduan *game online* pada remaja sebelum dilakukan CBT melalui *literature review*.
- b. Mengidentifikasi kecanduan *game online* pada remaja setelah dilakukan CBT melalui *literature review*.
- c. Menganalisis adanya pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja melalui *literature review*.

1.4 Manfaat Penelitian

1.4.1 Manfaat Teoritis

Penelitian *Literature Review* ini diharapkan dapat memberikan wawasan akademik bagi mahasiswa dan institusi pendidikan Universitas dr. Soebandi sebagai pengetahuan tambahan dan bahan masukan khususnya di bidang Ilmu Keperawatan Jiwa, di samping itu penelitian ini dapat dijadikan acuan dan sumber bacaan serta informasi mengenai pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja.

1.4.2 Manfaat Praktis

a. Bagi Orang Tua

Hasil *literature review* ini diharapkan dapat memberikan informasi dan pengetahuan pada orang tua berkenaan dengan upaya untuk mengurangi kecanduan *game online* terhadap remaja.

b. Bagi Remaja

Literature review ini dapat dijadikan sebagai sumber rujukan dan referensi tentang permasalahan yang berkaitan dengan remaja, khususnya menginformasikan tentang upaya dalam mengatasi kecanduan *game online* dengan CBT.

c. Bagi peneliti selanjutnya

Diharapkan peneliti selanjutnya dapat melakukan penelitian langsung dan mengembangkan penelitian berikut tentang pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja.

BAB II

TINJAUAN TEORI

2.1 Remaja

2.1.1 Definisi Remaja

Asal kata 'remaja' diambil dari bahasa latin yakni, *adolescence* dengan makna tumbuh atau berkembang menjadi dewasa. Remaja merupakan kelompok yang berusia sekitar 10-19 tahun (WHO). Tahap remaja merupakan proses perubahan dari fase anak hingga dewasa dalam rentang usia 11-21 tahun yang merupakan fase transisi dari tahap perkembangan anak menuju dewasa (Surbakti, 2017).

Masa remaja terjadi proses perkembangan termasuk perubahan yang berkaitan dengan perkembangan psikoseksual serta perubahan hubungan dengan orangtua yang memiliki cita-cita sebagai wujud orientasi masa depan. Remaja memiliki rasa penasaran yang tinggi sehingga timbul dorongan untuk mencari tahu hal yang membuat ia penasaran serta mencoba hal baru dalam upaya mencari jati diri dan mencapai kedewasaan sesuai dengan tugas perkembangan remaja. Di era millenium ini, remaja disuguhkan dengan kecanggihan teknologi yang memudahkan memperoleh informasi yang diinginkan. Rasa ingin tahu besar dan minat yang tinggi serta berbagai perubahan fisik maupun psikis pada akhirnya menciptakan permasalahan yang muncul dalam kehidupan remaja (Akbar, 2020).

2.1.2 Ciri-Ciri Remaja

Robert J. Havighurst dalam (Limbong, 2020) menyatakan tentang ciri-ciri yang dimiliki remaja sebagai berikut:

1. Mulai membangun kesadaran telah memasuki usia dewasa.
2. Mulai membangun relasi dengan teman sebaya.
3. Memahami perbedaan gender antara laki-laki dan perempuan.
4. Adanya kemandirian emosional.
5. Mulai belajar mengatur diri sendiri.
6. Memiliki energi positif yang besar.
7. Membutuhkan tempat untuk mengekspresikan kemampuan diri.
8. Memiliki cita-cita yang tinggi.
9. Memiliki rasa ingin tahu yang besar dalam hal apapun.
10. Selalu mencoba hal baru tanpa memikirkan dampak atau risiko yang diterimanya.

2.1.3 Tahapan Masa Remaja

Masa remaja merupakan masa yang banyak menarik perhatian karena sifat khasnya dan peranannya yang menentukan dalam kehidupan individu dalam masyarakat orang dewasa. Menurut penelitian dari *Association of Maternal & Child Health Programs*, tahapan remaja dibagi 3 tahap:

a. Masa Remaja Awal (usia 10-14)

Masa ini ditandai oleh sifat negatif pada remaja sehingga seringkali masa ini disebut masa negatif, dengan gejalanya seperti tidak tenang, kurang suka bekerja, pesimistik, individu merasa cemas, takut dan gelisah.

b. Masa Remaja Madya (15-17)

Pada masa ini mulai tumbuh dalam diri remaja dorongan untuk hidup. Kebutuhan akan adanya teman yang dapat memahami dan menolongnya, teman yang dapat merasakan suka dan duka. Pada masa ini dipandang sebagai masa untuk mencari sesuatu yang bernilai, pantas dijunjung tinggi dan proses terbentuknya pandangan hidup atau cita-cita sebagai penemuan nilai-nilai kehidupan.

c. Masa Remaja Akhir (18-21)

Tahap ini merupakan masa konsolidasi menuju masa dewasa yang ditandai pencapaian lima hal, antara lain :

1. Minat terhadap fungsi-fungsi intelektual
2. Memiliki ego yang digunakan untuk mencari pengalaman baru.
3. Terbentuknya identitas seksual yang tidak akan berubah lagi.
4. Sifat egosentrisme (memusatkan perhatian pada diri sendiri) berubah dengan keseimbangan antara kepentingan diri sendiri dengan oranglain.

2.1.4 Karakteristik Pertumbuhan dan Perkembangan Remaja

Pada masa remaja, seorang individu akan mengalami pertumbuhan dan perkembangan dalam dirinya, Adapun karakteristik tumbuh kembang pada remaja menurut Santrock dalam (Hartini, 2017) antara lain:

a. Perubahan fisiologis

Perubahan fisiologis yang terjadi di fase awal remaja terdapat 4 ciri khas perubahan tubuh pada remaja perempuan yaitu pertumbuhan tinggi badan bertambah cepat, haid pertama kali atau biasa disebut *menarche*, bentuk dada yang mulai terlihat, dan tumbuh rambut pada alat kelamin. Adapun karakteristik perubahan seksual pada remaja laki-laki ditandai dengan bertambahnya tinggi badan, berfungsinya organ reproduksi, serta tumbuhnya rambut halus pada alat kelamin. Progres fisik yang dialami remaja semakin berkembang baik di masa pertengahan seperti meningkatnya kemampuan motorik kasar, pembentukan otot, dan kekuatan tubuh. Pada fase akhir, remaja mengalami penyempurnaan sistem reproduksi.

b. Perkembangan daya pikir

Fase awal remaja ditunjukkan dengan peningkatan energi dan memiliki daya saing dengan teman sepermainan. Pada fase akhir remaja memiliki kemampuan menganalisa masalah dengan pola pikir yang baik.

c. Jati diri

Adanya penolakan atau penerimaan dari teman sebaya terjadi di fase remaja. Remaja timbul rasa ingin mencoba banyak peran, timbul rasa ingin merubah citra diri, meningkatkan rasa percaya diri, dan bersifat idealis. Sementara

di fase akhir remaja mengalami peningkatan dalam memaknai perbedaan jenis *gender* dengan baik.

d. Ikatan dengan orangtua

Adapun sikap yang ditunjukkan oleh masa remaja awal selalu merasa bergantung pada orangtua. Pada remaja pertengahan, mulai timbul konflik yang terjadi dari kontrol orangtua, sehingga remaja merasa telah mampu mengatur dirinya dan lepas dari kontrol orangtua. Sementara itu pada fase remaja akhir, memiliki konflik minima atas berjaraknya hubungan dengan orangtua baik secara fisik maupun emosional.

e. Ikatan dengan teman sebaya

Pada remaja awal dan pertengahan terjadi peningkatan kemampuan menarik perhatian lawan jenis, menciptakan persahabatan dan memperluas relasi hubungan dengan teman merupakan hal penting bagi remaja sebagai bentuk penerimaan diri dalam hubungan pertemanan. Sementara pada remaja akhir merasa lebih nyaman jika hubungan pertemanan yang semakin sedikit dan mulai tertarik untuk membuat hubungan yang konsisten dengan lawan jenis.

2.1.5 Tugas Perkembangan Remaja

Havighurst (dalam Saputro, 2018) mengatakan adapun tugas perkembangan remaja adalah sebagai berikut :

- a. Penerimaan diri terhadap perubahan fisiologis yang dialami dan mampu melaksanakan peran remaja di tahap perkembangannya dengan baik.
- b. Berhubungan baik dengan teman sebaya.

- c. Memiliki kemandirian yang baik sehingga mampu melepaskan diri dari ketergantungan pada orangtua.
- d. Meningkatkan kemampuan kognitif, berpikir kreatif, memahami makna hidup bersosialisasi dengan orang lain.
- e. Membebaskan diri dari tuntutan ekonomi dengan memberdayakan diri dalam bidang ekonomi.
- f. Melakukan persiapan diri untuk mendapatkan pekerjaan yang sesuai dengan minat dan bakat.
- g. Berperilaku sesuai norma dan pandangan ilmiah, serta memiliki rasa tanggung jawab yang tinggi
- h. Mempersiapkan diri untuk membentuk keluarga baru.

2.1.6 Latar Belakang Remaja Bermain *Game Online*

Remaja pada umumnya masih dalam usia menuntut ilmu, baik sekolah maupun kuliah. Banyaknya waktu luang yang dimiliki remaja berdampak pada banyaknya waktu yang dapat dihabiskan untuk bermain *game online*. Remaja yang bermain *game online* cenderung sulit dalam membatasi diri terhadap *game online*. Remaja yang sedang bermain *game online* seringkali menggunakan waktu pentingnya untuk bermain *game online*. Remaja yang terlalu sering memainkan *game online* lebih banyak menghabiskan waktunya di dunia *cyber* dari pada menggunakan waktunya untuk tidur, makan, ataupun berkomunikasi. Sehingga kualitas tidur remaja akan mengalami penurunan kualitas yang dapat

mengakibatkan terganggunya konsentrasi menurunnya daya ingat, dan berhubungan metabolisme tubuh untuk bekerja dengan optimal (Nofianti, 2018).

2.2. Konsep Kecanduan *Game Online*

2.2.1 Pengertian *Game Online*

Game berasal dari bahasa Inggris yang berarti dasar permainan. Permainan dalam hal ini merujuk pada pengertian kelincahan intelektual yang bisa diartikan sebagai arena keputusan dan aksi pemainnya. Young 2005 dalam (Kurniawan, 2017) mengemukakan bahwa *game online* merupakan permainan dengan jaringan, dimana interaksi antara satu orang dengan yang lainnya untuk mencapai tujuan, melaksanakan misi, dan meraih nilai tertinggi dalam dunia virtual.

2.2.2 Definisi Kecanduan *Game Online*

Game online merupakan bentuk permainan yang menggunakan jaringan internet dan dapat diakses oleh semua orang dengan bantuan alat seperti komputer, laptop, *smartphone*, maupun tablet. *Game online* memiliki beberapa jenis permainan diantaranya seperti *real time strategy* (RTS), *first person shooter* (FPS), *role playing game* (RPG), dan masih banyak jenis lainnya (Bengu, 2017).

Pengaruh *game online* membuat remaja merasa tidak pernah bosan dan perlahan kesulitan untuk tidak bermain *game online* akibat dari bermain *game* terlalu lama. Selain itu durasi bermain *game* terlalu lama, memungkinkan seseorang meniru adegan dalam *game online* (Akbar, 2020). Seseorang yang bermain *game online* akan menghabiskan lebih sedikit waktu untuk berkomunikasi dan

berinteraksi dengan orang lain dilingkungannya. Adiksi atau kecanduan merupakan suatu perilaku ketergantungan secara fisik dan psikologis untuk melakukan sesuatu dan terdapat perasaan tidak enak jika tidak terpenuhi. Dalam hal ini kecanduan *game online* dapat dikatakan sebagai kondisi seseorang yang terikat pada kebiasaan dan keinginan untuk terus bermain *game online* (Akbar, 2020).

2.2.3 Jenis *Game Online*

Game online memiliki variasi bentuk permainan yang membuat remaja tertarik dan tidak pernah bosan untuk memainkannya. Adapun jenis *game online* menurut Lindsay dalam (Fitri et al., 2018) diantaranya:

a. *First Person Shooter Games (FPS)*

Game yang dimainkan dengan sudut pandang karakter dalam permainan, dimana setiap karakter memiliki kemampuan yang berbeda dalam akurasi, reflex, dan lainnya. *Game* ini bisa melibatkan banyak orang dan biasanya *game* ini memiliki setting perang dengan senjata. Contohnya seperti: *pointblank*, *call of duty*, *counter strike*.

b. *Real Time Strategy Games (RTS)*

Game ini mengharuskan tiap pemain untuk mengatur strategi bermain. Dalam RTS ini tema permainan ada yang berupa sejarah (*Age of Empires*), fantasi (*Warcraft*), dan fiksi ilmiah (*Star Wars*).

c. *Massively Multiplayer Online Role-playing Games* (MMORPG)

Permainan ini biasa dimainkan dalam jumlah besar (>100 pemain) dimana pemain melakukan interaksi satu dengan yang lainnya secara langsung.

Contoh jenis *game* ini seperti *ragnarok*, dan *DOTTA*

d. *Cross Platform Online Play*

Permainan ini dimainkan dengan perangkat (*hardware*) berbeda dan biasanya menggunakan konsol seperti *playstation 2*, dan *Xbox*.

e. *Massively Multiplayer Online Game Browser*

Game dimainkan di browser seperti *internet explorer* atau *Mozilla Firefox*.

Game pemain tunggal *online* sederhana dapat dimainkan *browser* melalui teknologi skrip HTML, dan javascript, ASP, PHP, MySQL.

2.2.4 Faktor Risiko Kecanduan *Game Online* Pada Remaja

Ada banyak penyebab yang muncul dari kecanduan *game online*, salah satunya remaja tidak akan pernah bisa menyelesaikan *game* secara tuntas. Selain itu, remaja memiliki keinginan untuk menjadi nomer satu dalam permainan ataupun merasa bangga saat menjadi lebih mahir dalam permainan. Prinsip *game online* jika poin bertambah maka objek permainan menjadi lebih besar levelnya sehingga mayoritas remaja menjadi ketagihan. Smart dalam (Masya & Candra, 2016) mengatakan, berikut faktor risiko yang menyebabkan remaja mengalami kecanduan *game online* :

1. Faktor Eksternal

Adapun *external factor* yang menjadi penyebab kecanduan *game online* pada remaja diantaranya:

a. Kurangnya perhatian dari orang terdekat

Remaja merasa senang jika mendapat perhatian dari orang terdekatnya terutama dari orangtua. Seseorang akan berperilaku yang tidak menyenangkan untuk mendapatkan perhatian orang terdekatnya sehingga orangtua akan mengawasi dan memberikan perhatian.

b. Lingkungan

Perilaku remaja tidak hanya terbentuk dari keluarga. Saat di sekolah atau bermain dengan teman sebaya juga bisa membentuk perilaku remaja. Lingkungan yang kurang terkontrol dari teman sebaya yang bermain *game online* mengakibatkan remaja mengalami kecanduan *game online*.

c. Gaya pengasuhan

Pola asuh sangat mempengaruhi perilaku remaja. Orangtua harus berhati-hati dalam mengasuh anaknya karena kesalahan pola asuh dapat menyebabkan anak meniru perilaku orangtua yang buruk.

d. Hubungan Sosial

Hubungan sosial yang kurang baik sehingga remaja memilih alternatif bermain *game online* sebagai kegiatan menyenangkan.

2. Faktor Internal

Berikut faktor internal yang dapat menyebabkan kecanduan *game online* diantaranya:

a. Depresi

Beberapa remaja menggunakan media untuk meredakan depresinya termasuk dengan bermain *game online*, sehingga dengan kesenangan yang diperoleh dari bermain *game online*, maka semakin lama remaja akan ketagihan untuk selalu bermain *game*.

b. Kurangnya kontrol

Kurangnya kontrol dalam mencegah dampak negatif yang ditimbulkandari bermain *game online*. Orangtua memanjakan anak dengan fasilitas yang baik, menyebabkan kemungkinan efek kecanduan bermain *game online* terjadi. Sehingga remaja yang tidak terkontrol biasanya akan bersikap berlebihan.

c. Kurangnya aktivitas

Menyebabkan kemalasan sebagai aktivitas yang tidak menyenangkan sehingga bermain *game online* sebagai bentuk pelarian yang dilakukan remaja.

2.2.5 Ciri - Ciri Pecandu *Game Online*

WHO telah menetapkan *gaming disorder* atau kecanduan *game* termasuk salah satu gangguan mental, adapun ciri-cirinya ditandai dengan gangguan kontrol atas *game*, meningkatkan prioritas kepada bermain *game* di atas kegiatan lain, *game* lebih jauh diutamakan daripada dan aktivitas lainnya, dan kelanjutan atau peningkatan terhadap bermain *game* meskipun terjadi konsekuensi negatif.

Berdasarkan sumber dari *Center for Internet Addiction Recover*, (Smart.A, 2010) mengemukakan bahwa anak kecanduan game online memiliki ciri-ciri sebagai berikut:

- a) Merasa terikat dengan *game online* (memikirkan mengenai aktivitas *online* pada saat sedang *offline* atau mengharapkan sesi online berikutnya).
- b) Memainkan *game online* dengan lama waktu lebih dari 14 jam perminggu dan hanya memainkan satu jenis atau tipe *game* saja. Bahkan lebih dari 1 bulan masih tetap fokus memainkan atau menggeluti *game* yang sama serta masih terus bermain meskipun sudah tidak menikmati lagi.
- c) Merasa kebutuhan bermain *game online* dengan jumlah waktu yang terus meningkat untuk mencapai sebuah kegembiraan yang diharapkan. Merasa gelisah, murung, depresi, dan lekas marah ketika mencoba untuk mengurangi atau menghentikan bermain *game online*.
- d) Berbohong kepada anggota keluarga, saudara atau orang lain untuk menyembunyikan seberapa jauh terlibat dengan game online.
- e) Bermain *game online* merupakan cara untuk mengalihkan diri dari permasalahan atau untuk mengurangi kondisi perasaan yang menyusahkan.

2.2.6 Dampak Kecanduan Game Online

Penggunaan waktu yang berlebihan dalam bermain *game online* dapat mengganggu aktivitas sehari-hari. Remaja yang mengalami kecanduan *game online* semakin tidak akan bisa mengatur waktu bermain (Novrialdy, 2019). Hal ini menyebabkan remaja mengabaikan peran dan tugasnya di dunia nyata yang

apabila diabaikan akan berdampak negatif dan merugikan diri sendiri. Adapun dampak yang timbul dari adiksi *game online* mencakup 5 aspek (King et al., 2017):

1. Aspek Kesehatan

Gangguan kesehatan yang muncul akibat sering bermain *game online* menurut (Surbakti, 2017) sebagai berikut:

- a. Tegangnya otot mata atau disebut dengan *eye strain*, kelelahan yang terjadi pada bagian mata karena melihat benda secara terus-menerus seperti layar komputer, TV, ataupun handphone.
- b. *Wasir*, disebabkan karena duduk dalam jangka waktu yang lama sehingga mengganggu sirkulasi darah dan menekan pembuluh darah vena di sekitar anus yang menyebabkan pembengkakan pembuluh darah.
- c. *Carpal turnel syndrome*, gangguan yang timbul seperti ketegangan pada saraf di pergelangan tangan, sehingga menimbulkan efek kesemutan.
- d. Menurunkan metabolisme, bisa terjadi bila sering duduk yang terlalu lama tanpa aktivitas fisik yang mengakibatkan penurunan massa otot dan penurunan tahan tubuh sehingga mudah terserang penyakit.

2. Aspek Psikologis

Remaja yang mengalami kecanduan *game online* akan terus memikirkan permainnya, sulit berkonsentrasi saat belajar atau bekerja, berani untuk melakukan apapun untuk bisa bermain *game online* (Lebho et al., 2020). Ciri-ciri remaja yang mengalami kecanduan *game online* yaitu mudah marah, emosi, mudah mengucapkan kata kotor.

3. Aspek Akademik

Remaja pada usia sekolah memiliki peran sebagai murid yang apabila mengalami kecanduan *game online* dapat membuat prestasi akademik menurun. Konsentrasi remaja akan terganggu sehingga kemampuan menyerap pelajaran yang disampaikan oleh pengajar kurang optimal.

4. Aspek Sosial

Mempengaruhi kualitas hubungan dengan orang terdekat yang ditunjukkan dengan sikap menjauh dari orang lain ataupun keluarga karena senang menyendiri untuk bermain *game online* (Teguh & Hidayat, 2019).

5. Aspek Keuangan

Remaja yang tidak memiliki penghasilan sendiri dapat berbohong kepada orangtua dan melakukan berbagai cara seperti mencuri hanya untuk bermain *game online*. Dampak kejahatan yang ditimbulkan dari kecanduan *game online* berupa tindakan pencurian ataupun penipuan yang dilakukan remaja usai sekolah (Novrialdy, 2019).

2.2.7 Pencegahan Kecanduan *Game Online* Remaja

Orangtua dengan anak yang menyukai bahkan sering bermain *game online* tentunya perlu diawasi dan dilakukan tindakan awal guna mencegah terjadinya adiksi pada anak akibat bermain *game*. Bentuk pencegahan yang bisa dilakukan pada remaja dengan adiksi *game online* dijelaskan sebagai berikut:

1. Peralihan Perhatian (*attention switching*)

Bentuk aktivitas berpengaruh signifikan dalam mengurangi dan mencegah timbulnya pengaruh buruk dari kecanduan *game online* dengan melakukan ekstrakurikuler yang diadakan sekolah ataupun dengan aktivitas olahraga sehingga dapat mengalihkan fokus remaja terhadap *game online*. Penting bagi orang terdekat remaja untuk mengetahui potensi, bakat, dan minat remaja untuk mengalihkan perhatian dari aktivitas *game online*.

2. Penolakan (*dissuasion*)

Bentuk sikap yang ditampilkan dengan cara memberikan saran ataupun nasihat, argumentasi, persuasi, pendalaman hingga pemaksaan. Hal ini membutuhkan dukungan kekuatan eksternal (orangtua, guru, teman) untuk mencegah perilaku yang tidak diinginkan.

3. Pendidikan (*education*)

Kegiatan yang difokuskan untuk meningkatkan kognitif remaja dengan memperkaya ilmu pengetahuan sehingga remaja akan terdistraksi untuk belajar hal yang baru dan mengurangi kegiatan bermain *game*. Remaja bisa memperoleh ilmu di sekolah, di luar rumah seperti mengikuti bimbel atau les privat, maupun mendapatkan informasi di media elektronik misalnya menonton berita, membaca situs web menarik di internet sesuai dengan minatnya.

4. Pemantauan Orangtua (*parental monitoring*)

Anak usia remaja cenderung bermain *game online* ketika remaja merasa memiliki hubungan yang buruk dengan orangtua. Untuk itu, orangtua harus berhati-hati dan perhatian dalam memberikan akses teknologi serta harus lebih

mengawasi anak bermain *game online*. Adapun pengawasan yang dapat dilakukan ialah dengan menjalin komunikasi yang baik dengan anak, menunjukkan kepedulian terhadap kegiatan sekolah anak, dan lain sebagainya.

5. Pembatasan sumber daya (*resourch restriction*)

Tindakan untuk membatasi akses ataupun jangkauan anak dalam bermain *game*. Salah satu penyebab adiksi *game online* yaitu kemudahan akses. Menurut (King et al., 2017) dalam artikelnya menunjukkan bahwa apabila remaja lebih mudah mengakses *game online* maka berpeluang akan bermain lebih lama dan sering. Remaja yang memiliki media elektronik di kamar lebih cenderung menggunakannya untuk bermain *game online* daripada membaca buku. Orangtua dapat membatasi uang bermain *game*, sehingga upaya tersebut dapat membatasi ruang gerak dan akses remaja untuk bermain *game online* secara berlebihan.

2.2.8 Penatalaksanaan Kecanduan *Game Online*

1. Psikofarmakologi

Penelitian mengenai penatalaksanaan farmakologis dan non-farmakologis pada adiksi internet sudah diteliti dan direkomendasikan pada pasien yang sudah ditegakkan diagnosisnya. Adiksi internet memiliki dimensi biologis, maka obat, seperti obat antidepresan (amitriptilin, imipramine), antianxietas (diazepam, clorazepate) atau antipsikotik (Chlorpromazin, trifluoperazine, haloperidol) dapat membantu mengurangi gejala. Untuk sejauh ini penelitian mengenai pengobatan farmakologis yang telah diketahui keefektivannya untuk mengurangi gejala adiksi internet adalah Escitalopram dan Bupropion (Rosenberg & Feder, 2014).

2. Psikoterapi

a. CBT

Cognitive Behavioral Therapy memberikan langkah demi langkah untuk menghentikan perilaku Internet kompulsif dan mengubah persepsi pasien mengenai internet, smartphone dan komputer. CBT juga dapat menolong pasien untuk mempelajari cara-cara yang lebih baik untuk mengatasi emosi-emosi tidak nyaman, seperti kecemasan, stress, atau depresi (Rosenberg & Feder, 2014) .

b. REBT

Konseling memiliki banyak pendekatan salah satunya adalah pendekatan *Rational Emotive Behavior Therapy* (REBT) yang pertama kali dikembangkan oleh Albert Ellis pada tahun 1955. *Rational Emotive Behavior Therapy* (REBT) merupakan pendekatan kognitif-behavioral. Pendekatan *Rational Emotive Behavior Therapy* (REBT) berfokus pada perilaku individu, akan tetapi *Rational Emotive Behavior Therapy* (REBT) menekankan bahwa perilaku yang bermasalah disebabkan oleh pemikiran yang tidak rasional (Solikhah & Casmini, 2017).

c. Teknik *Self Control*

Teknik *self control* merupakan upaya yang dilakukan untuk mengarahkan atau mengendalikan perilaku dalam mencapai tujuan yang diinginkan.

d. Konseling Keluarga

Konseling keluarga merupakan salah satu bentuk interaksi antara konselor dengan keluarga dalam pemecahan masalah.

2.2.9 Alat Pengukuran Kecanduan *Game Online*

a. *Game Addiction Scale* (GAS)

Game Addiction Scale (GAS) merupakan alat pengukuran yang singkat. Skala ini dikembangkan secara spesifik oleh Lemmens untuk menilai permainan game diantara remaja dan dikonsepskan berdasarkan kriteria untuk kecanduan patologis di dalam edisi keempat dari *Diagnostic and Statistical Manual of Mental Disorder* (DSM-IV). Menurut Lemmens dalam (Lebho et al., 2020), remaja yang mengalami kecanduan *game online* memiliki 7 kriteria sebagai tolak ukur untuk menentukan remaja yang mengalami kecanduan *game online*. Seseorang yang mendapatkan 4 dari 7 kriteria merupakan indikasi remaja yang mengalami kecanduan *game online* (Lebho et al., 2020):

1. *Salience*, memikirkan tentang bermain *game online* sepanjang hari.
2. *Tolerance*, menambah waktu bermain *game online*.
3. *Mood modification*, bermain *game online* untuk melarikan diri dari masalah.
4. *Relapse*, cenderung bermain *game* kembali setelah lama tidak bermain.
5. *Withdrawal*, merasa tidak enak jika tidak bermain *game online*.
6. *Conflict*, menciptakan masalah baru dengan orang lain akibat bermain *game* secara berlebihan.
7. *Problems*, mengabaikan aktivitas lain yang menyebabkan masalah.

b. *Indonesian Online Game Questionnaire* (IGOC)

Indonesian Online Game Questionnaire memiliki properti psikometri yang adekuat untuk penelitian penggunaan *game online* di antara murid sekolah di Indonesia. Reliabilitas didapatkan adalah $\alpha=0.73$ yang menunjukkan bahwa skala

ini memiliki reliabilitas yang acceptable, dengan item-total correlation antara 0.29–0.55 yang mengindikasikan *construct homogeneity* yang acceptable. Penilaian skor 14–21 mengindikasikan mild online game addiction dan skor ≥ 22 mengindikasikan online game addiction. *Indonesia Online Game Addiction Questionnaire* merupakan skala pengukuran yang divalidasi dengan konteks murid sekolah di Indonesia, maka pengukuran mungkin tidak memberikan hasil yang optimal jika diluar konteks murid sekolah Indonesia .

c. *Game Addiction Inventory for Adults* (GAIA)

Pengukuran tingkat kecanduan siswa ini menggunakan instrumen *Game Addiction Inventory for Adults* (GAIA) yang dibuat oleh Wong dan Hodgins (2014) Aspek-aspek yang menjadi skalanya adalah:

- 1). Loss of control and consequences (kehilangan kendali dan konsekuensi)
- 2). Agitated withdrawal (penarikan yang gelisah)
- 3). Engagement (keterlibatan)
- 4). Coping (mengatasi)
- 5). Mournful withdrawal (pengunduran diri yang berduka)
- 6.) Shame (malu).

2.2.10 Tingkatan Kecanduan *Game Online*

Kecanduan *game online* dideskripsikan sebagai gangguan mengontrol keinginan untuk bermain *game online* tanpa melibatkan penggunaan obat atau zat adiktif (Young, 2009). Kecanduan *game online* memiliki 3 tingkatan kecanduan yaitu kecanduan ringan, sedang dan berat.

a. Kecanduan *game* ringan

Seseorang dikatakan kecanduan ringan apabila sering bermain *game online* dengan pola hidup yang mulai tidak teratur dan malas dalam melakukan segala sesuatu.

b. Kecanduan *game* sedang

Kecanduan *game* sedang apabila seseorang merasa antusias apabila ditanya tentang *game online* sehingga sulit untuk berkonsentrasi, sering mengantuk, dan mudah emosional dalam berbagai hal.

c. Kecanduan *game* berat

Seseorang dengan kecanduan berat akan timbulnya sifat ingin menirukan karakter dalam *game* sehingga menyebabkan terputusnya sosial di masyarakat, pada tingkat ini seseorang sudah mengeluarkan uang hanya untuk bermain *game* (Pratama et al., 2020).

2.3 Konsep CBT (*Cognitive Behavioral Therapy*)

2.3.1 Definisi CBT

Cognitive behaviour therapy atau terapi perilaku kognitif merupakan salah satu bentuk psikoterapi yang mengubah pikiran negatif menjadi pikiran positif (Sari et al., 2020). CBT dikatakan sebagai teknik psikoterapi berdasarkan hubungan antara pikiran, perasaan, perilaku. CBT dapat meningkatkan motivasi untuk berhenti bermain *game online*, mengontrol perilaku berulang, dan memperkuat pengambilan keputusan untuk terlibat dalam aktivitas pengalihan (Dong et al., 2018). Elemen sentral CBT dalam meningkatkan motivasi dan

perubahan perilaku pecandu *game online* adalah dengan memfasilitasi remaja untuk berubah secara bertahap dengan mengarahkan untuk menyadari masalah kecanduan dan dampak negatifnya serta memfasilitasi diskusi dua arah untuk mengatasi masalah tersebut.

2.3.2 Tujuan Pendekatan CBT

Menurut McLeod bahwa tujuan dari CBT untuk memberikan kontribusi pada kepribadian *self defeating* dengan keyakinan yang disatukan dengan penerimaan diri (*self acceptance*). Seperti yang dikemukakan oleh McLeod, Nevid dkk menyatakan bahwa CBT bertujuan untuk membantu klien mengidentifikasi dan memperbaiki keyakinan maladaptif dan sikap *self defeating* yang menghasilkan atau menambah masalah emosional (Hardjanto, 2017).

2.3.3 Karakteristik CBT

CBT merupakan bentuk psikoterapi yang sangat memperhatikan aspek peran dalam berpikir, kepekaan, dan bertindak. Berikut akan disajikan karakteristik terapi perilaku kognitif (AD & Megalia, 2017) sebagai berikut:

a. Berdasarkan model kognitif respon emosional

CBT didasarkan pada fakta ilmiah yang memunculkan perasaan dan perilaku, situasi, dan peristiwa. Keuntungan dari fakta ini seseorang dapat mengubah cara berpikir, cara merasa, dan cara dan berperilaku dengan lebih baik.

- b. CBT memiliki waktu yang efisien

CBT merupakan konseling yang memberikan bantuan dalam waktu yang relative singkat dibandingkan dengan pendekatan lainnya.

- c. CBT merupakan upaya kolaborasi antara terapis dan klien

Konselor harus mampu memahami maksud dan tujuan yang diharapkan konseli.

- d CBT memiliki program yang terstruktur dan terarah.

Konselor CBT memiliki agenda khusus untuk setiap sesi atau pertemuan. CBT memfokuskan pada pemberian bantuan kepada konseli untuk mencapai tujuan yang telah ditetapkan sebelumnya. Konselor CBT tidak hanya mengajarkanapa yang harus dilakukan oleh konseli, tetapi bagaimana cara konseli melakukannya.

- e. CBT didasarkan pada model edukasi.

CBT didasarkan atas dukungan ilmiah terhadap asumsi tingkah laku dan emosional yang dipelajari.

- f. CBT menggunakan metode sokratik. Konselor ingin memperoleh pemahaman yang baik terhadap hal-hal yang dipikirkan oleh klien.

2.3.4 Aspek *Cognitive Behavioral Therapy* (CBT)

Spiegler & Guevremont mengemukakan bahwa langkah penting dalam memahami masalah partisipan dengan lebih tepat berdasarkan pendekatan CBT, perlu dilakukan analisa fungsional atau analisa berdasarkan prinsip S-O-R-C sebagai berikut:

- a. *Stimulus* merupakan peristiwa yang terjadi sebelum individu menunjukkan perilaku.

- b. *Organism* merupakan partisipan yang memiliki aspek kognisi dan emosi didalamnya.
- c. *Response* merupakan perilaku yang dilakukan oleh individu sering disebut juga perilaku yang tampak (*overt behavior*) ataupun perilaku tidak tampak (*covert*).
- d. *Consequences* merupakan peristiwa yang terjadi sebagai suatu hasil dari perilaku.

2.3.5 Keefektifan CBT Pada Kecanduan *Game Online*

CBT merupakan pendekatan konseling yang menitik beratkan pada restrukturisasi atau pembenahan kognitif yang menyimpang akibat kejadian yang merugikan dirinya sendiri baik secara fisik maupun psikis. CBT merupakan konseling yang dilakukan untuk meningkatkan dan merawat kesehatan mental. Konseling ini akan diarahkan pada modifikasi fungsi berpikir, merasa dan bertindak, dengan menekankan otak sebagai penganalisa, pengambil keputusan, bertanya, bertindak, dan memutuskan kembali. *Cognitive Behavioural Therapy* memberikan langkah demi langkah untuk menghentikan perilaku Internetkompulsif dan mengubah persepsi pasien mengenai, smartphone dan komputer. CBT juga dapat menolong pasien untuk mempelajari cara-cara yang lebih baik untuk mengatasi emosi-emosi tidak nyaman, seperti kecemasan, stress, atau depresi (Rosenberg & Feder, 2014)

Metode CBT merupakan metode yang efektif terhadap kecanduan *game online* pada remaja dengan hasil penelitian menunjukkan ada penurunan nilai

mean kecanduan *game online* sebesar 13,94 poin (Sari et al., 2020). CBT dapat meningkatkan motivasi untuk berhenti bermain *game online*, mengontrol perilaku repetitif, dan memperkuat pengambilan keputusan untuk melakukan kegiatan pengalihan (Dong et al., 2018).

2.3.6 Prosedur *Cognitive Behavioral Therapy* (CBT)

CBT merupakan pendekatan psikoterapeutik yang digunakan oleh konselor untuk membantu individu ke arah yang positif. Berbagai variasi teknik perubahan kognisi, emosi dan tingkah laku menjadi bagian yang terpenting dalam CBT.

Berikut ini penjelasan proses melakukan CBT menurut Froggat (2008) dalam Manafe (2018) :

- a. Melakukan kontak terapi
 - 1) Membangun hubungan saling percaya dengan remaja dan keluarga.
 - 2) Memperhatikan jika ada gangguan yang muncul saat klien bertemu dengan terapis seperti kecemasan di awal pertemuan.
 - 3) Tunjukkan sejak dini kepada remaja bahwa perubahan menuju kemajuan menjadi mungkin dibantu dengan terapis yang mengarahkan remaja untuk mencapai tujuan tersebut.
- b. Menilai masalah, pribadi, dan situasi
 - 1) Mulailah dengan sudut pandang remaja mengenai apa yang menjadi masalahnya
 - 2) Tentukan gangguan klinis yang menyertai

- 3) Dapatkan riwayat pribadi dan sosial remaja.
 - 4) Kaji tingkat keparahan masalah remaja.
 - 5) Tandai faktor kepribadian remaja.
 - 6) Kaji apakah ada gangguan sekunder, dengan menangkap perasaan remaja mengenai masalah yang dialami.
 - 7) Identifikasi apakah ada penyebab non-psikologis pada klien.
- c. Mempersiapkan remaja untuk terapi
- 1) Jelaskan tujuan terapi yang ingin dicapai.
 - 2) Kaji motivasi remaja untuk berubah.
 - 3) Menjelaskan pada remaja tentang dasar terapi CBT.
 - 4) Diskusikan pendekatan yang akan digunakan dan implikasi terapi pada remaja.
 - 5) Masuk ke dalam kontrak terapi.
- d. Melaksanankan program terapi
- Penerapan CBT dapat dilakukan dalam 4 sesi, setiap sesi diadakan selama 30 menit untuk tiap remaja. Sesi tersebut meliputi:
- 1) Mengidentifikasi pengalaman yang tidak menyenangkan, pikiran negatif, dan perilaku negatif yang muncul serta cara mengatasinya.
 - 2) Edukasi klien untuk melawan pikiran negatif dan mengubah perilaku negatif.
 - 3) Memanfaatkan sistem pendukung.
 - 4) Mengevaluasi manfaat melawan pikiran negatif dan mengubah perilaku negatif.

e. Mengevaluasi kemajuan terapi

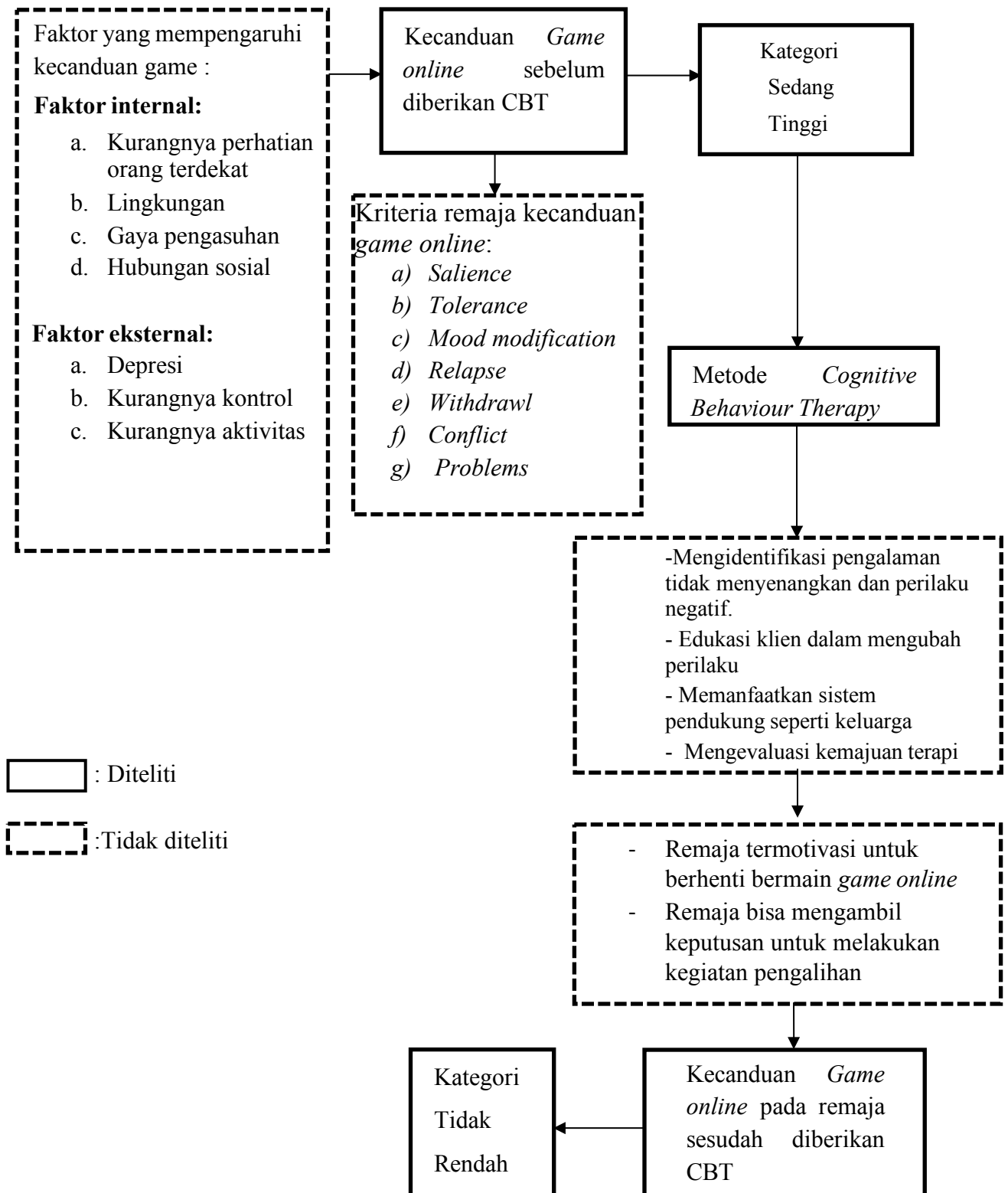
Menjelang akhir terapi penting untuk memeriksa kembali kemajuan yang ada, apakah disebabkan oleh perubahan signifikan dalam pemikiran remaja atau hanya peningkatan yang tidak disengaja. Pada evaluasi kemajuan terapi ini diharapkan remaja termotivasi untuk berhenti bermain, Remaja bisa mengambil keputusan untuk melakukan kegiatan pengalihan

f. Mempersiapkan klien untuk mengakhiri terapi

Setiap sesi konseling selalu dilakukan evaluasi untuk mengetahui tingkat pencapaian tujuan. Melalui evaluasi ini diharapkan adanya respon konseli terhadap pikiran-pikiran yang mengganggu tujuannya, dengan kata lain tetapberfokus pada permasalahan konseling.

g. Ingatkan remaja dan keluarga bahwa kekambuhan sangat mungkin terjadi dan terapis harus yakin bahwa klien mengetahui yang harus dilakukan jika gejala muncul kembali. Diskusikan dengan remaja dan keluarga bagaimana merekaakan mencari bantuan jika timbul kekambuhan.

2.3.7 Kerangka Teori



BAB III METODE PENELITIAN

3.1 Strategi Pencarian Literatur

3.1.1 Protokol dan Registrasi

Rangkuman menyeluruh dalam bentuk *literature review* pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja. Protokol dan evaluasi dari *literature review* akan menggunakan *checklist* PRISMA sebagai upaya menentukan pemilihan studi yang telah ditemukan dan disesuaikan dengan tujuan dari *literature review* ini.

3.1.2 Database Pencarian

Literature review yang merupakan rangkuman menyeluruh beberapa studi penelitian yang ditentukan berdasarkan tema tertentu. Pencarian *literature* dilakukan pada bulan Oktober sampai Desember 2021. Data yang digunakan dalam penelitian ini adalah data sekunder yang diperoleh bukan dari pengalaman langsung, akan tetapi diperoleh dari hasil penelitian yang telah dilakukan oleh peneliti-peneliti terdahulu. Sumber data sekunder yang didapat berupa artikel jurnal bereputasi baik nasional maupun internasional dengan tema yang sudah ditentukan (Nursalam, 2020). Pencarian *literature* dalam *literature review* ini menggunakan tiga *database* dengan kriteria kualitas tinggi dan sedang, yaitu: *PubMed*, *Google Scholar*, *ProQuest*.

3.1.3 Kata Kunci

Pencarian artikel atau jurnal menggunakan *keyword* dan *Boolean Operator* (*AND*, *OR*, *NOT*, or *AND NOT*) yang digunakan untuk memperluas atau menspesifikasikan pencarian, sehingga mempermudah dalam penentuan artikel atau jurnal yang digunakan. Kata kunci dalam *literature review* ini disesuaikan dengan *Medical Subject Heading* (MeSH) yaitu sebagai berikut:

3.1.4 Tabel Kata Kunci

Variabel 1	Variabel 2	Populasi
Terapi Perilaku Kognitif	<i>AND</i> Kecanduan <i>Game Online</i>	<i>AND</i> Remaja
<i>OR</i>	<i>OR</i>	<i>OR</i>
<i>Cognitive Behaviour Therapy AND Online Game Addiction AND Adolescence</i>		
	<i>OR</i>	<i>OR</i>
<i>Internet Game Disorder AND Teenagers</i>		

3.2 Kriteria Inklusi dan Eksklusi

Strategi yang digunakan dalam mencari artikel dapat menggunakan PICOS *framework*, yaitu terdiri dari:

- a. *Population/Problem* merupakan populasi atau masalah yang akan dianalisis sesuai dengan tema yang sudah ditentukan dalam *literature review*, yaitu remaja yang mengalami kecanduan *game online*.

- b. *Intervention* merupakan tindakan penatalaksanaan terhadap kasus baik individu atau kelompok masyarakat serta pemaparan tentang penatalaksanaan studi sesuai dengan tema yang sudah ditentukan dalam *literature review* yaitu terapi CBT.
- c. *Comparison* merupakan penatalaksanaan atau intervensi lainnya yang digunakan sebagai pembandingan dan menggunakan kelompok kontrol pada artikel yang dipakai.
- d. *Outcome* merupakan hasil atau luaran yang diperoleh pada studi terdahulu yang sesuai dengan tema yang sudah ditentukan dalam *literature review* yaitu adanya pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja
- e. *Study design* merupakan desain penelitian yang digunakan dalam artikel-artikel yang akan direview yaitu menggunakan metode *quasi experimental, randomized control group*.

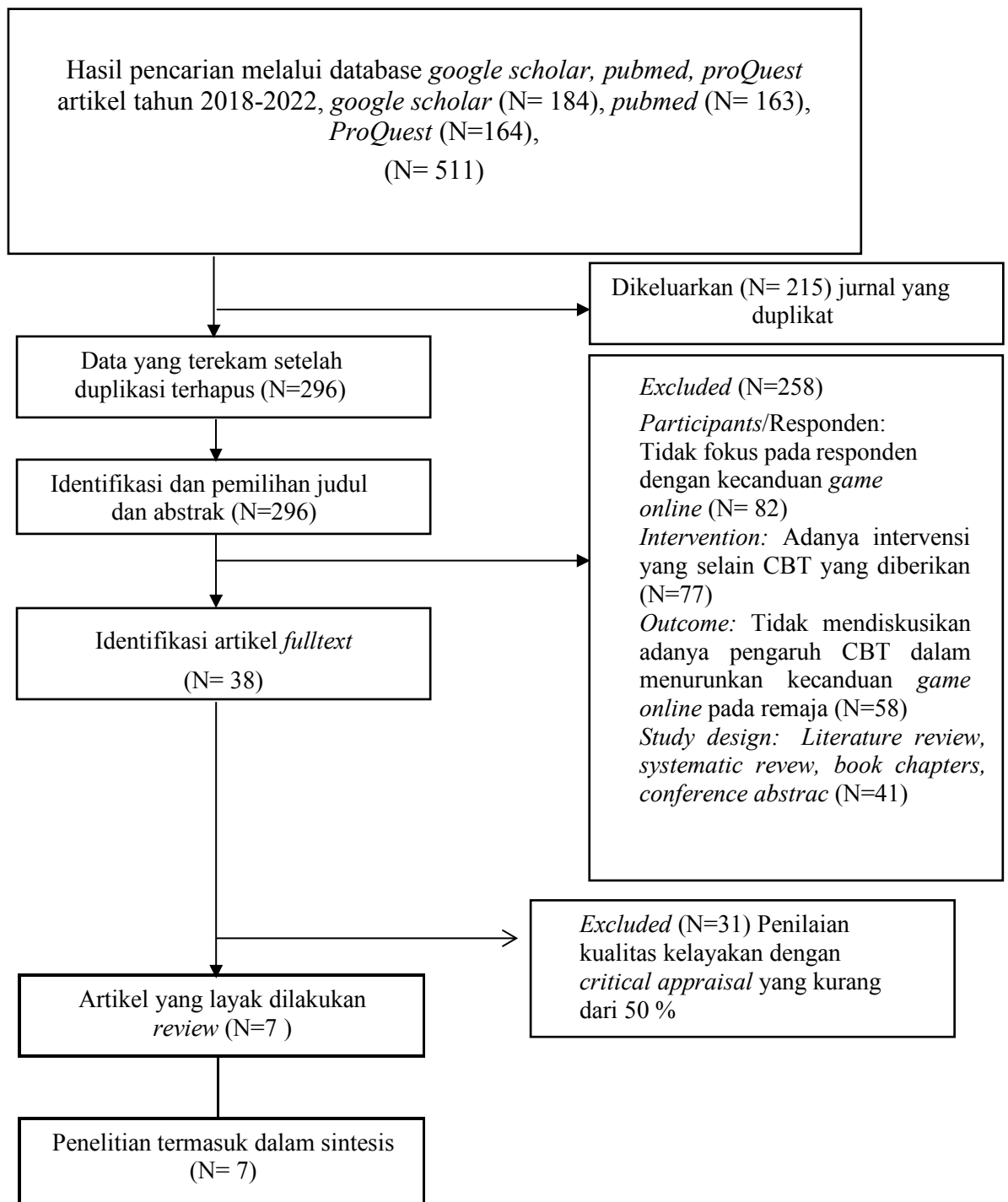
Tabel 3.2 Kriteria Inklusi dan Eksklusi *Literature Review*

Kriteria	Inklusi	Eksklusi
<i>Population</i>	Artikel yang didalamnya berpopulasi remaja	Populasi yang tidak berfokus pada remaja yang kecanduan <i>game online</i>
<i>Intervention</i>	Intervensi menggunakan metode CBT	Intervensi menggunakan metode selain CBT (REBT, teknik <i>self control</i> , konseling keluarga)
<i>Comparation</i>	Penelitian yang membandingkan antara sebelum dan sesudah dilakukan intervensi CBT.	Penelitian yang tidak berfokus pada hasil perbandingan sebelum dan sesudah dilakukan CBT.
<i>Outcomes</i>	Studi yang mendiskusikan adanya pengaruh CBT dalam menurunkan kecanduan <i>game online</i> pada remaja	Studi yang tidak mendiskusikan dan berfokus tentang adanya pengaruh CBT dalam menurunkan kecanduan <i>game online</i> pada remaja
<i>Study design</i>	<i>Quasi experiment, Randomized control group, comparasion.</i>	<i>Cross Sectional, Literature review and systematic review.</i>
<i>Publication Years</i>	Tahun 2018-2021	Sebelum tahun 2018
<i>Language</i>	Bahasa Indonesia dan Inggris	Bahasa selain Indonesia dan Inggris

3.3 Seleksi Studi dan Penilaian Kualitas

3.3.1 Hasil Pencarian dan Seleksi Studi

Berdasarkan hasil pencarian *literature* melalui publikasi diempat *database* dan menggunakan kata kunci yang sudah disesuaikan dengan MeSH, peneliti mendapatkan 511 artikel yang sesuai dengan kata kunci tersebut. Hasil pencarian yang sudah didapatkan kemudian diperiksa duplikasi, ditemukan terdapat 215 artikel yang sama sehingga dikeluarkan dan tersisa 296 artikel. Diskrining kembali sesuai dengan PICOS mendapatkan 37 artikel. Jumlah akhir yang di analisa berdasarkan kelayakan *critical appraisal* didapatkan sebanyak 7 artikel yang bisa dipergunakan dalam *literature review*. Hasil seleksi artikel studi dapat digambarkan dalam diagram *flow* di bawah ini :



Gambar 3.3 Diagram *Flow literature review* berdasarkan PRISMA 2009 (Polit and Beck, 2013).

BAB IV

HASIL DAN ANALISIS

4.1 Karakteristik Studi

Hasil penelusuran artikel pada penelitian berdasarkan topik *literature review* ini “ pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja” didapatkan tujuh artikel penelitian dimana seluruhnya kuantitatif dengan desain penelitian adalah menggunakan pendekatan *quasi experimental*, rentan tahun artikel yang diambil yaitu tahun 2018 hingga 2022. Berikut ini hasil analisis artikel yang ditampilkan dalam bentuk tabel sebagai berikut :

Tabel 4.1 Karakteristik Studi

NO	Author	Judul	Sumber	Tahun	Metode	Database
1	• Febriana Sari • Irna Kartika • Henim Nur K. • S. Dwi Sulistyawati	<i>Cognitive Behaviour Therapy</i> Menurunkan Kecanduan Game Online Pada Siswa SMA	Jurnal Kedokteran Diponegoro Vol: 10 No: 3 E-ISSN: 2549-8134 P-ISSN: 2089-0834	2020	Desain Penelitian Desain penelitian ini menggunakan <i>quasi experiment</i> dengan <i>pre and post test one group without control group</i> . Sample Sampel terdiri dari 30 remaja. Variable Penelitian Independent : <i>Cognitive behaviour therapy.</i> Dependent : Kecanduan game online pada siswa SMA Instrument <i>Internet Adiction Test (IAT)</i> Analisis Data dianalisis menggunakan Analisis data menggunakan <i>paired t test</i> .	Google Scholar
2	• Indah Adriani • Fatmawati • Haerat	<i>The Effect of Cognitive Behaviour Therapy on Online Gaming Addiction in Adolscents</i>	Vol : 5 No : 1 P-ISSN: 2580-7137	2018	Desain Penelitian Desain penelitian ini menggunakan <i>pre and post control group design</i> . Sampel 34 remaja. Variabel Penelitian Independent : <i>Effect of Cognitive Behaviour Therapy</i>	Google Scholar

					Dependent : <i>Online Gaming addiction in Adolscents</i> Instrument Kuesioner Analisa Data Analisis menggunakan uji statistik uji T berpasangan dengan tingkat kepercayaan ($\alpha = 0,05$).	
3	- Hanan Hosni El Sherbini - Rasha Abd El Hakim Abdou	<i>Effect of Cognitive Behaviour Therapy on Internet Gaming Disorder and Quality of Life Among Preparatory School Students in Alexandria</i>	Vol : 8 No : 23	2020	Desain Penelitian Desain penelitian ini menggunakan Quasy Ekperimen Sampel 200 siswa remaja. Variabel Penelitian Independent : <i>Cognitive Behaviour Therapy</i> Dependent : <i>Interent Gaming Disorder among School Students</i> Instrument Kuesioner Analisa Data Menggunakan uji Chi-Square Tingkat signifikansi yang dipilih untuk penelitian ini adalah P sama dengan atau kurang dari 0,05.	ProQuest
4	- Nuzulli Rahmatillah - Farida Setawati	<i>The Analysis of Cognitive restructuring techniques effectiveness to</i>	Vol : 04 No : 02 ISSN: Print 1412-9760	2020	Desain Penelitian Desain penelitian ini menggunakan <i>Quasy Ekperimen</i> dengan Desain <i>Pre-Test</i> dan <i>Post-Test</i> Sampel 16 siswa remaja.	ProQuest

		<i>reduce the online game addiction</i> (2019)			Variabel Penelitian CBT <i>cognitive restructuring counseling techniques</i> (Variabel Independen) <i>Online game addiction</i> (Variabel Dependen) Instrument <i>Online game addiction scale</i> Analisa Data Analisis data menggunakan uji <i>score gain</i>	
5	• Frendi Nur Diansyah • Meilina Juwita Andini • Suhudi • Bakhrudin All Habsy	Keefektifan Konseling Kelompok <i>Cognitive Behaviour</i> untuk mengurangi kecanduan <i>game</i> <i>online</i> pada remaja	Vol : 03 No : 02 ISSN: 2580-7862	2020	Desain Penelitian Desain penelitian ini menggunakan Ekperimen dengan Desain Pre-Test dan Post-Test Sampel 33 remaja. Independent : Konseling kelompok <i>cognitive behaviour</i> Dependent : Kecanduan <i>game online</i> pada remaja Instrument Angket Analisa Data IBM SPSS Statistic v20 dengan uji <i>Paired Sample T-Test</i>	Google Scholar
6	• Katajun Lindenberg, PhD • Sophie Kindt, MSc	<i>Effectiveness of Cognitive Behavioral Therapy-Based Intervention in</i>	JAMA Psychiatry 2019 Oct 1;76(10):10	2022	Desain Penelitian Desain penelitian ini menggunakan Quasy Ekperimen Sampel 16 siswa remaja.	PubMed

• Carolin Szász-Janocha,	<i>Preventing Gaming Disorder and Unspecified Internet Use Disorder in Adolescents</i>	18-1025.		Variabel Penelitian Independent : <i>Cognitive Behavioral Therapy–Based Intervention</i> Dependent : <i>Gaming Disorder in adolescent</i> Instrument CSAS [Computerspielabhängigkeitsskala] Analisa Data Analisis data menggunakan uji signifikansi adalah 2-sisi, dan $P < .05$ digunakan untuk menunjukkan signifikansi. Semua perhitungan statistik menggunakan IBM SPSS Statistics, versi 27 (IBM).	
• ily of Rosario Herrera Torre • Eskarleth Masiel Calero Morales • Leydi Aurora Herrera Davila.	<i>Efficacy of cognitive behavioral treatment in adolescents video game users</i>	<i>Revista Torreon Universitari o Autonoma de Nicaragua</i> Vol : 09 No : 26	2019	Desain Penelitian Desain penelitian ini menggunakan Quasy Ekperimen dengan Desain Pre-Test dan Post-Test Sampel 40 siswa remaja. Variabel Penelitian Independent : <i>Efficacy of cognitive behavioral treatment</i> Dependent : <i>adolescents video game users</i> Instrument Questionnaire Analisa Data <i>Cross tables and chi square</i>	Pubmed

4.2 Karakteristik Responden Studi

Karakteristik responden yang di *review* oleh peneliti pada 7 artikel antara lain terdiri dari, variabel usia, jenis kelamin, dan pendidikan ditunjukkan pada tabel berikut :

Tabel 4.2 Karakteristik Responden

No	Penulis dan tahun Terbit	Hasil Temuan							
		Laki-laki	%	Perempuan	%	Usia	%	Pendidikan	%
1	Sari, dkk. (2020)	15	50%	15	50%	15-16 Tahun	100 %	SMA	100%
2	Indah, dkk. (2018)	18	52,%	16	47,1%	15-16 Tahun	100 %	SMA	100%
3	Freudi, dkk. (2020)	Tidak Dijelaskan	-	Tidak Dijelaskan	-	18-21 Tahun	100 %	Mahasiswa	100%
4	Nuzuli, dkk. (2020)	Tidak Dijelaskan	-	Tidak Dijelaskan	-	15-19 Tahun	100 %	SMK	100%
5	Hanan, dkk. (2020)	104	49,5%	96	50,5%	12-16 Tahun	100 %	SMP SMA	60% 40%
6	Katajun, dkk(2022)	229	54,3%	193	45,7%	15-20 Tahun	100 %	-	-
7	Torre, dkk, (2019)	30	75%	10	25%	14-19 Tahun	100 %	-	-

Berdasar tabel 4.2, hasil dari 7 artikel didapatkan empat artikel mayoritas responden yang paling banyak berjenis kelamin laki-laki, satu artikel memiliki responden berjenis kelamin dengan jumlah sama, dan dua artikel tidak menjelaskan karakteristik usia responden. Hasil analisis 7 artikel didapatkan mayoritas responden yaitu kelompok remaja dengan rata-rata usia paling banyak sekitar 14-21 tahun. Didapatkan mayoritas pendidikan responden yaitu tiga artikel menunjukkan pendidikan paling banyak adalah SMA/SMK, satu artikel menunjukkan pendidikan paling banyak adalah pendidikan pertama, satu artikel menunjukkan pendidikan paling banyak adalah mahasiswa, dan dua artikel tidak menjelaskan karakteristik pendidikan.

4.3 Karakteristik *Cognitive Behaviour Therapy*

- a. Karakteristik *Cognitive Behaviour Therapy* pada 7 artikel yang direview ditunjukkan pada tabel berikut:

Tabel 4.3 Karakteristik *Cognitive Behaviour Therapy*

Artikel	Sesi	Tahapan Sesi perlakuan CBT	Jumlah Artikel
Freudi,dkk. (2020)	3 Sesi	<i>Cognitive behaviour therapy</i> yang dilakukan dengan menggunakan 3 sesi: (1) Peneliti memberikan model A-B-C dan memberikan terapi berupa pembayanagan diri. (2) Memberikan model A-B-C dengan memberikan gambaran kegiatan positif selain <i>Game Online</i> dan memberikan terapi berupa pembayanagan diri serta motivasi untuk mengurangi intensitas kegiatan <i>Game Online</i> . (3) Pemberian motivasi dan pengukuran diri.	1
Sari, dkk. (2020)	4 Sesi	<i>Cognitive behaviour therapy</i> yang dilakukan dengan menggunakan 4 sesi: 1. Mengidentifikasi pengalaman yang tidak menyenangkan, pikiran otomatis negatif dan perilaku negatif yang muncul serta cara melawannya. 2. Melawan pikiran otomatis negatif atau mengubah perilaku negatif berikutnya. 3. Memanfaatkan sistem pendukung. 4. Mengevaluasi manfaat melawan pikiran negatif dan merubah perilaku negative.	3
Katajun, dkk (2022)			
Torre, dkk (2019)			
Indah, dkk. (2018)	5 Sesi	<i>Cognitive behaviour therapy</i> yang dilakukan dengan menggunakan 5sesi: Proses penelitian terdiri dari 5 pertemuan dimana pertemuan pertama melakukan pengukuran awal (pre test) pada kelompok kontrol dan eksperimen, pada pertemuan kedua, tiga, empat melakukan proses terapi perilaku kognitif pada kelompok eksperimen dan pada pertemuan kelima pertemuan melakukan post test pada kelompok exprimen dan kontrol.	1

Nuzuli, dkk. 6 Sesi (2020)	<i>Cognitive behaviour therapy</i> yang dilakukan dengan menggunakan 6 sesi: 1) Tahap rasional dimana peran konselor menjelaskan tujuan konseling dan prosedur yang harus dilakukan oleh konseli 2) Tahap identifikasi adalah tahap dimana peran konselor dalam melakukan identifikasi pemikiran konseli dalam mencari distorsi pemikiran konseli, 3) Pengenalan dan latihan dalam mengatasi pikiran yang salah, 4) Konselor memberikan cara untuk dapat mengalihkan pikiran, menyalahkan diri sendiri dengan memberikan bantuan cara mengatasi pikiran sendiri, 5) Konselor memberikan penjelasan bagaimana caranya teknik pernyataan diri positif kemudian konseli mempraktekkannya 6) Konselor memberikan pekerjaan rumah.	1
Hanan, dkk. 14 Sesi (2020)	CBT yang dilakukan dengan 14 sesi Sesi 1 melibatkan pengenalan program, pengenalan diri, dan gambaran tujuan pengobatan. Sesi 2 siswa menggambarkan kehidupan mereka sendiri, termasuk status psikologis mereka (suasana hati dan kecemasan), lingkungan sosial, dan kohesi keluarga serta sejarah mereka bermain game internet. Sesi 3-5 menangani "stres" siswa Sesi 6, siswa diminta untuk mengintrospeksi "identitas diri" mereka dengan menggunakan to-do dan not-to-do list. Sesi 7-9, lima langkah perubahan; prakontemplasi, kontemplasi, persiapan, tindakan, dan pemeliharaan dibahas. Di dalam sesi 10, pola perilaku siswa termasuk impulsif, emosi, dan kesepian, serta pola berpikir mereka, dibahas. Selama sesi 11 dan 12, peristiwa menyakitkan memprovokasi kecemasan, suasana hati tertekan, dan konflik keluarga dibahas. Sesi 13 meliputi pemulihan kohesi keluarga dan lingkungan sosial. Di dalam sesi 14, perubahan siswa dibahas dan diperkuat dan penghentian program dilakukan.	1

Berdasarkan tabel 4.3 didapatkan 7 artikel diantaranya dalam pemberian terapi CBT menggunakan 3 sesi sebanyak 1 artikel, 4 sesi sebanyak 3 artikel, 5 sesi sebanyak 1 artikel, 6 sesi sebanyak 1 artikel dan 4 sesi sebanyak 1 artikel.

b. Waktu pelaksanaan CBT

Berdasarkan 7 artikel yang dianalisis terdapat 4 artikel yang menjelaskan tentang waktu pelaksanaan CBT, CBT yang dilakukan dalam 4 sesi diberikan selama 45 menit tiap sesi. Minggu pertama peneliti memberikan CBT sesi 1 dan 2 bersamaan, dilanjutkan minggu kedua CBT sesi 3 dan 4 bersamaan. Pada minggu ketiga dilakukan post test. CBT yang dilakukan dalam 14 sesi, dilaksanakan 2 hari per minggu, empat sesi per hari untuk 4 kelompok berbeda, durasi setiap sesi berkisar antara 45-60 menit, tes akhir dilakukan dua kali dan mengecek kembali 3 bulan kemudian untuk melihat perubahan pada responden. (Sari et al., 2020; Frendi et al., 2020; Hanan, 2020; Katajun, 2022).

4.4 Analisis

4.4.1 Kecanduan *Game Online* Pada Remaja Sebelum Diberikan CBT

Hasil kecanduan *game online* pada remaja sebelum dilakukan terapi CBT berdasarkan tingkatan dan nilai *mean* ditunjukkan pada tabel berikut:

Tabel 4.4 Kecanduan *Game Online* Sebelum Diberikan CBT

No	Penulis	Tingkat Kecanduan <i>Game Online</i>	N	Persentase/ Mean
1	Hanan, dkk. (2020)	1. Tidak	0	0,00%
		2. Rendah	80	40%
		3. Sedang	107	53,5%
		4. Tinggi/Kecanduan	13	6,5%
2	Nuzuli, dkk. (2020)	1. Sedang	6	75%
		2. Tinggi	2	25%
3	Indah, dkk. (2018)	1. Tinggi	17	100%
4	Sari, dkk. (2020)	-	30	57,17
5	Frengi, dkk. (2020)	-	33	67,50
6	Katajun, dkk(2022)	-	167	29,05
7	Torre, dkk, (2019)	-	40	45,0

Berdasarkan hasil identifikasi menunjukkan bahwa dari 3 artikel didapatkan hasil tertinggi responden dengan kecanduan *game online* sebelum dilakukan CBT pada kategori sedang yaitu sebanyak 53,5% dengan total 107 responden. Berdasarkan hasil identifikasi menunjukkan bahwa dari 4 artikel yang menggunakan kategori *mean*, didapatkan hasil tertinggi kecanduan *game online* sebelum dilakukan CBT berdasar nilai *mean* yaitu sebanyak 67,50 .

4.4.2 Kecanduan *Game Online* pada Remaja Setelah Diberikan CBT

Karakteristik kecanduan *game online* pada remaja setelah dilakukan terapi CBT berdasarkan tingkatan dan berdasar nilai rata rata *mean* ditunjukkan pada tabel berikut:

Tabel 4.5 Kecanduan *Game Online* Setelah Diberikan CBT

No	Penulis	Tingkat Kecanduan <i>Game Online</i>	N	Persentase/ Mean
1	Hanan, dkk. (2020)	1. Tidak	65	32,5%
		2. Rendah	112	56%
		3. Sedang	23	11,5%
		4. Tinggi/Kecanduan	0	0,00%
2	Nuzuli, dkk. (2020)	1. Tidak	2	25%
		2. Rendah	4	50%
		3. Sedang	1	12,5%
		4. Tinggi	1	12,5%
3	Indah, dkk. (2018)	1. Tidak	11	64,7%
		2. Tinggi/Kecanduan	6	35,7%
4	Sari, dkk. (2020)	-	18	43,23
5	Freudi, dkk. (2020)	-	33	67,50
6	Katajun, dkk(2022)	-	24	7,53
7	Torre, dkk, (2019)	-	6	12,5

Berdasarkan hasil identifikasi menunjukkan bahwa dari 3 artikel didapatkan hasil tertinggi responden dengan kecanduan *game online* setelah dilakukan CBT pada kategori ringan yaitu sebanyak 56,0% dengan total 112 responden. Berdasarkan hasil identifikasi menunjukkan bahwa dari 4 artikel yang menggunakan kategori nilai *mean*, didapatkan hasil terendah kecanduan *game online* setelah dilakukan CBT berdasarkan nilai *mean* terendah yaitu 7,53, sedangkan 1 artikel tidak menunjukkan penurunan.

4.5 Pengaruh *Cognitive Behaviour Therapy* dalam Menurunkan Kecanduan *Game Online* Pada Remaja

Hasil *literature review* dari 7 artikel dengan topik pengaruh *cognitive behaviour therapy* dalam menurunkan kecanduan *game online* pada remaja dapat dilihat di tabel berikut:

Tabel 4.6 Pengaruh *Cognitive Behaviour Therapy* dalam Menurunkan Kecanduan *Game Online* Pada Remaja

Artikel	Hasil temuan
Sari, dkk. (2020)	Hasil penelitian menunjukkan bahwa nilai rerata kecanduan <i>game online</i> sebelum intervensi adalah 57,17 dan nilai rerata kecanduan <i>game online</i> setelah intervensi adalah 43,23. Kesimpulan penelitian ini adalah <i>Cognitive Behaviour Therapy</i> menurunkan kecanduan <i>game online</i> secara signifikan (p value 0,001 dengan $\alpha = 0,05$, p value $< \alpha$).
Indah, dkk. (2018)	Hasil penelitian menunjukkan bahwa statistik uji T berpasangan dengan ($\alpha = 0,05$). Berdasarkan hasil tes ini. Didapatkan nilai p pada kelompok eksperimen sebesar 0,000. Jadi H_0 ditolak dan H_a diterima. Hal ini menunjukkan bahwa terdapat pengaruh tingkat kecanduan <i>game online</i> pada remaja sebelum dan sesudah diberikan terapi perilaku kognitif dengan nilai p value (0,00) $<$ dari nilai 0,05.
Nuzuli, dkk. (2020)	Perolehan skor kecanduan <i>game online</i> kelompok eksperimen menunjukkan nilai mean post test kelompok eksperimen 42,88, nilai rata-rata pretest 63,13 dengan <i>gain</i> skor -20,25. Skor menunjukkan p value (0,00) $<$ 0,05 dapat disimpulkan CBT efektif dalam mengurangi kecanduan <i>game online</i> pada siswa.
Hanan, dkk. (2020)	Hasil uji <i>Chi-Square</i> Tingkat signifikansi yang dipilih untuk penelitian ini adalah p sama dengan

	atau kurang dari 0,05. yang menunjukkan $p\text{-value} = 0,000$ ($p\text{-value} < \alpha = 0,05$). Interpretasi ada pengaruh CBT dalam mengatasi kecanduan <i>game online</i> pada remaja.
Katajun, dkk. (2022)	Sebanyak 422 remaja berisiko (usia rata-rata [SD], 15,11 [2,01] tahun; 229 peserta wanita [54,3%]) diacak ke salah satu kelompok intervensi PROTECT (n = 167; skor risiko rata-rata [SD], 29,05 [6,98]) dan dimasukkan dalam analisis keparahan gejala. Dibandingkan dengan kelompok kontrol, kelompok PROTECT menunjukkan penurunan yang lebih besar secara signifikan dalam keparahan gejala gangguan permainan, hasil uji signifikansi nilai ($\gamma_{11} = -0.458$; 95% CI, -0.735 to -0.180 ; $P < .001$, Sehingga dapat disimpulkan ada pengaruh CBT dalam mengatasi kecanduan <i>game online</i> pada remaja.
Torre, dkk. (2019)	Hasil pre-test dan post-test terapi <i>cognitive behaviour therapy</i> pada kecanduan <i>game online</i> ditemukan bahwa ada perbedaan yang signifikan secara statistik antara sebelum dan sesudah bahwa didapat hasil menunjukkan $p\text{-value} = 0,000$ ($p\text{-value} < \alpha = 0,05$), Interpretasi bahwa ada pengaruh CBT dalam mengatasi kecanduan <i>game online</i> pada remaja.
Freudi, dkk. (2020)	Hasil penelitian menunjukkan bahwa nilai rerata kecanduan <i>game online</i> uji <i>Paired Sample T-Test</i> . Sehingga menunjukkan hasil nilai Sig $0,507 > 0,05$ maka hipotesis menyatakan bahwa “H0 diterima” sedangkan “H1 ditolak” yang artinya tidak ada Keefektifan Konseling Kelompok <i>Cognitive Behavior</i> dalam mengatasi Kecanduan <i>Game Online</i> pada Mahasiswa di Universitas Darul ‘Ulum”

Berdasarkan tabel 4.6 terkait analisis pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja 6 dari 7 artikel yang telah ditelaah oleh peneliti menunjukkan bahwa terdapat pengaruh yang signifikan sebelum dan sesudah dilakukan *cognitive behaviour therapy*. Hal ini dibuktikan oleh hasil uji

statistik dari setiap artikel dimana nilai *p-value* $<0,05$. Sedangkan 1 artikel menunjukkan bahwa nilai kecanduan *game online* uji *Paired Sample T-Test* menunjukkan hasil nilai *Sig* $0,507 > 0,05$ maka hipotesis menyatakan bahwa “H0 diterima” sedangkan “H1 ditolak” yang artinya tidak ada pengaruh CBT dalam menurunkan kecanduan *game online*.

BAB V

PEMBAHASAN

5.1 Kecanduan *Game Online* sebelum Diberikan *Cognitive Behaviour Therapy*

Hasil analisis *review* dari 7 artikel yang diperoleh, menunjukkan bahwa kecanduan *game online* pada remaja sebelum diberikan CBT berdasarkan kategori tingkat kecanduan *game online* menyatakan bahwa dari 3 artikel menunjukkan bahwa rata-rata kecanduan *game online* pada responden sebelum dilakukan CBT dalam kategori tinggi dan sedang. Artikel pertama Hanan, dkk. (2020) didapatkan 107 responden dengan kategori kecanduan *game online* sedang 53,5 %, artikel kedua Nuzulli, dkk. (2020) didapatkan 6 dari 8 responden dengan kategori kecanduan *game online* tinggi sebesar 75% dan artikel ketiga Indah, dkk. (2018) menyatakan bahwa didapatkan 17 responden dengan kategori kecanduan *game online* tinggi sebesar 100%. 4 artikel yang menggunakan kategori *mean*, didapatkan hasil tertinggi kecanduan *gameonline* sebelum dilakukan CBT berdasar nilai *mean* yaitu sebanyak 67,50. Penelitian yang dilakukan oleh Sari, dkk. (2020) tingginya kecanduan *game online* pada remaja dapat disebabkan oleh ketersediaan dan bertambahnya jenis-jenis *game* di pasaran yang semakin pesat sejajar dengan perkembangan teknologi (Griffiths, 2014; Phelan, 2018), penelitian yang dilakukan oleh Indah, dkk. (2020) didapatkan hal yang meningkatkan tingginya kecanduan *game online* yaitu maraknya jenis dan pilihan dalam bermain *game online* membuat para pemain menjadi kurang mengendalikan diri dan

memunculkan persepsi individu yang beranggapan bahwa tidak ada hal lain yang lebih penting untuk dilakukan selain bermain *game online*, sedangkan penelitian dari Hanan, dkk. (2020) menyebutkan faktor risiko yang membuat angka remaja menjadi tinggi meliputi faktor sosio-demografi, sosial, psikologis, dan penggunaan internet yang berlebihan. Hal ini sesuai dengan penelitian yang dilakukan Masya, dkk. (2016) faktor yang menjadi penyebab dari tingginya kecanduan *game online* pada remaja, dapat dibagi menjadi faktor internal dan eksternal. Faktor eksternal meliputi kurangnya perhatian dari orang terdekat, lingkungan, gaya pengasuhan, hubungan sosial, faktor internal meliputi, depresi, kurangnya aktivitas. Faktor lingkungan yang mempengaruhi remaja lebih suka bermain *game online* berawal dari tersedianya fasilitas *game* di rumah sehingga membuat remaja lebih suka bermain *game* daripada bersosialisasi dengan lingkungan masyarakat. Selain itu, lingkungan sekolah saat bermain dengan teman itu juga dapat membentuk perilaku seseorang, artinya meskipun seseorang tidak dikenalkan *game* di lingkungan rumah, maka seseorang juga akan mengenal *game online* karena pergaulan (Masya & Candra, 2016).

Dampak kerugian yang muncul pada individu yang mengalami kecanduan *game online* adalah mereka cenderung mengabaikan kehidupan nyata mereka seperti belajar, bekerja, beristirahat, dan bersosialisasi dengan lingkungan (Ginting, 2017). Pada penelitian *literature* ini ditemukan, karakteristik remaja bermain *game online* mayoritas berjenis kelamin laki-laki, hal ini sesuai dengan penelitian Indah, dkk. (2020), bahwa remaja laki-laki

lebih bermain *game online* karena memiliki variasi tingkat kesulitan, terdapat unsur kekerasan di dalam permainan dan dapat dimainkan bersama temannya walaupun di tempat bermain berbeda, sedangkan perempuan lebih memilih permainan dengan karakteristik *game* yang lebih mudah dimainkan. Rata-rata *game online* yang tersedia di pasaran saat ini adalah *game* yang bertema kekerasan sehingga lebih diminati oleh laki-laki.

Menurut peneliti, kecanduan *game online* dapat menyebabkan individu menjadi kurang bersosialisasi dengan lingkungan sekitarnya. Ada beberapa faktor yang menyebabkan tingginya kasus kecanduan *game online* dari artikel yang diteliti yaitu maraknya jenis dan pilihan dalam bermain *game online* membuat para pemain menjadi kurang mengendalikan diri dan memunculkan persepsi individu yang beranggapan bahwa tidak ada hal lain yang lebih penting untuk dilakukan selain bermain *game online* dan faktor lain seperti faktor sosio-demografi, sosial, psikologis, dan penggunaan internet yang berlebihan, faktor lain yang berdampak besar pada remaja untuk bermain *gameonline* ada pada lingkungan sekitar baik di rumah dan juga lingkungan bermain dengan teman. Berdasarkan fakta, tingkat kecanduan *game online* sebelum di berikan CBT sebagian besar memiliki kategori tinggi dan kecanduan.

5.2 Kecanduan *Game Online* Remaja sesudah Diberikan *Cognitive Behaviour Therapy*

Hasil analisis *review* dari 7 artikel menunjukkan bahwa kecanduan *game online* pada remaja setelah diberikan CBT berdasarkan kategori tingkat

kecanduan *game online*, bahwa dari 3 artikel menunjukkan rata-rata kecanduan *game online* pada responden setelah dilakukan CBT dalam kategori ringan dan tidak kecanduan. Artikel pertama Hanan, dkk. (2020) didapatkan 65 responden dengan kategori tidak kecanduan *game online* 32,5 % dan kategori ringan dengan 112 responden sebesar 56%, artikel kedua Nuzulli, dkk. (2020) didapatkan 4 dari 8 responden dengan kategori kecanduan *game online* rendah sebesar 50% dan artikel ketiga Indah, dkk. (2018) menyatakan bahwa didapatkan 11 responden dengan kategori tidak kecanduan *game online* sebesar 64,7%. Kecanduan *game online* pada remaja setelah diberikan CBT berdasarkan 4 artikel yang menggunakan kategori nilai *mean*, menunjukkan penurunan, didapatkan hasil terendah kecanduan *game online* setelah dilakukan CBT yaitu 7,53, sedangkan 1 artikel tidak menunjukkan penurunan.

Kecanduan *game online* pada individu secara biologis dapat ditangani dengan obat antidepresan atau anti kecemasan. Selain itu penanganan kecanduan *game online* juga dapat diberikan dengan memberikan program konseling yang salah satunya menggunakan pendekatan CBT. Hal ini sesuai dengan penelitian yang dikemukakan oleh Rodriguez, dkk. (2017) bahwa penanganan kecanduan *game online* yang paling umum digunakan adalah CBT. CBT merupakan pendekatan konseling yang menitikberatkan pada pembenahan kognitif yang menyimpang akibat kejadian yang merugikan dirinya sendiri baik secara fisik maupun psikis. Konseling ini akan diarahkan pada modifikasi fungsi berpikir, merasa dan bertindak, dengan menekankan otak sebagai penganalisa, pengambil keputusan, bertanya, bertindak, dan

memutuskan kembali (Rosenberg & Feder, 2014). Hal ini sejalan dengan penelitian oleh Hanan, dkk. (2020), kecanduan *game online* berhasil menurun setelah diberikan CBT dan remaja memperoleh strategi mengatasi serta meningkatkan keterampilan pengambilan keputusan yang tepat, berpikir kritis, ketegasan dan keterampilan berkomunikasi. Hal yang sama, penelitian yang dilakukan oleh Sari, dkk. (2020) CBT dapat menurunkan kecanduan *game online* dan meningkatkan motivasi untuk berhenti bermain *game online* dan memperkuat kegiatan pengalihan.

Menurut peneliti CBT merupakan metode yang efektif membantu remaja untuk mengurangi durasi penggunaan *smartphone* dan bermain *game online*. Hal ini sesuai dengan artikel yang di *review*, dimana terjadi penurunan dalam durasi bermain *game online* setelah diberikan CBT yang menyebabkan remaja menyadari bahwa bermain *game online* dapat merugikan diri sendiri sesuai dengan tujuan yaitu CBT mampu mengajak individu untuk menentang pikiran dan emosi yang salah. Sebagian besar artikel yang direview mengungkapkan bahwa konseling dengan pendekatan terapi perilaku kognitif memiliki pengaruh yang signifikan untuk membantu remaja dalam mengendalikan kecanduan *game online*.

5.3 Pengaruh CBT Dalam Menurunkan Kecanduan *Game Online* pada Remaja

Berdasarkan hasil *review* dari 7 artikel pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja yang telah diperoleh didapatkan 6 artikel

memiliki nilai $p\text{ value} < 0,05$, yang artinya ada pengaruh CBT dalam menurunkan kecanduan *game online*. Hasil jurnal Sari, dkk. (2020) dituliskan dari 30 reponden berdasarkan uji signifikan ($p\text{ value} 0,001$ dengan $\alpha = 0,05$, $p\text{ value} < \alpha$) . Hasil jurnal Indah, dkk. (2018) dari 34 responden didapatkan nilai $p\text{ value} (0.001) < \alpha (0,05)$. Hasil jurnal Nuzulli, dkk. (2018) dari 16 responden berdasarkan perolehan skor kecanduan *game online* kelompok eksperimen menunjukkan nilai rata-rata kelompok post test kelompok eksperimen 42,88, nilai rata-rata pretest kelompok eksperimen 63,13 dengan gain skor -20,25, Uji sig didapatkan nilai $p\text{ value} 0,009 < 0,05$, Hasil jurnal Hanan, dkk. (2020) dari 200 responden berdasarkan hasil uji *Chi-Square* menunjukkan $p\text{-value} = 0,000$ ($p\text{-value} < \alpha = 0,05$). Dari hasil jurnal Katajun, dkk. (2022) didapatkan nilai $P\text{ value} (0.001) < \alpha (0,05)$. Dari hasil jurnal Ily, dkk. (2019) didapatkan nilai $p\text{ value} = 0,000$ ($p\text{-value} < \alpha = 0,05$). Hasil jurnal Frendi, dkk. (2020), menunjukkan uji *Paired Sample T-Test* dengan hasil nilai *Sig* $0,507 > 0,05$ maka hipotesis menyatakan bahwa “H0 diterima” sedangkan “H1 ditolak”.

Berdasarkan hasil review 7 artikel yang telah diperoleh didapatkan bahwa $p\text{ value}$ dari keenam artikel menunjukkan $p\text{ value} < 0,05$ yang artinya ada pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja, sedangkan satu artikel menunjukkan nilai *Sig* $0,507 > 0,05$ yang artinya tidak ada pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja, artikel yang di *review* menggunakan beberapa instrumen penelitian antara lain, kuesioner, *ped quality of life and inventory short form (Peds QLTM)*, *online game addiction scale*, angket, CSAS (*computerpielabhangigkeitskala*).

Berdasarkan pemaparan dan hasil penelitian 6 dari 7 artikel yang didapat, menunjukkan bahwa CBT mampu mengatasi dan menurunkan tingkat kecanduan *game online* terhadap remaja, penelitian yang dilakukan oleh Sari, dkk. (2020) mengungkapkan bahwa konseling dengan pendekatan terapi perilaku kognitif memiliki pengaruh yang signifikan untuk membantu remaja dalam mengendalikan kecanduan *game online*. Pada dasarnya CBT dirancang untuk membantu individu memperoleh wawasan tentang masalahnya, sehingga individu dapat mengubah pikiran yang menyimpang (bermain *game online* secara berlebihan) menjadi berpikir rasional (bermain *game* sesuai kebutuhan) (Sari et al., 2020).

CBT dapat dilakukan dalam 4 sesi, 5 sesi dan 6 sesi seperti yang digunakan dalam beberapa artikel dalam *literature review* ini dan menunjukkan adanya pengaruh dalam menurunkan kecanduan *game online* pada remaja tetapi CBT akan lebih efektif jika dilakukan dalam 14 sesi, penelitian yang dilakukan oleh Hanan, dkk. (2020) menunjukkan bahwa CBT diterapkan pada responden dengan kecanduan *game online* mendapat hasil yang lebih efektif, dimana 200 remaja dengan kecanduan *game online* sebanyak 177 remaja menurun menjadi kategori tanpa gangguan dengan evaluasi yang lebih mendalam dan dalam fase tindak lanjut selama tiga bulan berturut-turut.

Penelitian yang dilakukan oleh Frendy, dkk. (2020) menyatakan bahwa hasil dari penelitiannya tidak terdapat pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja. Salah satu faktor adalah peran konselor dimana konselor dalam penelitian yang dilakukan oleh Frendy, dkk. (2020) masih

belum siap dalam memberikan layanan pada responden yang memiliki kasus kecanduan *game online* berat dan juga masih kurangnya tenaga konselor dalam penelitian tersebut. Peran konselor sangat penting dalam terapi ini, hal ini juga diungkapkan oleh Indah, dkk. (2020) bahwa faktor pendukung seperti pengawasan orang tua dan pendekatan konselor pada responden dapat memudahkan responden merubah perilakunya. Faktor lain adalah sesi dariterapi ini menggunakan tiga sesi, dimana CBT akan lebih efektif jika dilakukandalam 14 sesi, ini sesuai dengan penelitian Hanan, dkk. (2020) CBT diberikan dalam 14 sesi dan evaluasi selama 3 bulan lebih efektif diberikan pada penderita kecanduan *game online*.

Menurut opini peneliti CBT dapat secara efektif diberikan untuk mengeksplorasi gejala dan dampak kecanduan *game online* apabila responden memiliki kesadaran bahwa perilaku berlebihan dalam bermain *game online* dapat merugikan diri sendiri baik disadari maupun tidak disadari, selain itu adanya keinginan dan motivasi untuk berubah menjadi lebih baik pada diri responden menjadi sangat penting. CBT dapat dilakukan dalam 4 sesi, 5 sesi dan 6 sesi dan menunjukkan adanya pengaruh dalam menurunkan kecanduan *game online* tetapi CBT lebih efektif jika diberikan dalam 14 sesi dengan evaluasi yang lebih mendalam dan dalam fase tindak lanjut selama tiga bulan berturut-turut. Peran konselor sangat penting dalam terapi ini, faktor pendukung seperti pengawasan orang tua dan pendekatan konselor pada responden dapat memudahkan responden merubah perilakunya.

BAB VI

KESIMPULAN DAN SARAN

6.1 Kesimpulan

Tinjauan dari 7 artikel yang telah direview didapatkan kesimpulan yaitu :

a. Kecanduan *game online* sebelum diberikan CBT

Kecanduan *game online* pada remaja sebelum diberikan CBT berdasarkan tingkat kecanduan *game online* berada pada kategori sedang dan tinggi.

Artikel yang menggunakan kategori *mean*, didapatkan hasil tertinggi kecanduan *game online* sebelum dilakukan CBT berdasar nilai *mean* yaitu sebanyak 67,50 yang berarti skor *mean* kecanduan *game online* masih tinggi.

b. Kecanduan *game online* sesudah diberikan CBT

Kecanduan *game online* pada remaja setelah diberikan CBT memiliki tingkat kecanduan *game online* dengan kategori rendah dan tidak kecanduan. Artikel yang menggunakan nilai *mean* menunjukkan penurunan, didapatkan hasil terendah kecanduan *game online* setelah dilakukan CBT berdasar nilai *mean* terendah yaitu 7,53, sedangkan 1 artikel tidak menunjukkan penurunan.

c. Pengaruh CBT dalam menurunkan kecanduan *game online* pada remaja

Hasil dari artikel 7 yang direview, didapatkan bahwa enam dari tujuh artikel, CBT efektif dalam menurunkan kecanduan *game online* pada remaja.

6.2 Saran

6.2.1 Bagi Orang Tua

Hasil *literature review* ini diharapkan dapat memberikan informasi dan pengetahuan pada orang tua bahwa kecanduan *game online* dapat ditangani dengan terapi CBT, dibantu oleh tenaga bantuan perawat, psikolog, dan konselor agar terapi CBT memberikan hasil yang maksimal pada penderita kecanduan *game online*.

6.2.2 Bagi Remaja

Literature review ini dapat dijadikan sebagai sumber rujukan dan referensi tentang permasalahan yang berkaitan dengan remaja, khususnya menginformasikan tentang upaya dalam mengatasi kecanduan *game online* dengan CBT.

6.2.3 Bagi Peneliti Selanjutnya

Hasil *literature review* ini dapat digunakan sebagai pedoman bagi pihak yang akan melakukan penelitian berikutnya, serta sebagai sumbang saran diharapkan peneliti selanjutnya dapat melakukan penelitian langsung dan mengembangkan penelitian berikut dengan metode selain CBT seperti REBT, teknik *self control* dan metode konseling keluarga dalam menurunkan kecanduan *game online* pada remaja.

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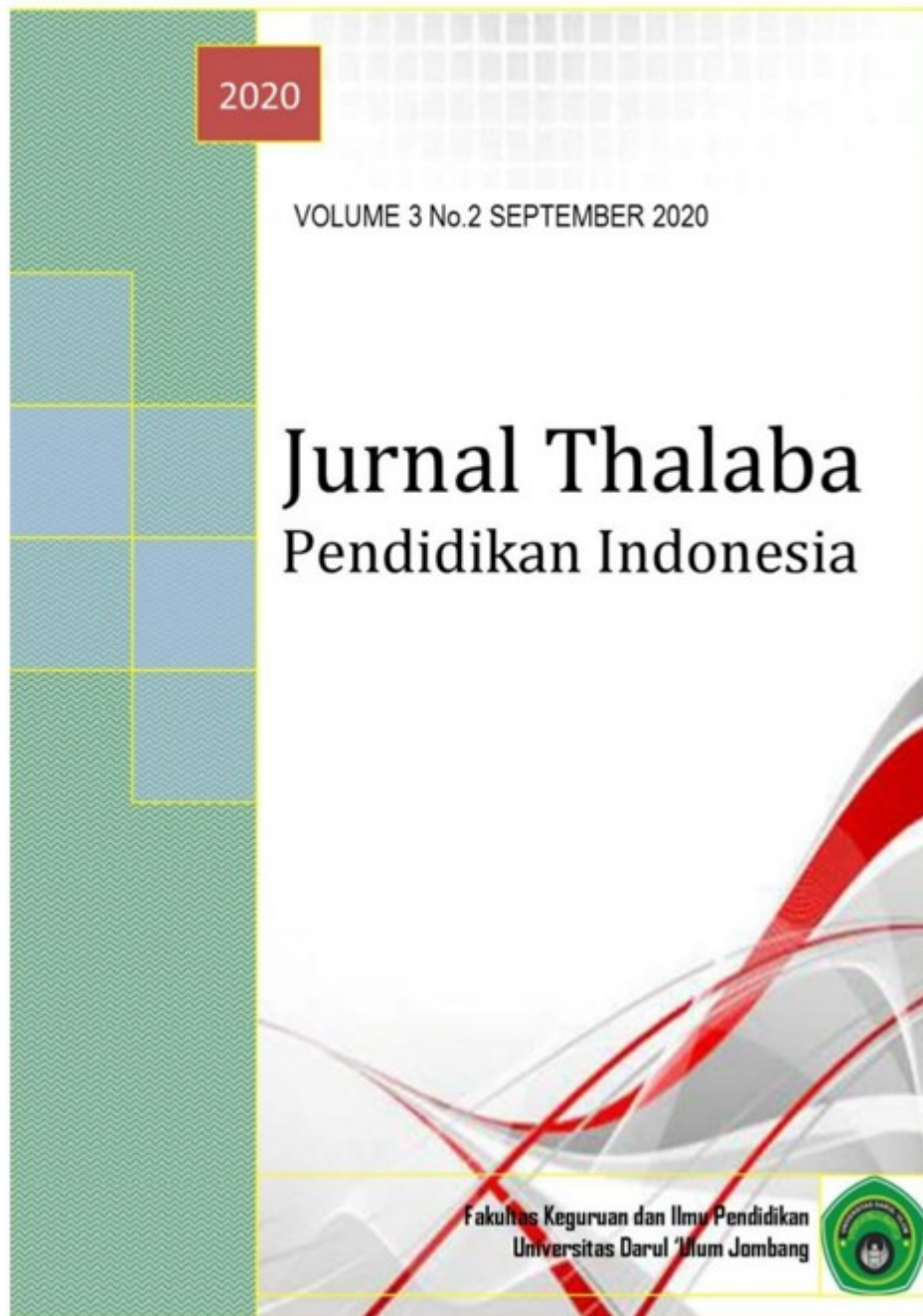
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LAMPIRAN



KEEFEKTIFAN KONSELING KELOMPOK *COGNITIVE BEHAVIOR* UNTUK MENGURANGI KECANDUAN *GAME ONLINE* PADA MAHASISWA

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Abstrak : Tujuan penelitian ini ialah untuk menguji adakah keefektifan Konseling Kelompok *Cognitive Behavior* untuk mengurangi kecanduan *Game Online* pada mahasiswa Universitas Darul 'Ulum. Maka dalam penelitian ini, peneliti menetapkan sampel sebanyak 33 mahasiswa dengan berasumsi dapat mewakili total keseluruhan jumlah populasi di Universitas darul 'Ulum. Selanjutnya dengan menggunakan instrumen penelitian berupa Angket dan peneliti mengukur tingkat Kecanduan *Game Online* pada 33 sampelnya sehingga peneliti menemukan hasil sebagai berikut ; (1) 10 sampel dinyatakan memiliki tingkat kecanduan *Game Online* "Rendah" dengan nilai persentase 30,3% ; (2) 19 sampel di nyatakan memiliki tingkat kecanduan *Game Online* "Sedang" dengan nilai persentase 57,6% ; (3) 4 sampel di nyatakan memiliki tingkat kecanduan *Game Online* "Tinggi" dengan nilai persentase 12,1%. Setelah menemukan sampel yang memiliki tingkat kategori Kecanduan *Game Online* "Tinggi" selanjutnya peneliti menetapkan sampel untuk masuk tahap Ekperimen dengan Desain Pre-Test dan Post-Test dalam Konseling Kelompok *Cognitive Behavior* . Sehingga peneliti menemukan hasil penghitungan menggunakan Paired Sample T-Test sebagai brikut ; diketahui nilai Sig 0,507 > 0,05 sehingga dapat diputuskan bahwa H0 diterima sedangkan H1 ditolak.

Kata Kunci : Konseling Kelompok *Cognitive Behavior*, Kecanduan *Game Online*.

***THE EFFECTIVENESS OF COGNITIVE BEHAVIOR GROUP
COUNSELING TO REDUCE ADDICTION TO
ONLINE GAMES ON STUDENT***

Abstract : The purpose of this study was to test the effectiveness of Cognitive Behavioral Group Counseling to reduce online game addiction in Darul 'Ulum University students. So in this study, the researchers set a sample of 33 students assuming they could represent the total population at Darul 'Ulum University. Furthermore, by using a research instrument in the form of a questionnaire and the researchers measured the level of Online Game Addiction in 33 samples, the researchers found the following results; (1) 10 samples were stated to have a "Low" level of online game addiction with a percentage value of 30.3%; (2) 19 samples were stated to have a "Medium" level of online game addiction with a percentage value of 57.6%; (3) 4 samples were stated to have a "High" level of Online Game addiction with a percentage value of 12.1%. After finding a sample that has a "High" Online Game Addiction category, the researcher then sets the sample to enter the Experimental stage with Pre-Test and Post-Test Designs in Cognitive Behavior Group Counseling. So the researchers found the results of the calculation using the Paired Sample T-Test as follows; it is known that the Sig value is $0.507 > 0.05$ so it can be decided that H_0 is accepted while H_1 is rejected.

Keywords: Cognitive Behavior Group Counseling, Online Game Addiction.

PENDAHULUAN

Pelayanan bimbingan dan konseling berperan untuk mencegah timbulnya masalah, sebagai pemahaman diri serta penyaluran pilihan pendidikan, pekerjaan, dan karir serta membantu memperbaiki masalah, sehingga peserta didik dapat mengembangkan potensi-potensi yang dimilikinya. Pada bimbingan dan konseling terdapat jenis-jenis layanan yang digunakan dalam melakukan proses konseling diantaranya sebagai berikut: (1) layanan orientasi; (2) layanan informasi; (3) layanan penempatan dan penyaluran; (4) layanan bimbingan belajar; (5) layanan konseling perorangan; (6) layanan bimbingan kelompok; dan (7) layanan konseling kelompok. Didalam bimbingan konseling terdapat pula beberapa program bimbingan diantaranya: (1) bimbingan akademik; (2) bimbingan karir; (3) bimbingan keluarga; (4) bimbingan sosial-pribadi (Habsy, 2017)

Dalam Prosesnya Bimbingan dan Konseling tidak sembarang dalam melakukan Terapi. Terapi sendiri memiliki banyak macam-macam atau beragam. Salah satu terapi tersebut ialah Cognitive-behavior atau Cognitive –Behavior Teraphy (CBT). Cognitive Behavior Teraphy Menurut Comier&Comier dalam (Detria, 2012) *Cognitive-behavior therapy* (CBT) merupakan salah satu rumpun aliran

konseling direktif yang dikemukakan oleh Williamson dengan modifikasi bersama teknik kognitif. Manajemen diri merupakan salah satu model dalam *Cognitive-Behavior Therapy*. Manajemen diri atau pengelolaan diri adalah salah satu strategi perubahan perilaku yang dalam prosesnya konseli mengarahkan perubahan perilakunya sendiri dengan suatu teknik kombinasi teknik teurapetik.

Sementara itu di Era galobalisasi saat ini , tentunya berkembang suatu ilmu dan Teknologi semakin canggih . dimana setiap item, media pendukung kegiatan, kesehatan, pendidikan bahkan Hiburan. Salah satu manfaat dan penggunaanya yang sangat mudah serta digemari atau dijumpai dimuka umum saat ini ialah Game Online. Game online sendiri merupakan sarana hiburan bagi para penggunanya dalam menemani waktu-waktu luang.. Game Online menurut *Burhan* dalam (*Andri Arief K dan Andi Widhiya B. U. 2019*) game Komputer yang dimainkan multi player melalui internet. Namun saat ini tak hanya melalui Komputer saja *Game Online* dapat dimainkan tetapi dapat juga memlalui Smartphone.

Maka dengan bentuk penggunaanya yang saat ini sangat *Flexible*, *Game Online* sendiri banyak digandrungi oleh berbagai Kalangan salah satunya ialah Mahasiswa.

Kenapa begitu ?, menurut pengamatan yang dilakukan peneliti, bagi Mahasiswa sendiri Game Online seringkali dipergunakan guna mengisi Kegabutan (Tidak melakukan apa-apa), teman nongkrong dan lain-lain. Hal lainnya ialah juga dapat pula sebagai ajang pembuktian diri, dan adapula sampai membeli keperluan, perlengkapan serta *Item-item* penting dalam bermain *Game Online*. Adapula yang sampai tidak sadarkan bahwa uang bulanan telah terpakai demi bermain *Game Online*, dan mengalihkan suatu pembicaraan penting dengan bermain *Game Online*.

Kejadian tersebut dapat diasumsikan oleh Peneliti sebagai Mahasiswa yang sedang dalam masuk pada Fase Kecanduan *Game Online*. Jika dikaji kembali pendapat peneliti juga dapat termasuk dalam Aspek-aspek Kecanduan

Game Online yang disebutkan oleh Habsy (2017) yang diantaranya aspek tersebut ialah *Saliance, Tolerance, Mood Modificat, Withdrawal, Relapce, Coflict*, dan *Problem*.

Sehingga dari penjelasan diatas yang diantaranya tentang Konseling Kelompok, *Cognitive Behavior Therapy* dan tentang dampak dari *Game Online* peneliti mecoba untuk menggali informasi dan mencoba mengidentifikasi apakah Konseling Kelompok yang juga dengan *Cognitive Behavior Therapy*-nya dan apakah mempunyai Keefektifan dalam mengurangi Kecanduan *Game Onlin* ?, tentunya hal tersebut terangkum dalam judul Penelitian ini yakni, Keefektifan Konseling Kelompok *Cognitive Behavior* Dalam Mengurangi Kecanduan *Game Online* Pada Mahasiswa.

METODE PENELITIAN

Secara umum, penelitian merupakan suatu usaha untuk menjawab pertanyaan dan memecahkan permasalahan yang ada (Kurniawan & Puspitaningtyas, 2016). Penelitian berisikan serangkaian upaya dengan tata cara yang tersusun secara sistematis dan bertujuan untuk memecahkan permasalahan serta melaporkan hasil penelitian. Metodologi penelitian merupakan serangkaian tata cara

yang digunakan dalam mendapatkan pengetahuan ilmiah atau ilmu (Suryana, 2010).

Maka dalam penelitian ini akan menggunakan Jenis Penelitian Kuantitatif-Deskriptif. Dalam lingkup yang lebih sempit, penelitian kuantitatif diartikan sebagai penelitian yang banyak menggunakan angka, mulai dari proses pengumpulan data, analisis data dan

penampilan data (Siyoto & Sodik, 2015). Sedangkan dalam (A. Rahmah, 2019) Deskriptif merupakan suatu Penelitian yang berfungsi untuk Mendeskripsikan fenomena-fenomena yang ada.

Kesimpulannya adalah data yang berupa angka yang telah dikelola akan diterangkan atau dijabarkan dengan menggunakan kalimat suatu penjelasan agar penelitian dapat dimengerti dan lebih spesifik.

Dalam menguji sampel dengan penggunaan teknik diatas selanjutnya untuk

menguji sampel yang digunakan ialah *One-Group Pretest-Posttest Design*.desai ini digunakan untuk memberikan ukuran pada sampel sebelum diberi perlakuan dan sesudah diberikan perlakuan.

Dengan demikian peneliti mengharapkan bisa mendapatkan hasil perlakuan yang lebih akurat, karena dapat membandingkan dengan keadaan sebelum perlakuan. Namun dengan catatan, apabila telah dipuskannya sampel dengan tingkat kecanduan Tinggi.

HASIL dan PEMBAHASAN

Hasil

Dalam penelitian ini Objek kajian ialah Konseling Kelompok *Cognitive Behavior* yang mana subyek dari penelitian ini ialah mahasiswa Universitas Darul 'Ulum. Sementara itu lokasi penelitian dilakukan di Universitas darul 'Ulum. Dari total keseluruhan subyek atau mahaiswa di Universitas Darul 'Ulum ialah sebanyak 1.442 orang (sumber pddikti.go.id).

Berdasarkan dari hasil yang didapat dari lapangan dan berdasarkan instrumen penelitian berikut beberapa tahapan dalam memperoleh data tentang tingkat Kecanduan *Game* mahasiswa Universitas Darul 'Ulum.

Tahap penelitian ini dilaksanakan pada tanggal 14 Agustus 2020 dengan mencoba mengintervensi sampel tentang wawasan *Game Online* dan mengukur sampel dengan Angket yang diberikan kepada sampel. Dari kegiatan tersebut peneliti mendapkan data yang dapat dilihat pada Gambar 1.3 dan tabel 1.3

Sebelum memasuki tahap eksperimen peneliti mencoba menggali informasi di Universitas Darul 'Ulum dengan menyebarkan Angketnya untuk mencari sampel mana yang memang harus masuk pada tahapan eksperimen penelitian

Sehingga peneliti mampu untuk menganalisa hipotesisnya . sebelum masuk pada temuan hasil penghitungan peneliti

akan melampirkan hitungan sampel yang akan dikategorikan dengan melihat pada gambar berikut.

$$X_{maks} : 5 \times 28 = 140$$

$$X_{min} : 1 \times 28 = 28$$

$$\begin{aligned} \text{Range} &: X_{maks} - X_{min} \\ &140 - 28 = 112 \end{aligned}$$

$$\begin{aligned} \text{Mean} &: (X_{maks} + X_{min})/2 \\ &(140 + 28)/2 \\ &168/2 = 84 \end{aligned}$$

$$\begin{aligned} \text{Sd} &: \text{Range}/6 \\ &112/6 = 18,66667 = 19 \end{aligned}$$

$$\begin{aligned} \text{Rendah} &: X < M - 1\text{Sd} \\ &X < 84 - 19 \\ &X < 65 \end{aligned}$$

$$\begin{aligned} \text{Sedang} &: M - 1\text{Sd} \leq X \leq M + 1\text{Sd} \\ &84 - 19 \leq X \leq 84 + 19 \\ &65 \leq X \leq 103 \end{aligned}$$

$$\begin{aligned} \text{Tinggi} &: M + 1\text{Sd} \leq X \\ &84 + 19 \leq X \\ &103 \leq X \end{aligned}$$

Maka berdasarkan dari catatan dari hasil pentabulasian angket penghitungan frekuensi peneliti dapat mengelompokkan sampelnya dengan yang telah diberikan kepada sampel.

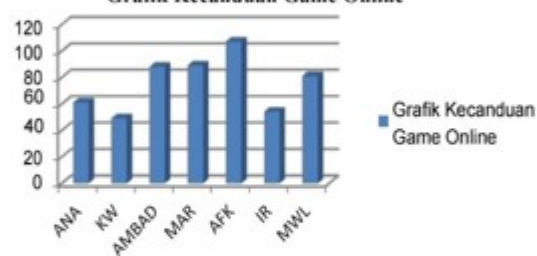
Gambar 1.6
Kategori

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rendah	10	30,3	30,3	30,3
	Sedang	19	57,6	57,6	87,9
	Tinggi	4	12,1	12,1	100,0
	Total	33	100,0	100,0	

Tabel 1.3

No.	Nama	Total Skor
1	ANA	61
2	KW	49
3	AMBAD	88
4	MAR	89
5	AFK	107
6	IR	54
7	MWL	81

Grafik Kecanduan Game Online



Dalam kategori kelompok “Tinggi” ialah jika nilai atau skor yang di dapatkan sampel $103 \leq X$ maka dapat dikategorikan kelompok “Tinggi”.

Sehingga peneliti mendapatkan beberapa sampel yang berada pada kelompok kategori “Sedang” dengan jumlah sampel yang dapat dilihat pada tabel 1.8.

Tabel 1.8

No.	Nama	Total Skor
1	AFK	107
2	AM	116
3	DRB	104
4	MHA	117

Menurut indikator yang meliputi setiap item pada instrumen penelitian dengan teori yang berdasarkan Lemens dkk, 2009 individu yang memiliki atau memenuhi 7 aspek (*Salience, Tolerance, Mood Modificat, Withdrawal, Replace Conflict, dan Problem*) dan memiliki tingkat nilai lebih dari indikator maka dapat diasumsikan oleh peneliti ialah individu yang memiliki Kecanduan *Game Online*.

Maka menurut peneliti, sampel yang berada pada kelompok kategori "Tinggi" memiliki atau memenuhi aspek-

Pembahasan

Berdasarkan dari hasil sebelum layanan peneliti menetapkan nilai *Pre-Test* ialah nilai yang diambil dari penghitungan angket sebelum layanan lebih tepatnya saat penyebaran angket.

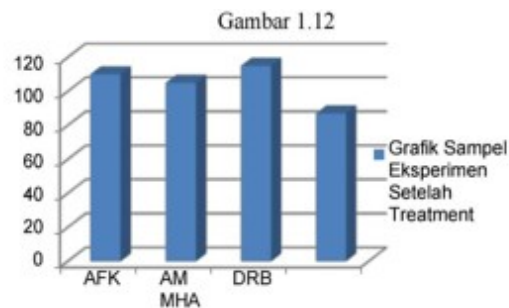
Sementara itu target pada pelaksanaan pertama ini ialah menanamkan model A-B-C (*Attendent, Behavior, Consequences*), model ini berfungsi sebagai proyeksi yang dilakukan sampel untuk menggambarkan diri dan

aspek yang di indiktorkan pada setiap item instrumen penelitian sehingga dapat disebutkan sampel Kecanduan *Game Online*.

Jadi, bersarkan temuan dan penjelasan di atas peneliti telah menemukan 4 sampel yang layak untuk mengikuti tahap eksperimen peneliti dengan menerapkan Konseling Kelompok *Cognitive Behavior*. Dimana eksperimen tersebut akan menguji Hipotesis dari peneliti dan terkait eksperimen tersebut.

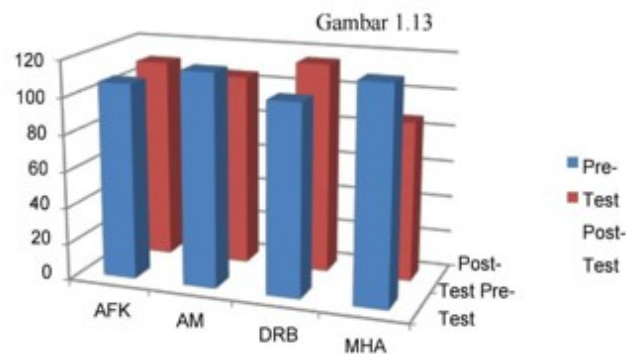
melakukan suatu terapi dengan membayangkan kejadian tersebut

Kemudian peneliti meminta pengukuran diri dengan memberikan skor 1 – 10 pada sampel eksperimen tersebut. Maka dari target tersebut sampel dapat menilai diri sendiri dan kemudian peneliti memberikan masukkan untuk mengimplementasikan tulisan tersebut kepada sampel eksperimen.



Jadi, dari hasil tersebut peneliti dapat mengasumsikan bahwa dari hasil pengukuran ialah nilai *Post-Test* yang

berdasarkan dari penghitungan angket peneliti



Gambar 1.13 merupakan perbandingan dari sampel eksperimen yang merupakan data hasil dari *Pre-Test* dan *Post-Test*. Selanjutnya peneliti akan dapat di Ujikan pada media atau *Software Statistic* yak *IBM SPSS Statistic v20* guna menemukan

perbandingan antara hasil *Pre-Test* dan *Post-Test* dan menguji Hipotesis Penelitian.

Sehingga dalam menentukan apakah salah satu hipotesis peneliti diterima, terbukti atau benar tidaknya peneliti memakai aplikasi (*Software*) komputer *IBM*

SPSS Statistic dengan menggunakan Uji *Paired Sample T-Test*.

Sementara itu pengambilan keputusan ialah jika nilai $Sig < 0,05$ maka H_1 diterima dan H_0 di tolak, sedangkan jika nilai $Sig > 0,05$ maka H_0 diterima dan H_1 di tolak.

Maka berdasarkan dari hasil pengujian *Paired Sample T-Test* dapat dipustuskan bahwa nilai menunjukkan $Sig 0,507 > 0,05$ dan " H_0 ; Tidak ada Keefektifan Konseling Kelompok *Cognitive Behavior* dalam mengurangi Kecanduan *Game Online* pada

Maka keputusan tersebut akan terlebih dulu dilihat pada gambar berikut.

Mahasiswa di Universitas Darul 'Ulum'" diterima. Sedangkan " H_1 ; Ada Keefektifan Konseling Kelompok *Cognitive Behavior* dalam mengurangi Kecanduan *Game Online* pada Mahasiswa di Universitas Darul 'Ulum'" ditolak.

PENUTUP

Gambar 1.14

Paired Samples Test

Paired Differences									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Pre-Test - Post-Test	6.75000	17.96988	8.98494	-21.84409	35.34409	.751	3	.507

Penelitian ini ialah untuk mengukur apakah ada Keefektifan Konseling Kelompok *Cognitive Behavior* Untuk Mengurangi Kecanduan *Game Online* Pada Mahasiswa Universitas Darul 'Ulum.

Pada penelitian ini penggunaan alat ukur (intstrumen penelitian) dan menggunakan teknik sampling *Sampling Purposive* untuk menentukan tingkat kecanduan *Game Online* dan kemudian menggunakan teknik Desain Eksperimen *One Grop Pre-Test Post-Test* dengan

mengambil sampel yang memiliki tingkat kecanduan *Game Online* untuk meneliti Keefektifan Konseling Kelompok *Cognitive Behavior*..

Dari hasil teknik *Sampling Purposive* peneliti mendapatkan hasil pengukuran dari 33 sampel dan membaginya ke dalam kelompok kategori, diantaranya; Tingkat Kecanduan *Game Online* (1) "Rendah" dengan persentase sampel 30,3% dengan jumlah sampel 10; (2) "Sedang" dengan persentase sampel

57,6% dengan jumlah sampel 19; dan (3) "Tinggi" dengan persentase sampel sebanyak 12,1% dengan jumlah sampel 4.

Diketahui terdapat adanya sampel yang memiliki tingkat kecanduan *Game Online* "Tinggi" selanjutnya peneliti memutuskan untuk melakukan tahap intervensi dan menyebut sampel tersebut sebagai sampel eksperimen. Sehingga dalam tahap eksperimen Konseling Kelompok *Cognitive Behavior* peneliti memiliki 3 tahapan dengan target per-pertemuan diantaranya yaitu (1) peneliti memberikan model A-B-C dan memberikan terapi berupa pembayangan diri; (2) memberikan model A-B-C dengan memberikan gambaran kegiatan positif selain *Game Online* dan memberikan terapi berupa pembayangan diri serta motivasi untuk mengurangi intensitas kegiatan *Game Online*; (3) Pemberian motivasi dan pengukuran diri.

Data pada sampel eksperimen terdapat 2 data pertama ialah saat sebelum melakukan Konseling (*Pre-Test*) dan kedua adalah setelah Konseling (*Post-Test*). Kemudian kedua data tersebut di uji untuk

menentukan Hipotesis penelitian. Uji dilakukan pada *IBM SPSS Statistic v20* dengan uji *Paired Sample T-Test*. Sehingga menunjukkan hasil nilai *Sig* 0,507 > 0,05 maka hipotesis menyatakan bahwa "H0 diterima" sedangkan "H1 ditolak".

Bersarkan dari kesimpulan sebagaimana menjadi mahasiswa ialah mengerti atau faham akan suatu keadaan dan dapat menilai diri sehingga mampu untuk mendapatkan suatu ilmu pengetahuan.

Dalam layanan Bimbingan dan Konseling juga terkadang memiliki suatu kesulitan untuk memberikan layanan pada mereka yang memiliki kasus yang amat berat sehingga seorang konselor-pun haruslah tanggap dan jika konselor telah mencapai kapasitasnya maka konselor-pun juga membutuhkan konselor lain untuk membantu memberikan pertolongan pada suatu kasus yang dialami klien atau peserta didik tertentu.

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The analysis of cognitive restructuring techniques effectiveness to reduce the online game addiction

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Abstract

In schools there are still many students who experience academic disorders such as lazy learning, often neglecting assignments, often skipping school, this is because one of them is because students are addicted to playing online games. This study aims to analyze the effectiveness of cognitive behavioral therapy (CBT) counseling with cognitive restructuring techniques to reduce online game addiction behavior of students. This research is a quantitative study with a quasi-experimental method. The population in this study were students who were addicted to online games. Sampling using a purposive sampling technique, so that the subjects in the experimental group were 8 students and the control group was 8 students. Data collection was done using online game addiction scale that has been tested for validity and reliability. Data analysis using score gain testing. The results showed that CBT cognitive restructuring techniques were effective in reducing online game addiction on students. The CBT cognitive restructuring techniques are effective in reducing online game addiction on students.

Keywords: Online game addiction, CBT cognitive restructuring counseling techniques.

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Introduction

Play is an important element for children's physical, emotional, mental, intellectual, creativity, and social development (Soetjingsih, 1998). School age children are group age or often referred to as age adjustment (Church & Stone in Hurlock, 2008). During the development of school-age children, the most popular games are competitive games (Hurlock, 2008). School-age children develop the ability to play games with regulations, (Desmita, 2008). Nowadays, the development of internet technology is warm, online game is no less blooming, its development is very fast (Harwood & Eaves, 2020; Magistretti, Dell'Era, & Verganti, 2020). Online games are electronic and visual based games (Rini, 2011). Online games have a very big difference with other games that gamers can not only play with the person next to them but can also play with several other players in other locations, even up to players in other parts of the world (Young, 2007). Children are considered to be more frequent and vulnerable to the use of online gaming than adults (Griffiths & Wood, 2000 in Lemmens, 2009).

Online game addiction is characterized by the extent to which gamers play games excessively which can negatively affect the gamers (Weinstein, 2010). Online game addiction criteria as well as internet addiction include excessive use, withdrawal symptoms, tolerance and negative effects (Young, 2011). This is because these four aspects better describe online gaming addictions, especially in students. Based on interviews and observations with Guidance and Counseling Teachers at SMK Negeri 2 Yogyakarta, the phenomenon of online game addiction is found at SMK Negeri 2 Yogyakarta, especially in class XI students. The majority of SMK Negeri 2 Yogyakarta students have gadgets such as mobile phones, i-pad, tabs and laptops that can access online gaming sites. In addition, the available wifi facilities at school also make it easier for students to be able to use the internet while in school. The habit of playing online games at school is done by students during recess or when there are no teachers in the class. Aside from school, students also play online games in internet cafes and in their homes using personal computers (PCs). There are even some students who deliberately did not enterschool (truant) just to play online games in internet cafes or games center. The activity of playing online games in class often creates teachers especially subject teachers feel uneasy because of the lessons being

delivered often can not be understood by students in class. Apart from that, chores the schools they provide are often not done by them. Besides activity on class, the low academic value obtained by students each time a test and remedial always cause anxiety for the subject teachers especially. Learners' awareness of their duties and responsibilities as students they often ignore.

Researchers are interested in taking samples of school-age children because children are considered to be more frequent and vulnerable to the use of online games than adults (Griffiths & Wood, 2000 in Lemmens, 2009; Derevensky, Hayman, & Lynette Gilbeau, 2019; Wartberg, Kriston, & Thomasius, 2020). Therefore, the authors are interested in conducting research on the effectiveness of cognitive restructuring techniques for the addiction of playing online games in school-age children at SMK Negeri 2 Yogyakarta. The purpose of this study was to determine the effectiveness of cognitive restructuring techniques to reduce online game addiction in school-aged children at SMK Negeri 2 Yogyakarta. The purpose of this research is to provide input for educators to reduce and prevent addiction from playing online games and the results of this study can be used as a basis for further research (Aristoteles, Rini, & Poddar, 2020). online games or ignoring basic needs, withdrawal symptoms if not using the internet which is marked by feeling so scared, anxious and depressed, tolerance is marked by the desire for someone to get access tools such as gadgets to get a better internet network, someone's keiginess in adding network applications socially attractive, and cannot stop not playing online games, the negative impact that is marked by arguing or talking hoax, poor performance, social isolation, and fatigue (Young, 2011).

Method

This type of research used in this study is quantitative. The variables in this study are addiction to play online games, namely excessive use, withdrawal symptoms, tolerance and negative impacts (Young, 2011). The population in this study were students of SMK Negeri 2 Yogyakarta class XI with a total of 110 students and this study used sampling in the form of purposive sampling, then obtained a sample of 16 students for the control group and the experimental group. The criterion is students who have addictions to online games in very high and high category, which are given counseling treatment for cognitive restructuring techniques, to get the subject the researchers conducted a pretest by providing an online game addiction scale that has been validated by experts. Data collection techniques in this study were to use online game addiction scales and after giving treatments researchers gave the posttest in the same scale as the pretest. Validity was obtained through item testing by experts, and reliability was obtained through Cronbach's Alpha testing, which resulted in a score of 0.91. Determination of the subject is taken based on the results of scale measurements that are classified in the category very high/high. The following is a table of online games addiction categories:

Table 1. Online Game Addiction Level Category

Addiction category	Interpretation
$M + 1.50s < X$ Theta	$60,80 < X$ Theta Very high
$M + 0,50s < X < (M + 1,50s)$	$49,56 < X \leq 60,80$ High
$M - 0,50s < X < (M + 0,50s)$	$43,78 < X \leq 49,56$ Medium
$M - 1,50s < X < (M - 0,50s)$	$38,10 < X \leq 43,78$ Low
$Theta X < (M - 1,50s)$	$Theta X < 38,10$ Very low

Furthermore, this study uses a gain score test which is to find out the differences of the two groups between the experimental group and the control group after and before treatment. To find these results using the help of the SPSS application (statistical package for social science).

Results and Discussion

The online game addiction scale that was collected was then analyzed and obtained 44 students with high online game addiction scores and 3 students had very high online game addiction scores, 29 students had moderate scores, 15 students got low scores, and 19 students had score of online game addiction is very low in SMK Negeri 2 class XI Yogyakarta. Implementation of treatments must be based on the principle of willingness, for that based on the results of initial measurements and willingness to counsel cognitive restructuring techniques, then after analyzing, researchers contact students who have addictions to online games that are very high and high, but in the end only 16 students are ready and willing to attend group counseling treatment techniques cognitive restructuring. Then divided into 2 groups, 8 students will be given treatment and 8 students as the control group. Here are the results of pretest and posttest online game addiction given to the group given treatment in the Table 2.

Table 2. The results of pretest and posttest online game addiction given to the treatment group

Pretest Results	Categories	Posttest Results	Categories
92	Very High	61	Very High
61	Very High	41	Low
56	High	40	Low
53	High	39	Low
59	High	41	Low
55	High	46	Medium
58	High	39	Low
50	High	36	Very Low

Based on the table above the results of the pretest and posttest assessment it is known that counselee 1 has experienced a significant decrease, that is the result before being treated 92 to 61, it's just that it is still in a very high category compared to other counselees, counselee 2 before being treated 61 to 41, counselee 3 has a score of 55 decreased to 40, while the decrease that occurred in counselee 4 decreased before being given treatment 53 to 39, counselee 5 before being given treatment 59 decreased 41, counselee 6 before being given treatment 55 decreased to 46, and counselee 7 before getting 58 decreased treatment to 39, then the last counselee also decreased after getting treatment.

Descriptions of the results of pretest and posttest addiction to online games The control group is a subject that is not subject to treatment, the following pretest and posttest results given to the control group are presented in tabular form:

Table 3. The result of pretest and posttest results given to the control group

Pretest Results	Categories	Posttest Results	Categories
66	Very High	63	Very High
55	High	55	High
53	High	56	High
55	High	58	High
53	High	56	High
53	High	57	High
54	High	56	High
54	High	57	High

Based on the table above, the results of the pretest and posttest data assessment of online game addiction in the control group showed no significant changes that occurred between the posttest and posttest scores. The first counselee 1 has decreased from the results of pretest and posttest with a total score of 66 to 63. This did not occur in the second counselee 2 that did not experience a decrease in the number of scores from 55 to 55, while counselee 3 did not experience a decrease in the total score from 53 to 56, the counselee 4 did not decrease the number of scores from 55 to 58, counselee 5 also did not decrease ie from the total score of 53 to 56, counselee 6 also did not decrease from the total score of 53 to 57, then counselee 7 also did not experience a decrease from the number of scores obtained 54 to 56, and the last counselee 8 did not experience a decrease in the number of initial scores obtained 54 to 57. The acquisition can be seen from every aspect there was no decline.

Table 4. The gain score of the online game addiction of the experimental group and the control group

Group	Post-Test	Pre-test	Gain Score
Experiment	42.88	63.13	-20.25
Control	57.25	57.13	0.12

Based on the above table, the gain score of the online game addiction of the experimental group and the control group shows that the mean post-test value of the experimental group is 42.88, the mean pretest value of the experimental group is 63.13 with the gain score of -20.25, while the mean post-test value of the control group amounted to 57.25, and the mean pretest value in the control group was 57.13 with a gain score of 0.12, this proves that the decrease in online game addiction in the experimental group was more than in the control

group. It can be concluded that there is a difference in the decrease of online game addiction between the experimental group and the control group after the treatment using CBT cognitive restructuring techniques shows that the decrease in online game addiction in students.

After being given counseling treatment to the experimental group with CBT restructuring techniques, the researcher then shared the scale of online game addiction which was the same as the scale given before the treatment was given as a post-test to the experimental and control groups. Changes in scores on the pre-test and post-test results are indicators of success with a significant difference in the hypothesis test results of research data. Based on the results of the analysis of hypothesis testing in the pre-test and post-test of the experimental group and the control group there are significant differences in changes in online game addiction. Research subjects in the experimental group experienced a significant decrease while the control group did not have a significant difference. This means that the hypothesis in this study was accepted. So it can be concluded that cognitive behavioral therapy cognitive restructuring technique counseling is effective in reducing online game addiction in class XI students of SMK Negeri 2 Yogyakarta.

CBT treatment of cognitive restructuring techniques is effective because this treatment has stages that are used (Espil & Houghton, 2018; Karekla et al., 2020; Kerwin & Bopp, 2014), namely 1) the rational stage in which the role of a counselor explains the purpose of counseling and procedures that must be carried out by the counselee, 2) identification is the stage where a counselor's role in doing identification of counselee thought in looking for distortions counselee thought, 3) introduction and practice in overcoming wrong thoughts, 4) counselor provides a way to be able to divert the mind, blame yourself by providing help on how to overcome their own thoughts, 5) counselor provides an explanation of how do a positive self-declaration technique then the counselee practices it, 6) the counselor assigns homework.

CBT with cognitive restructuring technique is effective against reducing online game addiction because cognitive restructuring technique is a technique that helps change irrational thinking in a more positive direction or towards irrational so that it can change someone's behavior (Christie et al., 2019; Dieris-Hirche et al., 2020; Kim, Han, Lee, & Renshaw, 2012; Kolstee et al., 2020; Muroff & Robinson, 2020; Taquet, Hautekeete, & Gorgeu, 2014). This is in line with the opinion of Aaron T. Beck (2011) that the cognitive behavior therapy approach is a counseling approach designed to solve problems experienced by the counselee by providing several techniques, one of which is cognitive restructuring. According to Corey (2013) cognitive restructuring technique is one of the techniques used in the cognitive behavioral therapy approach, this technique focuses more on modifying irrational thinking and directing rational thoughts and helping counsees in finding self-defeating thoughts and looking for rational alternatives so that adolescents can learn to deal with situations that cause anxiety.

The purpose of cognitive restructuring techniques According to Corey (2013) is to help build the mindset of the counselee who is more in line with what is expected and is positive or rational. This is in line with what was stated by Deacon (2011) who said that the restructuring technique was built in order to form an adaptive or appropriate mindset that is more positive in nature. In this case cognitive restructuring techniques in helping counsees to be able to learn to think differently that originally had wrong thoughts then changed or replaced them with more rational and realistic thinking. The results of this research hypothesis are also in line with research conducted by Hardiyansyah Masya (2013) that cognitive behavioral counseling is effective for dealing with internet addiction disorders. Other studies also conducted by Andre Julius (2016) prove that cognitive behavioral counseling is effective in reducing Cybersex Addiction. Siti Fatimah (2015), has also proven that cognitive behavioral therapy is effective in reducing academic stress in students of Class XI Pharmacy at Al-Wafa Vocational School Bandung.

Students who have a very high and high level of online game addiction have excessive pleasure and consider themselves to be okay so that excessive expectations arise. This happens because students assume by playing online games they will feel better without knowing the effects of addiction to playing online games. Lack of information about the effects of online game addiction received is a threat to him, so he will be overwhelmed with anxiety and irrational thoughts. Based on this the researchers felt the need to improve negative self concepts to be positive.

Addiction to online games is part of a form of addiction related to the joy that arises in the mind of someone so that there is no self-control in a person. According to Nimnas (2017), the same opinion is that addiction occurs because of the feeling of pleasure in the brain. Whatever the activity, whether it's sex, psychoactive drugs, abundant wealth, or food that tastes good, will be interpreted with the same thing in the brain. Someone who is addicted to online games can be seen from how much time is spent playing online games, this is in agreement expressed Weinstein (2010) addiction to online games is characterized by the extent to which teens play online games excessively which can have a negative influence on these players. In this study, the concept of online game addiction is divided into four aspects, namely overuse, withdrawal symptoms, tolerance and

negative impacts Young (2011). The following will discuss the effects of CBT counseling on cognitive restructuring techniques to reduce online game addiction in class XI students of SMK Negeri 2 Yogyakarta.

The aspect of excessive use is part of the first online gaming addiction felt by individuals. This excessive use is related to the irrational thoughts of individuals towards online games that think more so that it affects the task of their development as a student. This excessive use will affect the mind and addictive behaviors arise. The use of CBT group cognitive restructuring techniques can help modify irrational thinking and direct rational thoughts and help counselees in finding self-defeating thoughts and looking for rational alternatives so that counselees can learn to deal with situations which are the cause of online game addiction. According to Corey (2013) the advantage of cognitive restructuring techniques is that cognitive restructuring techniques are central techniques in cognitive behavioral counseling that teaches individuals how to improve themselves by replacing irrational beliefs with rational beliefs. CBT group counseling with cognitive restructuring techniques seeks to teach individuals to improve by replacing irrational beliefs with the rational beliefs of the individual itself so that better behaviors arise, so when someone's problem is overused, then the counseling process helps individuals to provide awareness of the use overuse online games using CBT cognitive restructuring techniques that will help explore desires and beliefs, things they might be able to do, opportunities for self-evaluation, and design plans for improvement.

CBT counseling restructuring technique seeks to make individuals able to regulate the strength within the counselee by providing coping thought, so when someone's problem with withdrawal symptoms, the counseling process helps individuals to provide strength and awareness of withdrawal symptoms using counselee cognitive restructuring techniques can design a plan for improvement (Taquet, Romo, Cottencin, Ortiz, & Hautekeete, 2017). CBT counseling with cognitive restructuring techniques can reduce online game addiction in the aspect of tolerance, desire someone to get access tools such as gadgets to get a better internet network, someone's dignity in adding interesting social networking applications, and can not stop not playing online games (Mastroiolo et al., 2020). This concerns the extent to which someone can not stop when playing online games. Then the CBT counseling process of cognitive restructuring techniques uses a way for a person to resist his desires when playing online games by using coping thoughts and replacing more positive activities. On the issue of addiction to online games on the negative impact aspects, which are characterized by arguing or talking hoax, poor achievement, social isolation, and fatigue (Rodda et al., 2019). CBT counseling for cognitive restructuring techniques tries to debate the more positive thoughts of the positive counselee and gives advice from the counselor and is also obtained from other group members.

Based on the calculation results after being given treatment using CBT counseling cognitive restructuring techniques to reduce online game addiction, students experience a decrease in online game addiction from before the treatment was given. This can be seen from the results of the behaviors shown such as students starting to change activities more positively, being optimistic, thinking more irrational.

Conclusion

Based on data analysis and discussion, the results of the study can be concluded as a CBT approach to cognitive restructuring techniques proven to be effective in reducing students' online game addiction, in providing cognitive restructuring techniques students can learn and experience new, giving restructuring techniques in CBT can also provide solutions to overcome addictions online game.

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The analysis of cognitive restructuring techniques effectiveness to reduce the online game addiction

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The Effect of Cognitive Behavior Therapy On Online Gaming Addiction In Adolescents

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ABSTRACT

Adolescence is one of the transitional periods of human development, where a person cannot be called an adult but no longer a child. The biggest users of online games in Indonesia are teenagers, where for teenagers playing online games is not a strange thing, pleasure and fun when playing games causes feelings of helplessness or inability to stop playing online games, so that in the end it affects other activities that are usually done daily. Knowing the effect of cognitive behavior therapy on online game addiction in adolescents at SMAN 7 Bulukumba in 2020 *. The design in this study is quantitative using research design, pre and post control group design, the sample of this study was 34 respondents who were divided into 2 groups (experimental and control), where the experimental group was given cognitive behavior therapy and the control group as a comparison. . The results of the analysis using the paired T test statistical test with a level of confidence ($\alpha = 0.05$). Based on the results of this test. It was found that the p value in the experimental group was 0.000 and the p value in the control group was 0.163. So H_0 was rejected and H_a accepted. The conclusion of this study is that there is an effect of cognitive behavior therapy on online game addiction in adolescents at SMA Negeri 7 Bulukumba in 2020, researchers suggest that more attention is needed to adolescents who are addicted to online games so as not to cause harm in the future.

Keywords: Cognitive Behavior Therapy, Online Game Addiction, Adolescence

INTRODUCTION

Man was born with all his needs, where at the beginning of human civilization, the needs became limited and very simple. Along with the development, the level of civilization becomes more advanced and more varied human needs. The development of technology makes information easier to access and the internet accelerates the change (Reza, 2018). The increasing use of the internet in line with the ease factor offered allows people to access the internet either by using a computer, notebook, or by using a mobile phone. Using the internet can facilitate daily activities such as: sending mail (email), sending messages (chatting), retrieving or sending the information needed as well as a means of obtaining entertainment. One of the entertainment that can be offered and is very popular among teenagers today is online game play (Siagian, 2017).

COMPREHENSIVE HEALTH CARE

Online games are a type of game play that uses electronic devices such as computers, mobile phones or other devices that can be connected to the internet network. Online games are the ones that one or more players can play at the same time, even if they don't know each other. Playing online games for most people is a fun right and can throw boredom at him. Online game players around the world are among the many with a figure of about 217 million people, and there are about 80% of them are addicted to online games. According to a survey conducted in the United States of America in children under the age of 13, there was an increase in the percentage of online game players in 2010 and 2015: from 54% to 70% through the microsoft xbox one game console.(Nielsen, 2015).

In Indonesia, the activity of teenagers in playing and downloading video games ranges in the number of 44.10% and in adolescents aged 10-24 years are in the range of 18.40% based on the statistic indonesian internet users. The largest users of online games in Indonesia are teenagers, where for teenagers playing online games is no stranger, especially for teenagers in urban areas(Yanti, 2019).

The rise of types and choices in playing online games makes gamers become addicted to playing and unable to control themselves. Addiction to online games is a symptom of impaired self-control or desire to play online games that makes gamers forget their time in playing and do not care about anything else. The feeling of pleasure and fun when playing games causes the onset of feelings of helplessness or inability to quit the activities of playing online games, thus ultimately impacting on other activities that are common in daily work. The easier it is to get technology to play online games (gadgets and computers) is also another factor that causes the urge of gamers to experience addiction(Solikha, 2016).

Playing online games can create its own satisfaction after completing the challenges that exist in online games as well as gaining achievements in the online games. At first online games serve as a saturation remover, train physical and mental skills, now turned into a serious threat to health by increasing the risk of experiencing health, social, psychic and physical disorders. Or in general the disorder is referred to as online gaming addiction(Siagian, 2017).

A lack of self-control can lead to an increasing risk of a person experiencing symptoms of addiction in playing online games. Basically online gaming addiction can be assessed by looking at how active a person is in playing games and how much negative

 COMPREHENSIVE HEALTH CARE

impact it has on themselves and their environment this causes very significant harm to online gaming addicts. One of the disadvantages of having individuals have experienced an addiction to online gaming is that they tend to neglect their real lives such as studying, working, resting, and socializing with the environment. People who have been addicted to online games can forget about important things for themselves such as learning, channeling their talents or hobbies, hanging out with friends and family. Online games have a huge influence on a person's growth and psychological development. Although gamers can socialize through online games, online games often make gamers forget their social life (Ginting, 2017).

Addiction online games or commonly referred to as internet addictive disorder is a symptom of someone making online gaming is everything and the main thing in his life, one gamer thinks that there is no more important thing to do than play online games. This increases the risk of experiencing online gaming addiction (fitri, 2018). Based on the initial survey by the author at SMAN 7 bulukumba in grade X, almost all students had gadgets and as many as 40 questionnaires were shared with students who often played games in 34 students experiencing the impact of addiction online games. The most games played are free fire and mobile legends.

Addiction to online games in individuals in terms of biological can be handled with antidepressant or anti-anxiety drugs, in addition to the handling of addiction online games can also be provided by providing counseling programs where one of them uses therapy cognitive behavior approach. This is in accordance with the research presented by (rodriguez, 2017) which suggests that the most commonly used handling of online gaming addiction is cognitive behavior therapy. Cognitive behavior therapy is one of the proven approach techniques to deal with various human problems from a general perspective, such as ditching, depression, family problems, foster care, and addiction (mohammad zainal arif, 2017).

Based on the phenomenon of the background that has been described by the author where the thing that is alarming is teenagers who are still in the learning stage spend time by playing online games that cause a decrease in their school's achievements to decrease their learning achievements. In addition, online games can also cause a person to be less social and less familiar with those around him. Then it can be concluded that the online game should be returned to its original purpose of making it as a means of recreation for a moment after a day of activities. Providing therapeutic services with



cognitive behavior therapy approach to provide views and understanding to individuals in order to change mindset during gaming. From this, the author is interested in researching "the influence of cognitive behavior therapy on addiction Online games in adolescents at SMAN 7 Bulukumba in 2020"

MATERIAL AND METHODS

The design in this research is quantitative by using research design, pre and post control group design. To find out the influence of cognitive behavior therapy on online gaming addiction in teenagers at SMAN 7 Bulukumba in 2020. The population in this study was the entire grade I students of SMAN 7 Bulukumba. The number of samples used in this study was 34 students, where the intervention group consisted of 17 students and a control group of 17 students. In this study using consecutive sampling technique is a sampling technique that sets the subject that meets the criteria of the study then inserted dalam research until a certain time bracket so that the number of respondents fulfilled (Nursalam, 2013).

RESULTS

Tabel1. Distribusi frekuensi karakteristik responden Di SMA Negeri 7 Bulukumba

Characteristic Respondent	Intervention groups		Intervention Control	
	F	%	F	%
Gender				
Male	9	52,9	9	52,9
Female	8	47,1	8	47,1
Age				
15 year	14	82,4	11	64,7
16 Year	3	17,6	6	35,3
Amount	17	100	17	100

Based on table 1 shows from the 34 overall respondents can be known the number of respondents based on the most gender is found in the male gender as many as 18 of all respondents and 16 respondents are female, while the distribution of respondents based on age is known there are 25 respondents aged 15 years and 9 respondents with the age of 16 years.

Table 2. Distribution Of Respondents' Frequency Based On The Influence Of Cognitive Behavior Therapy On Online Gaming Addiction

Chategori	F	%
Intervention Groups		
Pre-Test		
Addiction	17	100
Not Addiction	0	0
Amount	17	100
Post-Test		
Addiction	6	35,5
Not Addiction	11	64,7
Amount	17	100
Intervention Control		
Pre-Test		
Addiction	17	100
Not Addiction	0	0
Amount	17	100
Post-Test		
Addiction	15	88,2
Not Addiction	2	11,8
Amount	17	100

Based on table.2 it can be known that as many as 17(100%) respondents who experienced online gaming addiction in the intervention group before the pre-test decreased to 6 (35.5%) respondents who experience addiction to online games after being treated cognitive behavior therapy. While in the control group in the pre-test measurement there were 17 (100%) respondents who were addicted to online gaming and after post-test measurements were obtained as many as 15 (88.2%) respondents who are addicted to online gaming, which means that there are 2 (11.8%) respondents who are not addicted to online games after the second measurement (post-test).

Table 3. The Effect of Cognitive Behavior Therapy On Online Gaming Addiction In Adolescents

Category	Mean	Std. Deviation	T	P Value
Intervention Groups				
Pre-Test	-,647	,493	-5,416	,000*
Post-Test				
Intervention Control				
Pre-Test	-,118	,332	-1,461	,163*
Post-Test				

Based on table 3 with statistical test results using T test paired with a degree of meaning of 95%. Indicating that there is an influence on the level of online gaming addiction in adolescents before and after being treated with cognitive behavior therapy, this is shown with a value of p value (0.00) < of the value of 0.05. While in the control group showed no difference in average before and after observations were made, this was shown with a value of p value (.163) > 0.05. Then it can be stated that



there is an influence of cognitive behavior therapy in teenagers at SMA Negeri 7 Bulukumba in 2020.

DISCUSSION

Based on table 1 shows the level of online gaming addiction in adolescents before treatment as much as 17 (100%) respondents and after the treatment of cognitive behavior therapy there were 11 (64.5%) respondents who do not experience addiction to online games. This research process consists of 5 meetings where the first meeting I did the initial measurement (pre test) in the control group and exprimen, at the second meeting, three, four I did the cognitive behavior therapy process in the exprimen group and at the fifth meeting I did a post test in the group of exprimen and control.

The same research conducted by Nia Fitri Yanti about the influence of cognitive behavior therapy on online game addiction with quasy experiment pre - Post Test With Control Group research design on 88 respondents obtained online game addiction level in the intervention group before being given CBT which is at a low addiction rate of 6 people (13.6%), moderate addiction rate of 28 people (63.6%), and high addiction rate of 10 people (22.7%) and after being given cognitive behavior therapy Online game adiksi level in the intervention group that is at the low adiksi level amounted to 16 people (36.4%), moderate adiksi level as much as 26 people (59.1%), and high adiksi rate of 2 people (4.5%).(Yanti, 2019).

Addiction can be interpreted as unhealthy or self-harming behavior that continues continuously, as the age of the word addiction no longer always leads to drugs or alcohol, but can also occur on the internet, television and of course addiction to online games. Addiction to online games in adolescents can be caused by a variety of factors, where King and Delfabro in the journal Siregar say that someone experiencing games addiction tends to think of games as a means that can help them forget about loneliness / boredom so that they do not make contact with their social environment. In addition, addict games usually use online games as a form of coping from the problems they face, they think that playing games can help solve problems such as frustration in education, social relations, employment and anger (Siregar, 2013).

Excessive use of gadgets and playing online games can affect the stage of development in adolescence, so the need for time restrictions in playing online games such as in children aged 0-2 years should not be exposed to radiation exposure gadgets, for children aged 3-5 years can be given a time limit of playing online games up to 1



hour in a day while for children aged 6-18 years can use the gadget continuously for 1 to 2 hours in a day (Aryanti, 2017). Online gaming addiction also often occurs as a result of a lack of supervision and understanding of parents to the symptoms and impacts that can arise from online gaming addiction, further consequences that can occur if not given treatment that can affect mental and emotional development in children or adolescents so as to affect the social life of adolescents in society and interfere with activities such as learning and rest. A total of 34 teenagers at SMA Negeri 7 Bulukumba who are addicted to online games say that the most frequently played online games are mobile legend, free fire, PUBG Mobile and Wromzone.

This is in accordance with Welly's research on the relationship of online gaming addiction with depression rates in adolescents, whereas as many as 39 adolescents who experienced mild online gaming addiction obtained as many as 17 (43.6%) adolescents experienced mild depression rates and as much as 22 (56.4%) moderate depressive levels, while as many as 30 adolescents are addicted to moderate online gaming, there are 6 (20%) severely depressed adolescents and 24 (80%) teenagers have mild depression. So in his research, he concluded that there is a link between online gaming addiction and adolescent depression rates (Welly, 2017). The treatment that can be given to reduce addiction to online gaming in adolescents is cognitive behavior therapy, is one of the proven approach techniques as an approach that is very suitable to deal with various human problems in a general perspective such as, ditching, depression, family problems, foster care, and addiction to online games (mohammad zainal arif, 2017).

Basically cognitive behaviour therapy is designed to help individuals gain insight into their problems so that the individual can change distorted thoughts (playing games excessively) into rational thinking (playing games as needed) so as to give rise to adaptive behavior (Ginting, 2017). Cognitive behavior therapy which focuses on paying attention to the process of resha formation or the process of changing cognitive irrational (inappropriate) and detrimental to be rational so that individu has the right response psychically and psychologically in memandan future situations (Yahya, 2016).

Based on the data obtained by researchers from the evaluation sheet filled by respondents can be known that CBT can reduce playing time and increase motivation to reduce the impact of addiction to online games teenagers at SMA Negeri 7 Bulukumba, this is in accordance with the research Ginting Where there is an increase in changes in



playing online games this can occur because the awareness and motivation of individuals who realize that playing online games can cause harm to themselves in accordance with the purpose of CBT that is to invite individuals to oppose wrong thoughts and emotions by displaying evidence that contradicts their beliefs about the problem at hand. Based on the table shows as many as 6 (35.5%) respondents who are addicted to online games despite being given cognitive behavior therapy treatment, from the evaluation sheet can be known that the school holidays and the presence of himbaun to stay home are the main reasons respondents can not control the time to play games so the questionnaire score results show no change in the level of online gaming addiction.

The main factor individuals can change their thinking patterns is the realization that the mindset is incorrect and detrimental and the individual's desire to change in addition there are other factors that can influence online gaming addiction such as individual conditions both psychically and psychologically. Boredom that arises from not doing as much activity as usual becomes a driving factor for individuals to return to playing online games excessively (Solikha, 2016). This is in line with the 2018 Fitri theory that revealed that there are several supporting factors that affect the level of addiction of online games in children and adolescents such as gender (gender), individual conditions (both psychically and psychologically) as well as the type of online game play (Fitri, 2018).

This is in accordance with Kurniati's research, which concluded that therapy cognitive behavior approach can effectively help SMPN 4 Lampung students to reduce the duration of using smartphones. The same research by Ginting, also revealed that counseling individuals with cognitive behavior therapy approach has a significant influence to help private junior high school students in controlling online gaming addiction (Kurniati, 2019).

Based on the table can be known that after observation in the control group there are 2 (11.8%) respondents out of a total of 17 (100%) who previously experienced an addiction to online games that have undergone a change into not addicted to online games. After the analysis of the questionnaire sheet that respondents filled out, this can occur as a result of the covid-19 pandemic that impacts on school holidays so that respondents no longer get snack money to buy internet quota. According to the assumption of cognitive behavior therapy researchers can be effectively given to explore



the symptoms and impacts of online gaming addiction if respondents have the awareness that excessive behavior in playing online games can cause harm to themselves whether it is realized or not realized, in addition to the desire and motivation to change for the better than the respondent is also very necessary. In addition, supporting factors such as parental supervision can also facilitate respondents in changing their behavior.

CONCLUSION

There is an influence of cognitive behaviour therapy on online gaming addiction in adolescents at SMA Negeri 7 Bulukumba in 2020. We recommend that the need for more attention from the school to better monitor the use of smartphones in the school area and need supervision and support of the family to play a role in supervising the use of smartphones in adolescents so as not to cause negative impacts such as addiction to online games.

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COGNITIVE BEHAVIOUR THERAPY MENURUNKAN KECANDUAN GAME ONLINE PADA SISWA SMA

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ABSTRAK

Maraknya game online menyebabkan pemain menjadi kecanduan terhadap game online. Kecanduan game online menimbulkan kerugian secara signifikan seperti penurunan kemampuan atensi atau memusatkan perhatian, kemampuan eksekusi atau merencanakan dan melakukan tindakan, serta kemampuan inhibisi atau membatasi tindakan. Berbagai upaya dapat dilakukan untuk menurunkan kecanduan game online salah satunya dengan *Cognitive Behaviour Therapy* (CBT) yaitu sebuah terapi untuk memodifikasi pikiran dan perilaku kecanduan game online. Tujuan penelitian adalah untuk mengidentifikasi pengaruh *Cognitive Behaviour Therapy* terhadap kecanduan game online. Penelitian menggunakan desain quasi experiment dengan pre and post test one group without control group. Alat ukur penelitian menggunakan kuesioner kecanduan game online yang sudah valid dan reliabel. Sejumlah 30 siswa diberikan *Cognitive Behaviour Therapy* dan diukur kecanduan game online nya sebelum dan setelah diberikan terapi. Analisis data menggunakan paired t test. Hasil penelitian menunjukkan bahwa nilai rerata kecanduan game online sebelum intervensi adalah 57,17 dan nilai rerata kecanduan game online setelah intervensi adalah 43,23. Kesimpulan penelitian ini adalah *Cognitive Behaviour Therapy* menurunkan kecanduan game online secara signifikan (p value 0,001 dengan $\alpha = 0,05$, p value $< \alpha$).

Kata kunci: *cognitive behaviour therapy*; kecanduan game online

COGNITIVE BEHAVIOUR THERAPY REDUCE ONLINE GAMING ADDICTION IN THE SENIOR HIGH SCHOOL STUDENTS

ABSTRACT

Online gaming addiction is a world phenomena which take interest. There has been a significant increase in the number of empirical studies examining various aspects of problematic online gaming addiction. Online gaming addiction causes bad effect in the physical health, anxiety and sleeplessness. One of the attempt to reduce online gaming addiction is cognitive behavior therapy. The study aimed to identify the effect of Cognitive Behaviour Therapy to online gaming addiction. The study used quasy experiment design without control group. The study used online gaming addiction questionnaire which was valid and reliable to measure students online gaming addiction. There were four sessions of Cognitive Behaviour Therapy were given to the respondents. The sample of the study were 30 students of senior high school who were taken by purposive sampling technique. The data were analized using paired t test. The study indicated that the mean score of online gaming addiction reduced after 4 sessions of Cognitive Behaviour Therapy. The mean score of online gaming addiction was 57,17 before intervention and 43,23 after intervention. The statistical analysis showed that there was significant effect of Cognitive Behaviour Therapy to reduce online gaming addiction. (p value $< 0,05$). The conclusion was Cognitive Behaviour Therapy can reduce online gaming addiction.

Keywords: *cognitive behaviour therapy*; online gaming addiction

PENDAHULUAN

Game online merupakan permainan yang dapat diakses oleh banyak pemain dan dihubungkan oleh suatu jaringan internet.

Kalangan remaja merupakan pengguna game online terbesar. Sekitar 72% pelajar Amerika menyatakan bahwa pernah bermain game online. Sejumlah 9% atau

3.034 responden penelitian di Amerika teridentifikasi kecanduan *game online*. Sejumlah 4% pemain *game online* dikelompokkan menjadi *extreme user* dengan kategori lama waktu bermain kurang lebih 50 jam perminggu (*Addiction Statistics*, 2018). Di Amerika, pemain *game online* tertinggi di rentang usia 18 sampai 35 tahun sejumlah 29 % dan rentang usia kurang dari 18 tahun sejumlah 28% (Statista, 2018).

Kecanduan *game online* juga banyak terjadi di Asia Tenggara. Filipina menduduki peringkat pertama kategori pengguna PC *online game* terbanyak, diikuti Indonesia, Vietnam, Thailand, Malaysia, dan yang paling sedikit adalah Singapura (Akl, 2013). Data terbaru pada 2017, ada 43,7 juta gamer di Indonesia (56% di antaranya laki-laki). Penelitian yang dilakukan oleh Jaya pada tahun 2012 di sekolah-sekolah di Manado, Medan, Pontianak, dan Yogyakarta didapatkan hasil bahwa ada 45,3% dari 3.264 siswa sekolah yang bermain *game online* selama sebulan terakhir dan tidak berniat untuk berhenti (Jaya, 2018).

Kecanduan *game online* berdampak buruk bagi kesehatan fisik, mental, dan sosial. Dampak buruk bagi fisik meliputi adanya gangguan tidur, sering merasa lelah (*fatigue syndrome*), kaku leher dan otot, hingga *Karpal Turner Syndrome*. Selain itu, kecenderungan memprioritaskan bermain *game* dibandingkan aktifitas utama lainnya (misalnya makan), membuat para pecandu *game online* mengalami dehidrasi, kurus atau bahkan sebaliknya (obesitas) dan berisiko menderita penyakit tidak menular (Rokom, 2018).

Dampak buruk kecanduan *game online* bagi mental dan lingkungan sosial adalah penurunan ekspresi dan kepekaan emosi, anti sosial, penurunan kemampuan atensi (memusatkan perhatian), eksekusi (merencanakan dan melakukan tindakan), dan inhibisi (membatasi) (Rokom, 2018).

America Psychiatric Association (APA) sudah menetapkan dalam *Diagnostic Statistical Manual* (DSM) V bahwa kecanduan penggunaan internet (termasuk kecanduan bermain *game online*) termasuk dalam diagnosis gangguan jiwa yang dikenal dengan *Internet Gaming Disorder*.

Banyak upaya untuk mengatasi kecanduan *game online* salah satunya dengan *Cognitive Behaviour Therapy*. *Cognitive Behaviour Therapy* atau terapi perilaku kognitif merupakan salah satu bentuk psikoterapi yang mengubah pikiran negatif menjadi pikiran positif. *Cognitive Behaviour Therapy* merupakan salah satu bentuk terapi komunikasi (McHugh et al., 2010; Griffiths, 2015).

Banyak penelitian telah dilakukan terkait dengan *Cognitive Behaviour Therapy*. *Cognitive Behaviour Therapy* telah terbukti menurunkan tingkat ansietas klien dan ketergantungan rokok (Hargiana, Keliat & Mustikasari, 2015). Selain itu, penelitian lain membuktikan bahwa *Cognitive Behaviour Therapy* mampu menurunkan skor *internet gaming disorder* dan gangguan penggunaan alkohol (Vasilu & Vasile, 2017).

Studi pendahuluan yang dilakukan peneliti pada Desember 2018 di SMA Al Islam Surakarta, melalui observasi dan wawancara kepada Guru BK, didapatkan data bahwa banyak siswa yang hobi bermain *game online* dan beberapa diantaranya diduga sudah kecanduan *game online*. Upaya pencegahan kecanduan *game online* sudah dilakukan seperti pendidikan kesehatan tentang bahaya kecanduan *game online* dan *cyber crime*, namun untuk penanganan siswa yang sudah hobi bermain *game online* dan diduga kecanduan belum ada program penanganannya. Prestasi siswa menurun dan ada pelanggaran aturan sekolah seperti membolos jam sekolah dan penurunan kepekaan sosial siswa di lingkungan sekolah. Penelitian ini jenis dikriptif kuantitatif dengan pendekatan

quasy experiment one group without control. Penelitian ini bertujuan untuk mengetahui pengaruh *Cognitive Behaviour Therapy* terhadap kecanduan *game online* pada siswa SMA Al Islam 1 Surakarta.

METODE

Penelitian ini sudah lolos uji etik di Komite Etik Penelitian Universitas Kusuma Husada Surakarta dengan nomor II.02.j/05/S.Ket/I/2019. Desain penelitian yang digunakan adalah *quasy experiment* dengan *pre test – post test one group*. Penelitian dilakukan di SMA Al Islam 1 Surakarta pada bulan Januari-September 2019. Terapi CBT yang diberikan adalah CBT dengan 4 sesi/kelompok. Alat yang digunakan dalam penelitian ini adalah kuesioner kecanduan *game online* untuk mengukur kecanduan *game online* siswa. Kuesioner Kecanduan *Game Online* yang digunakan oleh peneliti merupakan modifikasi dari *Internet Adiction Test* (IAT) yang telah diadopsi ke bahasa Indonesia serta telah digunakan penelitian di Indonesia sebelumnya. Kuesioner telah diuji validitas dan reliabilitasnya, dengan

23 pertanyaan valid (awalnya 24 pertanyaan) dan nilai Cronbach Alpha 0.864 dimana Cronbach alpha ≥ 0.6 artinya reliabel (Gaol, 2012). Peneliti mengambil 30 responden dengan teknik *purposive sampling*. 30 responden dibagi menjadi 3 kelompok, masing-masing kelompok terdiri dari 10 siswa.

Pemberian CBT diberikan selama 45 menit tiap sesi. Minggu pertama setelah pre test, peneliti memberikan CBT sesi 1 dan 2 bersamaan, dilanjutkan minggu kedua CBT sesi 3 dan 4 bersamaan. Pada minggu ketiga dilakukan post test. Pengolahan data dilakukan dengan menggunakan komputer dengan langkah-langkah editing, koding, entri data, *cleansing*, dan *tabulating* (Dharma, 2011). Analisa data yang digunakan adalah analisis univariat dan bivariat. Pengujian hipotesis menggunakan uji paired t test karena data terdistribusi normal.

HASIL

Hasil penelitian dapat dilihat pada tabel berikut.

Tabel 1.
Karakteristik Responden (n=30)

Variabel	f	%
Jenis kelamin		
Perempuan	15	50,0
Laki-laki	15	50,0
Usia Remaja (15-16 tahun)	30	100,0

Tabel 2.
Skor kecanduan *game online* sebelum terapi CBT (n=30)

Pre	Mean	Med	SD	Min	Max
Kecanduan <i>game online</i>	57,17	56	4,60	53	73

Tabel 3.
Skor kecanduan *game online* setelah terapi CBT (n=30)

Post	Mean	Med	SD	Min	Max
Kecanduan <i>game online</i>	43,23	45	8,90	25	65

Tabel 4.
 Penurunan kecanduan *game online* siswa setelah intervensi (n=30)

Kecanduan <i>game online</i>	Mean	Selisih mean	p value
<i>Pre</i>	57,17	13,94	0,001
<i>Post</i>	43,23		

Tabel 1 diketahui bahwa responden sejumlah 50% berjenis kelamin perempuan dan 50% berjenis kelamin laki-laki; usia remaja 100% remaja usia 15-16 tahun. Tabel 2 diketahui bahwa skor kecanduan *game online* sebelum intervensi nilai rata-ratanya 57,17 dengan standar deviasi 4,60. Tabel 3 diketahui bahwa skor kecanduan *game online* setelah intervensi nilai rata-ratanya 43,23 dengan standar deviasi 8,90. Tabel 4 diketahui bahwa ada penurunan nilai *mean* kecanduan *game online* siswa sebesar 13,94 poin, dengan nilai *mean* awal 57,17 menurun menjadi 43,23 setelah diberikan CBT. Hasil uji statistik menunjukkan ada pengaruh signifikan Pengaruh *Cognitive Behaviour Therapy* (CBT) terhadap kecanduan *game online* siswa dengan *p value* 0,001 (*p value* < α , $\alpha=0,05$)

PEMBAHASAN

Karakteristik responden

Responden penelitian berjenis kelamin perempuan (50%) dan laki-laki (50%). Remaja laki-laki mempunyai hasrat untuk bermain *game online* lebih tinggi dibandingkan dengan perempuan. Terdapat hubungan signifikan antara respon otak dengan perilaku kecanduan *game online*. Respon otak yang direkam menggunakan yang direkam dengan functional magnetic resonance imaging (fMRI) menunjukkan aktivasi yang lebih besar (pada thalamus dan medial frontal gyrus) pada remaja laki-laki dibandingkan dengan remaja perempuan (Dong et al., 2018). Penelitian lain yang mendukung menjelaskan bahwa laki-laki mempunyai aktivasi otak lebih aktif ketika bermain *game online* (Müezzini, 2015)

Karakteristik responden berusia 15-16 tahun (100%). Usia remaja 15-16 tahun termasuk dalam *middle adolescent* (remaja madya) (Sarwono, 2015). Beberapa karakteristik remaja madya ini adalah ada kecenderungan "*narcistic*" atau menyukai diri sendiri dan menyukai teman-teman yang mempunyai sifat-sifat yang sama dengan dirinya. Remaja dengan kecanduan *game online* akan menyukai teman-teman komunitas *game online* juga. Hal tersebut tampak pada responden ketika sesi pemberian CBT. Kelompok remaja mempunyai kedekatan emosional yang erat karena sering bermain *game online* bersama. Mereka saling mempengaruhi satu sama lain (Xin et al., 2018; Kazdin, 2010).

Skor kecanduan *game online* sebelum terapi CBT

Nilai rerata kecanduan *game online* sebelum diberikan CBT adalah 57, 17 sedangkan nilai maksimalnya adalah 73. Hal ini menunjukkan bahwa siswa mengalami kecanduan *game online* yang cukup tinggi dan membutuhkan upaya untuk mengatasi kecanduan *game online*. Kecanduan adalah suatu perilaku yang tidak sehat berlangsung terus menerus yang sulit diakhiri oleh individu yang bersangkutan (Griffiths, 2014; Phelan, 2018). Kecanduan yang tidak dapat dikontrol atau tidak mempunyai kekuatan untuk menghentikan kegiatan tersebut dapat mengakibatkan individu menjadi lalai terhadap kegiatan lain (Stuart, 2016). Kecanduan *game online* dapat diartikan sebagai perilaku bermain *game online* yang dilakukan terus menerus dan sulit diakhiri oleh individu. Perilaku kecanduan *game online* dapat disebabkan oleh ketersediaan dan bertambahnya jenis-jenis *game* di

pasaran yang semakin pesat sejajar dengan perkembangan teknologi. Terdapat empat komponen kecanduan game online yakni *excessive use*, *withdrawl symptoms*, *tolerance*, dan *negative repercussions* (Griffiths, 2014; Phelan, 2018).

Hampir seluruh responden menunjukkan tanda-tanda *excessive use* atau penggunaan secara berlebihan. Hal tersebut terlihat dari hasil pengisian kuesioner pada nomor sembilan (kehilangan waktu tidur karena bermain game online sampai larut malam) dan pada nomor empat belas (bermain game online lebih lama dari waktu yang direncanakan). Selain itu, beberapa tanda *withdrawl symptoms* juga dialami oleh siswa seperti menutupi jumlah lama bermain yang diisi dalam kuesioner nomor lima belas.

Tumbuh kembang remaja terhadap hobi bermain game ditandai dengan adanya perpisahan emosional dan fisik dari orang tua. Remaja mulai membentuk identitas baru dan menginginkan kebebasan pengawasan orang tua. Kebebasan yang dicapai akan digunakan remaja untuk membentuk identitas diri. Identitas diri remaja membutuhkan harga diri dan penerimaan khususnya teman sebaya. Bermain game online dianggap menjadi kegiatan untuk penciptaan harga diri dan penerimaan dengan teman sebaya (Griffiths, 2014; Stuart, 2016).

Skor kecanduan game online setelah terapi CBT

Nilai rerata kecanduan game online setelah diberikan CBT adalah 43, 23. Kondisi tersebut mencerminkan adanya penurunan kecanduan game online setelah diberikan CBT. Sebagian besar siswa mengalami penurunan keinginan bermain game online, penurunan intensitas bermain game online, penurunan intensitas membayangkan segala hal terkait game online, dan penurunan kehilangan waktu tidur. Setelah diberikan CBT, terjadi penurunan kecanduan game online. Hampir seluruh siswa mengalami

peningkatan tekak untuk berhenti bermain game online yang ditunjukkan melalui pengisian kuesioner pada item soal nomor dua puluh. Tekak ingin berhenti bermain game online juga selaras dengan penurunan intensitas bermain game online.

Kecanduan game online merupakan kondisi yang perlu diantisipasi karena dampak buruknya. Dampak buruk kecanduan game online juga dirasakan oleh siswa-siswa, namun hal tersebut diabaikan dan terus bermain game online karena sudah menjadi kecanduan game online. Hampir seluruh responden mengalami gangguan kesehatan fisik seperti lelah dan nyeri punggung. Dampak buruk kecanduan game online bagi fisik meliputi adanya gangguan tidur, sering merasa lelah (*fatigue syndrome*), kaku leher dan otot, hingga karpal turner syndrome. Beberapa siswa juga mengalami ketidakstabilan emosi dan anti sosial. Dampak buruk kecanduan game online bagi mental dan lingkungan sosial adalah anti sosial ((Müezzini, 2015; Rokom, 2018).

Pengaruh Cognitive Behaviour Therapy (CBT) terhadap kecanduan game online siswa

Hasil penelitian menunjukkan ada penurunan nilai mean kecanduan game online sebesar 13,94 poin. Hasil penelitian menunjukkan *Cognitive Behaviour Therapy* (CBT) mampu menurunkan kecanduan game online siswa secara signifikan. *Cognitive Behaviour Therapy* mampu menurunkan skor internet gaming disorder. Pemberian *Cognitive Behaviour Therapy* mampu mengubah kecanduan yang dialami seseorang (Cully & Teten, 2008). Penelitian membuktikan bahwa CBT dapat menurunkan kecanduan game online pada pasien yang sudah didiagnosis internet gaming disorder. CBT dapat meningkatkan motivasi untuk berhenti bermain game online, mengontrol perilaku repetitif, dan memperkuat pengambilan keputusan untuk melakukan kegiatan pengalihan (Dong et al., 2018).

CBT yang diterapkan saat penelitian adalah CBT dengan 4 sesi, setiap sesi dilaksanakan selama 30-45 menit untuk setiap klien. Sesi tersebut meliputi (1) mengidentifikasi pengalaman yang tidak menyenangkan, pikiran otomatis negatif dan perilaku negatif yang muncul serta cara melawannya; (2) melawan pikiran otomatis negatif atau mengubah perilaku negatif berikutnya, (3) memanfaatkan sistem pendukung, dan (4) mengevaluasi manfaat melawan pikiran negatif dan merubah perilaku negative (Hargiana et al., 2018; McHugh et al., 2011). Elemen sentral CBT dalam meningkatkan motivasi dan perubahan perilaku pecandu game online adalah memfasilitasi pecandu game online untuk berubah secara bertahap dengan menggiring pecandu game online menyadari masalah kecanduan dan dampak negatifnya serta memfasilitasi diskusi dua arah untuk mengatasi masalahnya.

Menurut Prochaska et al, 1992 dalam Stuart et al. (2016) tahapan perubahan yaitu, tahap pertama dari perubahan adalah precontemplation. Pada tahap ini klien tidak berpikir bahwa mereka memiliki masalah kecanduan game online, sehingga mereka tidak mungkin untuk mencari bantuan atau berpartisipasi dalam pengobatan. Tahap kedua perubahan adalah kontemplasi. Hal ini ditandai dengan gagasan "ya, tapi." Seringkali klien menyadari bahwa perubahan diperlukan, tetapi mereka tidak yakin dan ragu-ragu tentang apakah perlu usaha, waktu, dan energi untuk mengurangi kecanduan game onlinenya. Tahap ketiga perubahan adalah persiapan. Pada saat ini klien telah membuat keputusan untuk berubah mengurangi bermain game onlinenya dan menilai bagaimana keputusan yang terasa. Tahap keempat perubahan adalah tindakan. Klien sekarang memiliki komitmen yang kuat untuk berubah tidak kecanduan game online dan telah mengidentifikasi rencana kegiatan untuk mengurangi kecanduan game onlinenya. Tahap kelima perubahan adalah pemeliharaan. Perubahan

terus, dan fokus klien pada pikiran dan perilaku-perilaku atau kegiatan-kegiatan yang perlu dilakukan untuk mempertahankan tidak kecanduan game online. Tahap keenam dan terakhir adalah terminasi. Hal ini didasarkan pada gagasan bahwa klien tidak akan terlibat dalam perilaku lama (kecanduan game online) dalam kondisi apapun.

SIMPULAN

Terdapat penurunan signifikan kecanduan game online siswa setelah diberikan *Cognitive Behaviour Therapy*. (p value 0,001 dengan $\alpha=0,05$). CBT terbukti secara signifikan mampu menurunkan kecanduan game online pada siswa SMA. Nilai rata-ratanya kecanduan game online sebelum diberikan CBT adalah 57,17 dengan standar deviasi 4,602, sedangkan nilai rata-rata setelah diberikan *Cognitive Behaviour Therapy* turun menjadi 43,23 dengan standar deviasi 8,901.

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Effect of Cognitive Behavioral Therapy on Internet Gaming Disorder and Quality of Life Among Preparatory School Students in Alexandria

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Abstract

Background: Internet Gaming Disorder poses a serious threat to adolescent's physical and mental health. Cognitive-behavioral therapy (CBT) is a promising intervention for treatment and management of such problem. **Objective:** Assess the effect of cognitive behavioral therapy on the internet gaming disorder and quality of life among preparatory school students in Alexandria. **Settings:** The study was carried out at 4 randomly selected governmental preparatory schools in Alexandria. **Subjects:** All students in the first and second grades in the previously selected settings (2080 students) were screened using internet gaming disorder scale. 200 students with internet gaming disorder from the previously selected schools were randomly selected to assess the effect of CBT application. **Tools:** Three tools were used for data collection. **The first tool** was students' basic data structured interview schedule. **The second tool** was Internet Gaming Disorder Scale (IGD-20). **The third tool** was Ped Quality of Life Inventory Short Form (Peds QLTM – SF 15). **Results:** More than one tenth (12.7%) of the studied students had internet gaming disorder. Immediately, after the program application around one third of them had no disorder and increased to 48.5% in the follow up phase. Before the program application, 37.0% of them had good quality of life, raised to 60.5% and 51.5% in the immediate evaluation and in the follow up phase respectively. **Conclusion and Recommendations:** Internet gaming disorder is a prevalent problem among adolescents that affect their quality of life and CBT is an effective intervention in managing such problem. The study recommended regular screening and early interventions and monitoring of internet use either by self or involving family members.

Keywords: Internet Gaming Disorders, Adolescents & Cognitive Behavioral Therapy.

Introduction

Nowadays, internet becomes an integral and even inescapable part of many people's daily lives; they turn to it to send messages, read news, conduct business and much more activities. But recent scientific reports have begun to focus on the preoccupation some people develop with certain aspects of the Internet, particularly online games. The "gamers" play compulsively, to the exclusion of other interests, and their persistent and recurrent online activity results in clinically significant impairment or disorder (Gentile, et al., 2011).

Gaming disorders is defined as "a pattern of persistent or recurrent gaming behavior ("digital gaming" or "video-gaming"), which may be online (i.e., over the internet) or offline (Potenza, 2015).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Internet Gaming Disorder is indicated by the support of at least five core symptoms (from nine) in over one 12-month period. More specifically, the diagnostic criteria of Internet Gaming Disorder, including the following nine clinical symptoms: (1) preoccupation with videogames (i.e. "preoccupation"); (2) experiencing unpleasant symptoms when playing videogames (i.e. "withdrawal"); (3) the need to spend an increased amount of time involved in video games (i.e.

"tolerance"); (4) failed attempts to control participation in videogames (i.e. "lose control"); (5) losing interest in past hobbies and entertainment as a result of, and with the exception of, videogames (i.e., "surrender from other activities"); (6) continue to use videogames despite having knowledge of psychosocial problems (i.e. "continuation"); (7) deceiving family members, therapists or others regarding the number of videogames (i.e. "fraud") (8) using videogames to escape or eliminate negative feelings (i.e., "escape") and 3 (9) harm or lose relationships, work, or education or significant career opportunities because of participation with videogames (i.e. "negative consequences") (Zajac, et al., 2017, & Wichstrom, et al., 2018).

International estimates of internet gaming disorder was ranged from 0.6% to 15% (Lee, & Morgan, 2018, & Muller, et al., 2014).

The impact of internet gaming disorder can be very serious, often impacting individual, family and the whole community. It results in experiencing physical, social, and mental or psychological problems which in turn affect the quality of life. It has been linked to physical problems like sleep disturbance, eating problems, limited physical activity, back strain, eyestrain, and impaired vision. (Weinstein, et al., 2014, & Kuss, & Griffiths, 2015).

The Internet games addicts transfer the social lives into the internet world. It leads to many social issues such as disturbing family, social, and workplace relations, where it isolates the persons from family and society and keeping them away from social interactions. It has a negative effect on psychological health such as depression, suicidal ideation, social phobia, schizophrenia, obsessive-compulsive disorder, antisocial/aggressive behaviors, and self-injurious behavior (Reda, et al., 2012 & Al Gammal, 2019).

A number of literatures have identified many risk factors for digital games addiction and several negative consequences resulting from this problem. Such risk factors include socio-demographic, social, psychological and mental factors, and internet use practices. It produces physical, social, and psychological problems, in addition to academic performance and career difficulties (Wolfling, et al., 2014).

Therefore, this problem needs immediate action and treatment. Thus, there are different ways to treat internet addiction and gaming disorder; however, cognitive behavioral therapy (CBT) has been proposed as an effective treatment. There is a specialized type or model to treat this disorder called cognitive behavioral therapy for internet addiction (CBT-IA) (Lee, & Kang, 2015, & Stevens, et al., 2018).

Cognitive behavioral therapy (CBT) is a short-term and problem-focused type of behavioral treatment. The CBT in general helps addicts to realize addictive feelings and actions, while learning new coping skills and methods to prevent a relapse. It focuses on helping addicts consider the relationship between beliefs, thoughts, and feelings and following behavior patterns and actions (Stevens M et al 2018).

Internet Gaming Disorder is an increasingly prevalent disorder especially among adolescents, which can have severe consequences on them and on their families. There is an urgent need to improve existing treatment programs; these are currently hampered by the lack of research in this area. So, the aim of this study was to assess the prevalence of internet gaming disorder among adolescents and identify the effect of cognitive behavioral therapy on it.

Significance of the study

Data generated from this study can play an important role in identifying the magnitude and prevalence of internet gaming disorder among preparatory school students in Alexandria. Additionally, it helps to highlight factors behind such problem and can assist in planning and implementing comprehensive strategies for combating such phenomenon.

Aims of the study

The aim of the study is to

1. Assess the effect of applying Cognitive Behavioral Therapy on internet gaming disorder and quality of life among preparatory school students in Alexandria.

Research hypothesis

1. Preparatory schools' students with internet gaming disorder who received cognitive behavioral therapy will show lower level of disorder.
2. Preparatory schools' students with internet gaming disorder who received cognitive behavioral therapy will show higher level of quality of life.

Materials & Method

Materials

Research design

The Quasi-Experimental design was adopted to carry out this study.

Settings:

This study was conducted in 4 governmental preparatory schools covering Alexandria Governorate as follow:

- Alexandria Governorate is divided into eight educational zones affiliated to the Ministry of Education namely, El Montazah, East, West, Middle, El-Ajmi, El Amria, El Gomrok and Borg El Arab. By using the proportional allocation method, 25% of the total districts was selected randomly. It was two districts namely East and El Montaza.
- By using the equal allocation method, two governmental preparatory schools (one for boys and one for girls) affiliated to the selected two zones were selected randomly. The selected schools were El Ramel School for boys and El Dehrya School for Girls from East zone and from El Montazah zone; Tarek Abn Ziad School for Boys and El Sedek School for Girls.

Subjects

1. All students in the first and second grades in the previously selected schools were screened by using Internet Gaming Disorder Scale (IGD-20). They were 2080 students (According to Alexandria directorate of educational affairs data 2019). Third grade students were excluded from the study as the CBT were implemented then evaluated immediately and after 3 months, so third grade students will leave the school before being assessed for the intervention's effect.
2. By using the equal allocation method, 50 students were randomly selected from the 1st and 2nd grades from those having internet gaming disorder in each school (total number was 200 students).

Inclusion criteria

- Have internet gaming disorder.

- Willing to participate in the study.

Tools: In order to collect the necessary data for the study, three tools were used:

Tool (I): Students' basic data structured interview schedule: It was developed by the researchers to collect data from students regarding their personal and socio-demographic characteristics, life style, health, social and educational data and Students' internet use

Tool (II): The Arabic Version of Internet Gaming Disorder test (IGD- 20 test):

It is a self-reporting instrument developed by Pontes H et al 2014 and translated into Arabic by Hawi N and Samaha, M 2017. It is a valid and reliable tool to assess both online and/or offline gaming activities occurring over a 12- month period based on the nine criteria set by the DSM-5. The (IGD-20) test comprises 20 items rated on a 5-point Likert scale; 1 (Strongly disagree), 2 (Disagree), 3 (Neither agree or disagree), 4 (Agree), and 5 (Strongly agree). The total score is determined by summing up the scores of the 20 items. Internet gaming disorder is diagnosed when the IGD-20 test total score is ≥ 71 (Pontes H et al 2014). The internet gaming disorder level was classified as mild level is scored from 71 to 80, moderate level is scored from 81 to 90 and severe level is ranged from 91 to 100.

Tool (III): Pediatric Quality of Life Inventory-Short Form (Peds QLTM – SF 15):

It is a 15 items self-reporting instrument developed by Chen, et al (2007) to measure the quality of life of the adolescent. The Peds QLTM- SF 15 items encompass the following subscales; physical functioning (5 items), emotional functioning (4 items), social functioning (3 items), and school functioning (3 items) and forming two domains; physical health (physical functioning subscale) and psychosocial health (sum of emotional functioning, social functioning, and school subscales). The items are rated on 5 points Likert scale, 7 ranging from 0 (never) to 4 (always). The total score ranges from 0 to 60, with high scores meaning better quality of life.

Methods

Administrative process

- Before conduction of the study an official letter from the Faculty of Nursing, University of Alexandria was directed to the Central Agency for Public Mobilization and Statistics (CAPMAS), the Directorate of Education in Alexandria to obtain their approval to carry out the study at selected schools in Alexandria.
- Directors of the selected schools were met to explain the purpose of the study and the time for starting of the study in order to facilitate data

collection and implementation of the nursing intervention.

I. Development of study tools

- Tool I was developed by the researchers after reviewing the current relevant literature to collect the necessary data.
- The content of the constructed tool was revised by a group of five experts in the field of the study to test its validity, completeness, and clarity of items, recommendations and suggestions of the jury were considered and the tool was modified accordingly.
- Using Cronbach Alpha Coefficient test. The reliability coefficient for tool II was $r = 0.872$, and $r = 0.884$ for tool III.

II. Pilot study

A pilot study was carried out on a random sample of 20 students that were not included in the study sample in order to ascertain the relevance, clarity and applicability of the tools, test wording of the questions and estimate the time required for the interview. Based on the obtained results, the necessary modifications were done.

III. Nursing intervention (Cognitive Behavioral Therapy):

Preparation phase

- Initial assessment of all students in the first and second grades in the selected schools using the Arabic Version of the Internet Gaming Disorder Scale (IGD-20) was carried out before applying the cognitive behavioral therapy (CBT).
- Based on the results of the (IGD-20) analysis, from the students with internet gaming disorder, 50 students were selected randomly from the first and the second grade in each school, forming a total number of 200 students. They were further divided into 24 subgroups according to their educational grade and sex. Each group ranged from 8 to 9 students. (12 groups of boys and 12 groups of girls).
- The researcher selected well equipped, comfortable, safe, easily accessible and nonthreatening place that will provide privacy for all participants at the selected schools as library, lecturer room and sometimes computer room for conduction of the program sessions.

Developmental phase

The program objectives and methodology were prepared using CBT manual guide for children and adolescents. (Young, 2011)

Implementation phase

The program was conducted on 14 consecutive sessions, 2 days per week, four sessions per day for four different groups. Each session duration ranged from 45-60 minutes.

Session 1 involved an introduction to the program, self-introduction, and an overview of treatment goals.

Session 2, students described their own lives, including their psychological status (mood and anxiety), social environment, and family cohesion as well as their history of internet gaming. **Sessions 3-5** dealt with students' "stress" in the following ways: (a) Defense and coping strategies were discussed; in response to stress, most students indulged in excessive internet gaming as an avoidance defense mechanism; (b) considering the pros and cons of internet gaming, students were asked to discuss the following: How can someone turn the cons into pros? How can internet gaming be turned into a healthy hobby? In responding to these questions, students were able to look at themselves objectively and reflect on their impulsive internet gaming; (c) students were educated on brain activity in response to stress associated with excessive and continuous internet use. **Session 6**, students were asked to introspect on their "self-identity," using to-do and not-to-do lists. During **Sessions 7-9**, the five steps of change: precontemplation, contemplation, preparation, action, and maintenance were discussed. In **session 10**, students' behavior patterns including impulsivity, emotions, and loneliness, as well as their thinking patterns, were discussed. During **sessions 11 and 12**, hurtful events provoking anxiety, depressed mood, and family conflicts were discussed. **Session 13** covered the restoration of family cohesion and the social environment. In **session 14**, the students' changes were discussed and reinforced and termination of the program was done. The program was ended by simple party for the participants who shared in the program, giving them simple gifts and reward.

Evaluation phase

- The students were evaluated to determine the extent to which they have acquired the desired skills and practiced it.
- Evaluation of the students prior the program was done in the form of pretest administered to them using tool (II, and III). At the end of the program, a post test was carried out using the same tools as in pretest. Post tests were conducted twice, immediately after the end of the program and 3 months later to evaluate the immediate and retained changes in students' behaviors.

Ethical considerations

- Informed oral consents were obtained from the students after brief explanation of the purpose and nature of the research.
- The anonymity and confidentiality of responses, voluntary participation and right to refuse to participate in the study were emphasized. The researcher explained the objectives of the study to the participants. Privacy was ensured.
- Data was collected by the researchers during the period from September 2018 to May 2019 (9 months) during the academic year 2018-2019.

Statistical analysis

After data were collected, they were coded and transferred into specially designed formats so as to be suitable for computer feeding. Following data entry, checking and verification processes were carried out to avoid any errors during data entry, frequency analysis, cross tabulation and manual revision were all used to detect any errors. The statistical package for social sciences (SPSS version 20) was utilized for both data presentation and statistical analysis of the results. The level of significance selected for this study was P equal to or less than 0.05.

Results

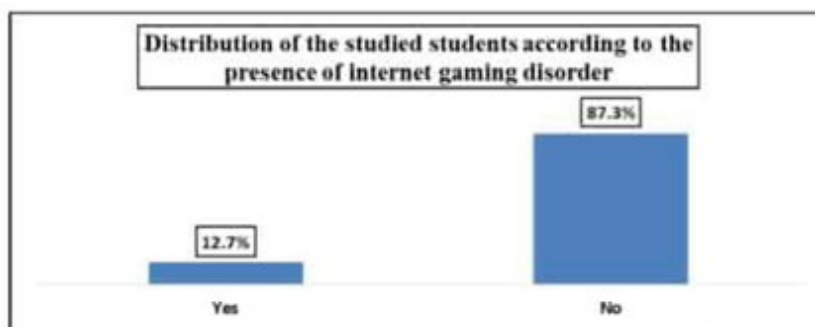


Figure (1): Distribution of the studied students according to the presence of internet gaming disorder.

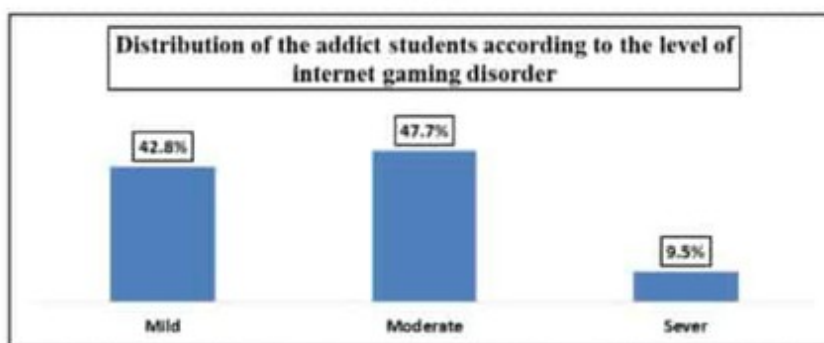


Figure (2): Distribution of the internet gaming disorder students according to the level of internet gaming disorder.

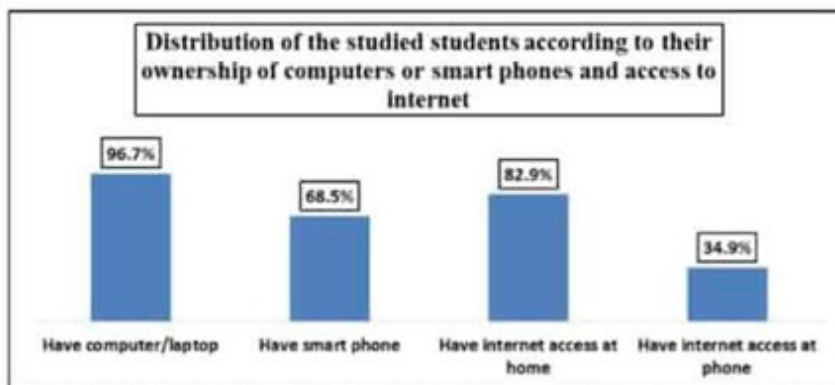


Figure (3): Distribution of the students according to the ownership of computer or smart phone and access to internet

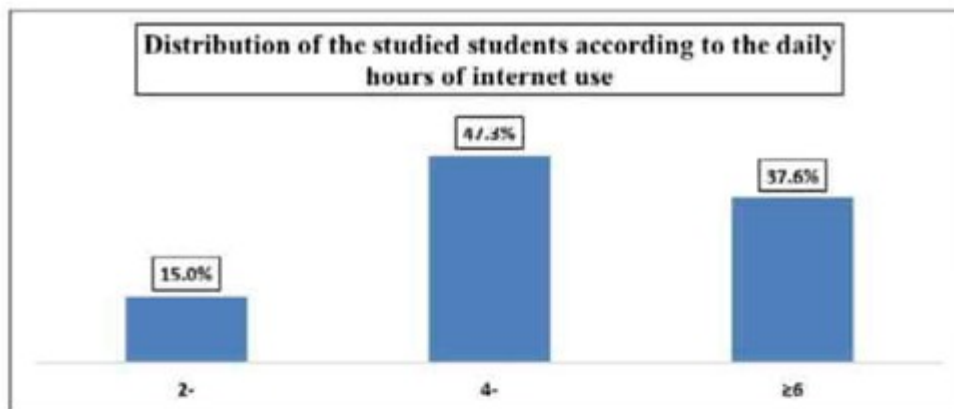


Figure (4): Distribution of the students according to the daily hours of internet use

Table (I): Distribution of the students according to the presence of internet gaming disorder and their basic characteristics.

Students' characteristics	Internet gaming disorder				Total N=2080		Test of Significance
	No N= 1816		Yes N= 264				
	No.	%	No.	%	No.	%	
Age (years)							
- 12-	916	85.0	162	15.0	1078	51.8	$X^2 = 11.074$ $P = 0.004^*$
- 14-	869	89.8	99	10.2	968	46.5	
- ≥16	31	91.2	3	8.8	34	1.6	
Sex							
- Male	891	86.5	139	13.5	1030	49.5	$X^2 = 1.187$ $P = 0.276$
- Female	925	88.1	125	11.9	1050	50.5	
Educational years							
- First	991	80.0	247	20.0	1238	59.5	$X^2 = 143.049$ $P = 0.000^*$
- Second	824	97.9	18	2.1	842	40.5	
Birth order							
- First	642	89.5	75	10.5	717	34.5	$X^2 = 9.871$ $P = 0.019^*$
- Second	573	87.7	80	12.3	653	31.4	
- Third	360	86.1	58	13.9	418	20.1	
- Forth and more	241	82.5	51	17.5	292	14.0	
Place of residence							
- Urban	527	79.1	139	20.9	666	32.0	$X^2 = 63.776$ $P = 0.000^*$
- Sub-urban	574	93.3	41	6.7	615	29.6	
- Rural	715	89.5	84	10.5	799	38.4	

 X^2 Chi Square test * Statistically significant at $p \geq 0.05$

Table (2): Distribution of the students according to the presence of internet gaming disorder and their families' characteristics: (N= 2080)

Items	Internet gaming disorder				Total N=2080		Test of Significance
	No N= 1816		Yes N= 264				
	No.	%	No.	%	No.	%	
Parents' marital status							
- Married (living together)	1648	90.2	179	9.8	1827	87.8	$X^2 = 126.128$ $P = 0.000^*$
- Divorced / separated	86	72.3	33	27.7	119	5.7	
- Father died	73	64.0	41	36.0	114	5.5	
- Mother died	9	45.0	11	55.0	20	1.0	
Fathers' age (years)	N= 1743		N= 223		N= 1966		
- 30-	166	91.7	15	8.3	181	9.2	$X^2 = 51.853$ $P = 0.000^*$
- 40-	1178	91.5	109	8.5	1287	65.5	
- 50-	339	81.3	78	18.7	417	21.2	
- ≥ 60	60	74.1	21	25.9	81	4.1	
Fathers' education					N= 1966		
- Illiterate / Read and write	725	98.1	14	1.9	739	37.6	$X^2 = 159.118$ $P = 0.000^*$
- Basic education	395	88.8	50	11.2	445	22.6	
- Secondary / technical education	498	83.1	101	16.9	599	30.5	
- University education	125	68.3	58	31.7	183	9.3	
Fathers' occupation					N= 1966		
- Working	1662	88.6	213	11.4	1875	96.9	$X^2 = 0.012$
- Not work / on retirement	81	89.0	10	11.0	91	3.1	$P = 0.913$
Mothers' age (years)	N= 1807		N= 253		N=2060		
- 25-	377	88.1	51	11.9	428	20.8	$X^2 = 0.437$ $P = 0.804$
- 35-	1172	87.9	162	12.1	1334	64.8	
- ≥ 45	258	86.6	40	13.4	298	14.5	
Mothers' education					N=2060		
- Illiterate/ Read and write	753	92.4	62	7.6	815	39.6	$X^2 = 35.713$ $P = 0.000^*$
- Basic education	359	87.1	53	12.9	412	20.0	
- Secondary / technical education	586	84.6	107	15.4	693	33.6	
- University education	109	77.9	31	22.1	140	6.8	
Mothers' occupation					N=2060		
- Working	226	71.7	89	28.3	315	15.3	$X^2 = 88.060$
- Not work / on retirement	1581	90.6	164	9.4	1745	84.7	$P = 0.000^*$
Sufficiency of income	N= 1816		N= 264		N= 2080		
- Not enough	676	91.1	66	8.9	742	35.7	$X^2 = 15.011$
- Enough	1140	85.2	198	14.8	1338	64.3	$P = 0.000^*$
Socio-economic level							
- Low	962	93.1	71	6.9	1033	49.7	$X^2 = 64.487$ $P = 0.000^*$
- Middle	787	82.0	173	18.0	960	46.2	
- High	67	77.0	20	23.0	87	4.2	
Parents' supervision on the students' activities							
- Yes	1444	97.1	43	2.9	1487	71.5	$X^2 = 452.095$
- No	372	62.7	221	37.3	593	28.5	$P = 0.000^*$

 χ^2 Chi Square test * Statistically significant at $p \geq 0.05$

Table (3): Distribution of the students according to the presence of internet gaming disorder and their life style habits: (N= 2080).

Items	Internet gaming disorder				Total N=2080		Test of Significance
	No N= 1816		Yes N= 264				
	No.	%	No.	%	No.	%	
Regular meals per day							
- Yes	510	93.9	33	6.1	543	26.1	X ² = 29.017 P = 0.000*
- No	1306	85.0	231	15.0	1537	73.9	
Skipped /Missed meals							
- Yes	590	79.8	149	20.2	739	35.5	X ² = 57.721 P = 0.000*
- No	1226	91.4	115	8.6	1341	64.5	
Practicing of exercises							
- Yes	866	90.3	93	9.7	959	46.1	X ² = 14.401 P = 0.000*
- No	950	84.7	171	15.3	1121	53.9	
Sleeping hours per day							
- 5-	942	86.3	149	13.7	1091	52.5	X ² = 3.326 P = 0.344
- 7-	521	87.4	75	12.6	596	28.7	
- 9-	190	89.2	23	10.8	213	10.2	
- ≥11	163	90.6	17	9.4	180	8.7	
Having sleeping problems							
- Yes	664	77.7	191	22.3	855	41.1	X ² = 121.919 P = 0.000*
- No	1152	94.0	73	6.0	1225	58.9	

 X^2 Chi Square test * Statistically significant at $p \geq 0.05$

Table (4): Distribution of the students according to the presence of internet gaming disorder and their health status related data: (N= 2080).

Items	Internet gaming disorder				Total N=2080		Test of Significance
	No N= 1816		Yes N= 264				
	No.	%	No.	%	No.	%	
Having chronic diseases							
- Yes	616	89.1	75	10.9	691	33.2	$\chi^2 = 3.156$ $P = 0.076$
- No	1200	86.4	189	13.6	1389	66.8	
Have current health complaints							
- Yes	189	44.0	241	56.0	430	20.77	$\chi^2 = 919.426$ $P = 0.000^*$
- No	1627	98.6	23	1.4	1650	9.3	
Current health complaints #							
	N= 189		N= 241		N= 430		$\chi^2 = 14.983$ $P = 0.001^*$
- Vision Problems	72	41.6	101	58.4	173	40.2	
- Neck & shoulder pain	136	47.4	153	52.9	289	67.2	
- Headache	32	26.4	89	73.6	121	28.1	

Multiple answers are allowed X^2 Chi Square test * Statistically significant at $p \geq 0.05$

Table (5): Distribution of the students according to the presence of internet gaming disorder and their perspective about their social relations: (N= 2080)

Items	internet gaming disorder				Total N=2080		Test of Significance
	No N= 1816		Yes N= 264				
	No.	%	No.	%	No.	%	
Have problems in relations with family members							
- Yes	16	45.7	19	54.3	35	1.7	$\chi^2 = 55.5773$ P = 0.000*
- No	1800	88.0	245	12.0	2045	98.3	
Have problems in relations with friends							
- Yes	49	25.0	147	75.0	196	9.4	$\chi^2 = 758.103$ P = 0.000*
- No	1767	93.8	117	6.2	1884	90.6	
Have problems in relations with school personnel							
- Yes	28	39.4	43	60.6	71	3.4	$\chi^2 = 152.018$ P = 0.000*
- No	1788	89.0	221	11.0	2009	96.6	

 χ^2 Chi Square test * Statistically significant at $p \geq 0.05$

Table (6): Distribution of the students according to the presence of internet gaming disorder and their scholastic achievement and leisure time activities: (N= 2080)

Items	Internet gaming disorder				Total N=2080		Test of Significance
	No N= 1816		Yes N= 264		No.	%	
	No.	%	No.	%			
Previous school failure							
- Yes	166	49.0	173	51.0	339	16.3	$\chi^2 = 537.253$ $P = 0.000^*$
- No	1650	94.8	91	5.2	1741	83.7	
Academic performance in the previous year							
- Excellent	340	96.3	13	3.7	353	17.0	$\chi^2 = 244.514$ $P = 0.000^*$
- Very good	545	95.1	28	4.9	573	27.5	
- Good	656	88.8	83	11.2	739	35.5	
- Passable	275	66.3	140	33.7	415	20.0	
Regular attendance to school							
- Yes	1607	98.2	30	1.8	1637	78.7	$\chi^2 = 817.993$ $P = 0.000^*$
- No	209	47.2	234	52.8	443	21.3	
Share in school activities							
- Yes	523	88.5	68	11.5	591	28.4	$\chi^2 = 1.049$ $P = 0.306$
- No	1293	86.8	196	13.2	1489	71.6	
Share in recreational activities							
- Yes	523	90.6	54	9.4	577	27.7	$\chi^2 = 8.008$ $P = 0.005^*$
- No	1293	86.0	210	14.0	1503	72.3	

 χ^2 Chi Square test * Statistically significant at $p \geq 0.05$

Table (9): Difference between levels of quality of life among the students across the study phases: (N= 200).

Items	Total (n=200)						Test of Significance
	Before		Post 1		Post 2		
	No.	%	No.	%	No.	%	
Physical functioning							
- Good	54	27.0	118	59.0	111	55.5	$X^2=57.46$ P= 0.000*
- Fair	86	43.0	70	35.0	80	40.0	$X^2=57.60$ P= 0.000*
- Poor	60	30.0	12	6.0	9	4.5	$X^2=1.309$ P= 0.519
$X^2=1.737$ P= 0.784							
Psychosocial functioning							
- Good	87	43.5	128	64.0	99	49.5	$X^2=18.27$ P= 0.000*
- Fair	72	36.0	52	26.0	81	40.5	$X^2=8.533$ P= 0.014*
- Poor	41	20.5	20	10.0	20	10.0	$X^2=10.03$ P= 0.007*
$X^2=25.828$ P= 0.000*							
Total Quality of life							
- Good	74	37.0	121	60.5	103	51.5	$X^2=25.16$ P= 0.000*
- Fair	86	43.0	63	31.5	80	40.0	$X^2=14.25$ P= 0.001*
- Poor	40	20.0	16	8.0	17	8.5	$X^2=3.498$ P= 0.174
$X^2=30.202$ P= 0.000*							

X^2 = Chi Square test X^{2c} comparison of the group across the study phases

X^{2b} comparison between pre and post1 X^{2c} comparison between pre and post2

X^{2d} comparison between post 1 and post 2 * Significant p at ≤ 0.05

Figure (1 and 2): Shows that more than one tenth (12.7%) of the studied students had internet gaming disorder. Among them, more than two fifths had mild and moderate disorder (42.8% and 47.7% respectively), while 9.5% of the students had sever internet gaming disorder.

Figure (3): Portrays that the vast majority (96.7%) of the studied students had computer or laptop at their homes and 82.9% of them had internet access at home. While, more than two thirds (68.5%) of the studied students reported having smart phones and more than one third (34.9%) of them had internet access at their phones.

Figure (4): Portrays that more than one tenth (15.0%) of the studied students used computer or laptop or smart phones from two to four hours per day, while 37.6% of them use it for six hours and more.

Table (1): Presents the relation between the studied students' internet gaming disorder and their basic demographic characteristics. The table reveals that internet gaming disorder was more encountered among those aged from 12 to less than 14 years (15.0%) compared to 8.8% of those aged 16 years and more. A statistically significant relation was detected between age and internet gaming disorder ($X^2=11.074$, P=0.004). Moreover, internet gaming disorder was more prevalence among male students than female students (13.5% and 11.9% respectively).

A significant relation was noted between students' academic year and internet gaming disorder ($X^2=143.049$, P=0.000). Higher percentage of internet gaming disorder was encountered among students enrolled in first preparatory grade compared to second grade students (20.0% and 2.1% respectively). Moreover, a significant relation was observed between students' birth order and internet gaming disorder ($X^2=9.871$, P=0.019), since it was more prevalent among students ranking the fourth and more (17.5%) in comparison to those ranked as the first child within their families (10.5%).

The same table reveals that internet gaming disorder was more prevalent among students lived in urban areas, than those who lived in rural areas (20.9%, 10.5% respectively) with a significant relation between them ($X^2=63.776$, P=0.000).

Table (2): Presents the relation between the studied students' internet gaming disorder and their families' socio-demographic characteristics. The table shows that internet gaming disorder was higher among students whose mothers were died (55.0%), followed by those whose fathers were died or divorced (36.0%), and those whose parents were divorced (27.7%). A statistically significant relation was existed between students' internet gaming disorder and parents' marital status ($X^2=126.128$, P=0.000). It is also evident from the table that internet gaming disorder was more prevalent among students with older mothers aged 45 years old and more (13.4%)

Table (7): The difference between internet gaming disorder and the quality of life among the students: (N= 2080).

Items	Internet gaming disorder				Total N=2080		Test of Significance
	No N= 1816		Yes N= 264				
	No.	%	No.	%	No.	%	
Physical functioning							
- Good	863	93.1	64	6.9	927	44.6	$X^2 = 132.269$ P = 0.000*
- Fair	790	87.3	115	12.7	905	43.5	
- Poor	163	65.7	85	34.3	248	11.9	
Emotional functioning							
- Good	978	90.5	103	9.5	1081	52.0	$X^2 = 87.411$ P = 0.000*
- Fair	613	89.8	70	10.2	683	32.8	
- Poor	225	71.2	91	28.8	316	15.2	
Social functioning							
- Good	868	90.9	87	9.1	955	45.9	$X^2 = 51.686$ P = 0.000*
- Fair	611	88.7	78	11.3	689	33.1	
- Poor	337	77.3	99	22.7	436	21.0	
School functioning							
- Good	571	87.7	80	12.3	651	31.3	$X^2 = 23.996$ P = 0.000*
- Fair	896	90.0	100	10.0	996	47.9	
- Poor	349	80.6	84	19.4	433	20.8	
Total Psychosocial functioning							
- Good	802	89.7	92	10.3	894	43.0	$X^2 = 41.582$ P = 0.000*
- Fair	700	89.5	82	10.5	782	37.6	
- Poor	314	77.7	90	22.3	404	19.4	
Total student's quality of life							
- Good	817	90.9	82	9.1	899	43.2	$X^2 = 53.988$ P = 0.000*
- Fair	735	88.3	97	11.7	832	40.0	
- Poor	264	75.6	85	24.4	349	16.8	

 X^2 Chi Square test * Statistically significant at $p \geq 0.05$

Table (8): Difference between levels of internet gaming disorder among the students across the study phases: (N= 200).

Items	Total (n=200)						Test of Significance
	Before		Post 1		Post 2		
	No.	%	No.	%	No.	%	
Internet gaming disorder							
- No	0	0.0	65	32.5	97	48.5	$X^2=137.61$ P= 0.000* $X^2=197.76$ P= 0.000* $X^2=10.885$ P= 0.004*
- Mild	80	40.0	112	56.0	88	44.0	
- Moderate	107	53.5	23	11.5	15	7.5	
- Sever	13	6.5	0	0.0	0	0.0	
$X^2= 229.90$ P= 0.000*							

 X^2 = Chi Square test X^{2a} comparison of the group across the study phases X^{2b} comparison between pre and post1 X^{2c} comparison between pre and post2 X^{2d} comparison between post 1 and post 2 * Significant p at ≤ 0.05

and those whose fathers were sixty years old and more (25.9%). Additionally, the table shows that the age of fathers had significant impact on students' internet gaming disorder ($X^2=51.853$, $P=0.000$).

It is apparent from the table that internet gaming disorder was more encountered among students whose fathers and mothers had university education (31.7% and 22.1% respectively) compared to those whose mothers and fathers could just read and write or illiterate (1.9% and 7.6% respectively). Moreover, the educational level of both fathers and mothers had significant impact on the students' internet gaming disorder ($X^2=159.118$, $P=0.000$ and $X^2=35.713$, $P=0.000$ respectively).

The table also reveals that internet gaming disorder was more prevalent among students whose fathers and mothers were working (11.4% and 28.3% respectively). A statistically significant relation existed between mothers' occupation and students' internet gaming disorder ($X^2=88.060$, $P=0.000$).

The same table illustrates that internet gaming disorder was more encountered among students whose families had enough monthly income (14.8%) and those from high socioeconomic level (23.0%). The table also reveals that both sufficiency of family monthly income and social level had significant impact on students' internet gaming disorder ($X^2=15.011$, $P=0.000$ and $X^2=64.487$, $P=0.000$ respectively).

Additionally, internet gaming disorder was higher among those who reported no parental supervision on their activities (37.3%) with a statistically significant relation between them ($X^2=452.095$, $P=0.000$).

Table (3): Shows the relation between the studied students' internet gaming disorder and their life style habits. The table portrays that internet gaming disorder was higher among students who have irregular meals per day and those who have skipped meals (15.0% and 20.2% respectively) with statistically significant relations between them ($X^2=29.017$, $P=0.000$ and $X^2=57.721$, $P=0.000$ respectively).

It is evident from the table that internet gaming disorder was more prevalent among students who did not practice physical exercises (15.3%) than those who did (9.7%). A statistically significant relation was observed between internet gaming disorder among students and practicing physical exercises ($X^2=14.401$, $P=0.000$).

Lastly, it can also be observed from the table that internet gaming disorder was more encountered among students who sleep less than 7 hours per day (13.7%) and those who reported having sleep problems (22.3%). The table also reveals that students' internet gaming disorder had a significant

relation with their sleeping problems ($X^2=121.919$, $P=0.000$).

Table (4): Presents the relation between students' internet gaming disorder and their health status. The table reveals that internet gaming disorder was higher among students who had no chronic diseases (13.6%). Additionally, internet gaming disorder was more prevalent among students who had current health complaints (56.0%). Among them, vision problems, neck and shoulder pain and headache were higher among students with internet gaming disorder (58.4%, 52.9% and 73.6% respectively). Statistically significant relations existed between internet gaming disorder and each of presence of current health complaints and the existing complaints ($X^2=919.426$, $P=0.000$ and $X^2=14.983$, $P=0.000$ respectively).

Table (5): Presents the relation between students' internet gaming disorder and their social relation. It is apparent from the table that internet gaming disorder was higher among students who have problems in relationships with their family members, friends and school personnel (54.3%, 75.0% and 60.6% respectively). Statistically significant relationships were noticed between students' internet gaming disorder and presence of problems between them and family members, friends and school personnel ($X^2=55.577$, $P=0.000$, $X^2=758.103$, $P=0.000$ and $X^2=152.018$, $P=0.000$ respectively).

Table (6): Illustrates the relation between students' internet gaming disorder and their academic performance. It can be observed that internet gaming disorder was higher among students who reported previous school failure (51.0%) and among those with passable academic performance in the previous academic year (33.7%). Statistically significant relations existed between students' internet gaming disorder and each of school failure and academic performance ($X^2=537.253$, $P=0.000$ and $X^2=244.514$, $P=0.000$ respectively).

The table illustrates that internet gaming disorder was more encountered among students who were not attend to school regularly (52.8%) with a statistically significant relation between students' internet gaming disorder and their regular attendance to school ($X^2=817.993$, $P=0.000$).

It could be noticed that internet gaming disorder was more prevalent among students who were not participating in both school activities and recreational activities (13.2% and 14.0% respectively). A statistically significant relation was detected between students' internet gaming disorder and participation in recreational activities ($X^2=8.008$, $P=0.005$).

Table (7): Portrays the relation between students' internet gaming disorder and their quality of life. It is apparent from the table that among students with poor physical functioning, 34.3% of them had internet

gaming disorder compared to 6.9% of good physical functioning, with a statistically significant relation between them ($X^2=132.269$, $P=0.000$). Furthermore, among students with poor psychosocial functioning, 22.3% of them had internet gaming disorder compared to 10.3% of good psychosocial functioning, with a statistically significant relation between them ($X^2=41.582$, $P=0.000$). The table also portrays that among students with poor total quality of life, 24.4% of them had internet gaming disorder compared to 9.1% of good quality of life, with a statistically significant relation between them ($X^2=53.988$, $P=0.000$).

Table (8): Shows the distribution of the studied students' levels of internet gaming disorder before and after the implementation of the CBT-IA program. It was noticed that 40.0% of the students had mild internet gaming disorder, and more than half (53.5%) had moderate level, and the rest (6.5%) of them had severe internet gaming disorder. While, less than one third (32.5%) of the students had no disorder immediately after the program, and those with mild and moderate level were 56% and 11.5% respectively. On the other hand, those with no disorder was 48.5% in the follow up phase, while 44.5% of the students had mild level and the rest (7.5%) had moderate level. The same table shows that the difference between pre, post 1 and post 2 assessment was statistically significant where ($X^2=137.61$, $P=0.000$, $X^2=197.76$, $P=0.000$ and $X^2=10.885$, $P=0.004$ respectively).

Table (9): Shows the distribution of the studied students' levels of quality of life before and after the implementation of the CBT-IA program. It was noticed that 37.0% of the students had good total quality of life, and 43.0% had fair quality of life, and the rest (20.0%) of them had poor quality of life. While, less than two thirds (60.5%) of the students had good total quality of life immediately after the program, and those with fair and poor quality of life were 31.5% and 8.0% respectively. On the other hand, those with good quality of life was 51.5% in the follow up phase, while 40.0% of the students had fair quality of life and the rest (8.5%) had poor quality of life. In addition, the table shows that the difference between pre, post 1 and post 2 assessment was statistically significant where ($X^2=25.16$, $P=0.000$ and $X^2=14.25$, $P=0.001$ respectively).

Discussion

The internet has become an important tool for social interaction, information, and entertainment. The high-tech social transition towards computerization has changed the nature of recreational activities among adolescents. Nowadays, most adolescents are entertained through computer gaming, a popular and

highly amusing leisure activity (Kuss, & Griffiths, 2011). At the same time, problematic gaming, the persistent and excessive engagement in computer or video games that cannot be controlled, has been identified as a potential risk among them (Muller, et al., 2012).

Early adolescence is a distinct period of human growth and development situated between childhood and adolescence. During this remarkable stage of the life cycle, adolescents experience rapid and significant developmental change. They tend to be curious and display wide-ranging interests. Typically, they are eager to learn and explore the varied facets of their environment. They also favor active over passive experiences and prefer interactions with peers during activities (Király, et al., 2014).

To make sense of the world around them, young adolescents, build upon their individual experiences and prior knowledge. So, through ease of access to the internet world, they can achieve their targets, to have fun, to learn, and to contact peers. However, the presence of relatively immature cognitive control makes this period a time of vulnerability and adjustment and may lead to a higher incidence of risky behaviors including internet gaming addiction. Overuse of internet and computer games may be a form of rebellion or sensation-seeking, providing pleasure, alleviating boredom, satisfying curiosity, facilitating social bonding, attaining peer status or as an escape/coping mechanism for this stressful period of life (Undavalli, et al., 2020).

The current study found that more than one tenth of the studied students had internet gaming disorder and among them, it was more encountered among younger students in comparison to older students. These findings come in line with the results of (Muller, et al., 2012, & Kheradmand, et al., 2012) who found that less than one fifth of the young adolescents suffered from computer games addiction. Previous studies identified gender as a risk factor for internet gaming disorder as boys are more addicted and spend more time playing on computers than girls (Festl, et al., 2012). The current study found that internet gaming disorder was more prevalent among male students. One explanation for this may be that males have a stronger motivation to play and pick up more positive thoughts from playing computer games, and thus, computers are regarded as a "male toy".

Moreover, the current study found that internet gaming disorder was less encountered among the first-born child. Similar findings were reported by (Kuss, & Griffiths, 2011, & Gnetile, et al., 2011). This finding could be attributed to that the first-born child is the center of attention of his family before a new sibling is incorporated into the family. The first born is "an only child" before another sibling is born

parents heavily invest in their first-born child. While, the last born has the least amount of care, time and attention of their parents, so they may engage deeply into the computer games world as a defense mechanism to attaining a status or as an escape/coping mechanism. Furthermore, the current study found that internet gaming disorder was higher among students who live in urban areas. This could be attributed to that urban areas may have better chance of high-speed internet access than rural areas. In addition, the living environment has a great impact over the lifestyles of children, urban children because of geographical constraints tend to stay more at home and involved in multimedia, on the other hand the chance of outdoor gaming is more among rural children. In the same line, **Undavalli, et al., (2020)** who found that the majority of the study participants with gaming disorder were from urban area.

Family and home environment are detrimental factors in adolescents' life. Age, level of education and occupation of parents are considerable familial factors in a wide variety of risk-taking behaviors among adolescents. The present study found that internet gaming disorder was more prevalent among students whose parents were older, highly educated and working. Those older parents didn't pay much attention to behaviors of their children/off springs and have less control, care and supervision than the younger parents. While, working parents are busy at work and have less time to spend with their adolescents to monitor them. Moreover, highly educated parents have better chances using modern technology and gadgets, which increased the adolescents' access to internet. In the same line, the results of **Shek, et al., (2015)** who found an association between the parents' age, occupation and level of education and the development of internet gaming disorder among their children.

Additionally, the current study found that internet gaming disorder was higher among those students whose parents were died or divorced. This finding could be attributed to that a broken home is associated with poor family functioning, lower parental control and care and higher stress level. So, the adolescents may forget their stress during internet access hours as a form of escape. Similar findings were reported by **(Bonnaire, & Phan, 2017)** who found that unstable home environment was significantly associated with internet gaming disorder among adolescents.

Problematic gaming may lead to several negative psychosocial consequences and mental health problems affecting work, education, family, friends, social life, psychosocial well-being, social competence, leisure activities, self-esteem, and

loneliness (**Shek, et al., 2015**). The same picture was portrayed in the current study findings as internet gaming disorder was higher among those students with poor psychosocial quality of life and those who reported problems in relations with family, friends and school personnel. Similar results were reported by **Lemmens, et al., (2011)**.

This could be attributed to the fact that the online gaming may temporarily offer social, recreational and personal gratification but excessive engagement can backfire to addictive behaviors entailing several pathological behavioral outcomes. Spending excessive time on online gaming hinders the accumulation of stable real-life friendships and the development of social skills. Social interaction is displaced to superficial and short-term online interactions, which produces deterioration of present real-life interactions and in turn increases social isolation and magnifies feelings of loneliness.

Another explanation is that the virtual social environment created through digital games enables the gamer to interact with people having similar gaming interests. This rather reinforces gaming instead of criticizing it. Virtual relationships thus become increasingly more important for the gamer, and virtual rank and status increasingly satisfy otherwise deficient social needs and reinforce online presence. Moreover, the guild or clan may exert social pressure to attach gamers to the game and keep them active. Gamers will receive social rewards for gaming skills in the real peer group as well. Pathological gamers tend to overestimate gaming rewards, activities, virtual identities, or hard-earned 'valuable' items (weapons, life) which in turn increase the time spend online.

Moreover, late night use of the internet can cause sleep deprivation and fatigue, which can adversely affect academic performance and school attendance. In the long term, it leads to sedentary life style and can cause serious health problems such as repetitive strain injury and back ache (**Lemmens, et al., 2011**). Similarly, the current study findings revealed that internet gaming disorder was more common among those who skipped meals, had irregular meal time, not practicing physical exercises, those with less sleeping hours and had sleeping problems and those with poor physical quality of life.

In addition, the current study reveals that vision problems, neck, shoulder pain and headache were more encountered among students with internet gaming disorder. In the same line, results of **(Kawabe, et al., 2019 & Toker, & Baturay, 2016)** found that adolescents with problematic internet use were more likely to suffer from somatic complaints could derive from spending prolonged hours on the computer screen and as a result having eye problems,

dizziness, headaches and sleep disturbances. Moreover, somatic complaints may have given rise to sleep deprivation, due to excessive engagement in online gaming during the late evening hours, is related to hallucinations.

Cognitive-behavioral therapy (CBT) has long been advocated as a treatment and has been extended to reduce internet addiction in the past decades. According to CBT, an event cannot directly lead to emotional and behavioral disorders. What really important is one's understanding and evaluation of the event. It uses cognitive reconstruction to correct people's negative thoughts, helping individuals get a new meaning and improve their thoughts, feelings, and behaviors (Dong, & Potenza, 2014).

Internet gaming addiction is a complex and gradual habit which is acquired under the combined action of defective cognition and behavior. The correction of this behavior requires the change of cognitive style, correction of behavior habits, and the maintenance of state after rehabilitation. Its therapeutic objectives generally include cognition, emotion, and behavior, through cognitive reconstruction, skill-building, and lifestyle reorganization (Dong, & Potenza, 2014).

Cognitive behavioral therapy aims to help those with internet gaming disorders to become aware of thought distortion which in turn causing psychological distress, and of behavioral patterns which are reinforcing it, and to correct them. Throughout this process, the adolescents acquire coping strategies as well as improved skills of appropriate decision making, critical thinking, assertiveness and communication skills (Young, & Brand, 2017 & Zajac, et al., 2017).

The efficacy of the cognitive behavioral therapy was portrayed in the current study findings, where the percentage of normal students with no disorder has been raised to 32.5% and 48.5% in the immediate evaluation and in the follow up phase after three months respectively. These results came in accordance with several studies which found that CBT was one of the most effective treatment strategies for treatment of internet addiction and internet gaming disorder. In the same line, the results of (Wolfling, et al., 2019, Torres Rodriguez, et al., 2018 & Han, et al., 2020) who proved the ability of cognitive behavioral therapy to target and modify maladaptive cognitions that underlie gaming behaviors that generate harm and/or distress among the studied groups. Another benefit of cognitive behavioral therapy is that it may be more equipped to address comorbid conditions in the context of internet gaming disorder. Adolescents with internet gaming disorder are more likely to have some critical impairment in their quality of life, such as higher prevalence of mood and anxiety disorders, poor sleep

quality, pain, muscle fatigue and poor academic performance (Machimbarrena, et al., 2019). In the same line, findings of the current study found that the percentage of students with good quality of life increased to 60.5% immediately after the program and to 51.5% in the follow up phase.

Conclusion

Based upon the findings of the current study, it could be concluded that, internet gaming disorder is a prevalent problem among preparatory school students. The cognitive behavioral therapy positively affects each of student's internet gaming disorder and their quality of life.

Recommendations

In line with the findings of the study, the following recommendations are made:

- Perform a regular screening for internet gaming disorder among children and adolescents.
- Encourage face-to-face socialization and healthy social relationships.
- Encourage a healthy life style for adolescents such as adequate amount of sleep, exercise, and a balanced diet.
- Encourage parents to monitor their children's hours and purpose of internet usage help in controlled internet use and gaming disorders.
- Develop a guideline for interventions to address internet gaming disorder among adolescents at the primary health-care level.
- Early interventions may include counseling regarding monitoring of internet use either by self or involving family members.

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Original Investigation | Psychiatry

Effectiveness of Cognitive Behavioral Therapy-Based Intervention in Preventing Gaming Disorder and Unspecified Internet Use Disorder in Adolescents A Cluster Randomized Clinical Trial

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Abstract

IMPORTANCE Behavioral addictions were introduced as novel mental disorders in the International Classification of Diseases, 11th Revision, based on evidence that human behavior itself can become addictive, similar to addiction to substances. However, previous studies on prevention of gaming disorder and unspecified internet use disorder lacked randomization, follow-up measurements, and diagnostic interviews that assessed incidence rates; this trial was intended to fill this gap.

OBJECTIVES To investigate whether the PROTECT (Professioneller Umgang mit technischen Medien [Professional Use of Technical Media]) intervention can reduce the symptom severity and prevent full syndrome and subthreshold onset of gaming disorder and unspecified internet use disorder in at-risk adolescents.

DESIGN, SETTING, AND PARTICIPANTS A multicenter cluster randomized clinical trial conducted recruitment, screening, intervention delivery, and data collection among at-risk adolescents aged 12 to 18 years in 33 high schools in Germany. Inclusion criteria for the study and symptom severity analyses were elevated symptoms of gaming disorder and unspecified internet use disorder. A subsample that met the inclusion criteria for incidence analyses (no full syndrome of gaming disorder or unspecified internet use disorder, depression, or anxiety at baseline) was analyzed for illness onset. Participants were randomized to either the PROTECT intervention group or the assessment-only control group. Participants were assessed at baseline, 1-month follow-up, 4-month follow-up, and 12-month follow-up between October 1, 2015, and September 30, 2018. Based on intent-to-treat principle, data analyses were conducted from February 8, 2019, to May 7, 2021.

INTERVENTIONS PROTECT, a theory-driven, manualized, cognitive behavioral therapy-based indicated preventive group intervention that is delivered in 4 sessions by trained psychologists. It targets changes in addictive reward processing and pathological cognitive mechanisms.

MAIN OUTCOMES AND MEASURES The primary outcome was symptom severity (measured by CSAS [Computerspielabhängigkeitsskala], a modified German video game dependency scale with a score range of 0–56 [higher scores indicating greater pathology]) along with incidence rates (assessed by a structured clinical interview) after 12 months. Secondary outcomes were comorbid psychopathology and problem behaviors.

RESULTS A total of 422 at-risk adolescents (mean [SD] age, 15.11 [2.01] years; 229 female participants [54.3%]) were randomized to either the PROTECT intervention group (n = 167; mean [SD] risk score, 29.05 [6.98]) or the assessment-only control group (n = 255; mean [SD] risk score, 26.21 [5.01]) and were included in the symptom severity analyses. Compared with the control group, the PROTECT group showed a significantly greater reduction in symptom severity of gaming disorder

(continued)

Key Points

Question Is manualized cognitive behavioral therapy-based indicated prevention effective in reducing symptoms of gaming disorder and unspecified internet use disorder and rates of these disorders in at-risk high school students?

Findings In this cluster randomized clinical trial of 422 at-risk adolescents with gaming disorder and unspecified internet use disorder, the PROTECT (Professioneller Umgang mit technischen Medien [Professional Use of Technical Media]) intervention group had a significantly greater reduction in symptoms over 12 months compared with the assessment-only control group (39.8% vs 27.7%). Differences in incidence rates did not reach significance.

Meaning Findings of this trial indicate that the PROTECT intervention in high schools is effective in reducing symptoms of gaming disorder and unspecified internet use disorder.

+ Visual Abstract

+ Invited Commentary

+ Supplemental content

Author affiliations and article information are listed at the end of this article.

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Abstract (continued)

or unspecified internet use disorder ($\gamma_{11} = -0.128$; 95% CI, -0.246 to -0.011; $P = .03$), reflecting a 39.8% vs 27.7% reduction of symptoms with an effect size of Cohen $d = 0.67$ (baseline vs 12-month follow-up) for the PROTECT group. Differences in incidence rates did not reach statistical significance. The PROTECT group showed a significantly greater decrease in procrastination ($\gamma_{11} = -0.458$; 95% CI, -0.735 to -0.180; $P < .001$) over 12 months, but no significant differences were found for other secondary outcomes.

CONCLUSIONS AND RELEVANCE Results of this trial showed that the PROTECT intervention effectively reduced symptoms of gaming disorder and unspecified internet use disorder over 12 months. The intervention did not change incidence rates of gaming disorder or unspecified internet use disorder.

TRIAL REGISTRATION ClinicalTrials.gov Identifier: NCT02907658

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Introduction

With the release of the *International Classification of Diseases, 11th Revision (ICD-11)*, the World Health Organization recognized that excessive behaviors can become addictive, and such an addiction can be analogous to addictions based on psychotropic substances.¹ Because of the neurobiological similarity between substance-related and nonsubstance-related addictions,²⁻⁶ these disorders were nosologically classified as “disorders due to substance use or addictive behaviors.”¹ Gaming disorder (ICD-11 code 6C51) was included in ICD-11 as a novel behavioral addiction in addition to gambling disorder, which was listed as an impulse control disorder in earlier editions of the ICD. Other behavioral addictions, such as internet use disorder, were recommended for inclusion as “other specified” (ICD-11 code 6C5Y) or “unspecified” (ICD-11 code 6C5Z) disorders that are attributed to addictive behaviors.⁷ Scientists have called for intensive research on prevention of (internet) gaming disorder.⁸

Gaming disorder and unspecified internet use disorder are associated with numerous impairments, such as comorbid psychiatric disorders, lower life satisfaction, and lower academic achievements.⁹⁻²² Epidemiologic studies show a relevant prevalence of gaming disorder (4.6%)²³ and internet use disorder (6.0%),²⁴ including both gaming disorder and unspecified internet use disorder. Adolescents seem to be particularly vulnerable to developing disorders that are associated with the reward system.^{20,25-27} In line with this finding, excessive use of video games and the internet is highly prevalent in youth and early adulthood.^{23,28-30} In 1 study, prevalence of gaming disorder and unspecified internet use disorder increased from 2.8% in children aged 11 to 12 years to 9.1% in young adults aged 18 to 21 years,²⁸ whereas several studies found that prevalence decreased at the end of the third decade of life.^{20,25,27} Findings on the stability of addiction symptoms over 1 year have been mixed, ranging from 28.4%³¹ to 37.6%³² to 63.3%.³³ However, those patients whose addictive behaviors persist present a challenge to health care and social systems. Individuals with these behaviors show limited motivation to seek help and treatment,^{34,35} which emphasizes the need to prevent illness onset. The excessive use of video games and internet applications has been growing (particularly during the ongoing COVID-19 pandemic),^{29,36,37} which underlines the need for prevention and early intervention.³⁸⁻⁴³ Between September 2019 and March 2020, the mean amount of time that adolescents in Germany spent on video gaming increased by 75.0% on weekdays (Monday through Friday) and by 29.3% on weekends.²⁹

The American Psychological Association recommendations for efficient psychological prevention emphasize a theoretical foundation for the intervention, an optimal dose-response relationship, and systemic anchoring (eg, in schools).⁴⁴ Typically, prevention should start before

symptom manifestation and should target individuals who might gain the most benefit and are selected according to factors that increase the risk of illness onset, such as age and first symptoms (ie, selective-indicated prevention). Risk selection potentially enhances cost-effectiveness. Prevention programs that target at-risk individuals must demonstrate incremental effectiveness beyond the expected effects of spontaneous remission and regression to the mean. Therefore, it is of utmost necessity to design longitudinal, randomized clinical efficacy trials that allow the observation of natural symptom courses in a control group and that use clinically relevant end points (ie, reduction of first symptoms and prevention of illness onset). The quality of previous studies on prevention of gaming disorder and unspecified internet use disorder has often been criticized because they lacked randomization as well as follow-up measurements and diagnostic interviews that assessed incidence rates.^{8,40,46}

To address this significant gap, we conducted a 2-group, cluster randomized clinical trial of the long-term effects of the PROTECT (Professioneller Umgang mit technischen Medien [Professional Use of Technical Media])⁴⁷ intervention (eFigure 1 in Supplement 1) for indicated prevention of gaming disorder and unspecified internet use disorder, which follows the American Psychological Association guidelines for prevention in psychology. We investigated whether the PROTECT intervention can reduce the symptom severity and prevent full syndrome and subthreshold onset of gaming disorder and unspecified internet use disorder in at-risk adolescents.

Methods

The data presented herein were obtained from the preregistered PROTECT study. The trial protocol (Supplement 2) was approved by the University of Education Heidelberg Research Ethics Committee and the Regional Council. All high schools in the Rhine-Neckar metropolitan region in Germany were contacted via the headmaster's office, and 33 high schools participated on a voluntary basis. Written informed consent was obtained from all participants. Data were collected between October 1, 2015, and September 30, 2018, and data were prepared, coded, and analyzed through May 7, 2021. We used the Consolidated Standards of Reporting Trials (CONSORT) reporting guideline.

Screening of At-Risk Participants and Randomization

Participants were screened for risk before study enrollment using the German version of the Compulsive Internet Use Scale (CIUS).⁴⁸ A CIUS score of 24 or higher, which is commonly used to identify high-risk participants, has been found to identify cases with a sensitivity of at least 70%.⁴⁹ To increase sensitivity in the present study but also limit the total number needed to treat, we chose a CIUS score of 20 as the cutoff criterion and thus included participants at moderate risk and high risk in the study. This at-risk subsample, which was eligible to participate, included the upper 36.4% of all screened participants. The internal consistency at screening was high (Cronbach $\alpha = .87$).

We screened 5549 high school students aged 12 to 18 years for risk of gaming disorder and unspecified internet use disorder before enrollment and randomization to either the PROTECT intervention group ($n = 167$) or the assessment-only control group ($n = 255$) (Figure 1). Randomization was conducted in schools, which were stratified by academic level (low, medium, or high), as clusters by an independent person who used MATLAB (MathWorks) to generate the 3 randomization lists (each with permuting block randomization, with block sizes of 4-6). The refusal or agreement to participate was recorded before the schools were randomized. Descriptive statistics by group are presented in eTable 1 in Supplement 1.

All participants were assessed (by paper and pencil) at baseline, 1-month follow-up, 4-month follow-up, and 12-month follow-up and were included in the symptom severity analyses. Following the trial protocol (Supplement 2), we tested for illness onset (clinical interview) at 12-month follow-up and included in the incidence analyses a subsample of 211 eligible participants (85 from the PROTECT intervention group, and 126 from the assessment-only control group). Participants in the subsample had no clinically relevant gaming disorder or unspecified internet use disorder and met 5

or more diagnostic criteria on the CSAS [Computerspielabhängigkeitsskala], a modified German video game dependency scale; had no depression (DIKJ [Depressions-Inventar für Kinder und Jugendliche] questionnaire T score ≥ 60); and had no social anxiety (Social Interaction Anxiety Scale total score ≥ 36) at baseline. The flow of participants is presented in Figure 1. Detailed information on the participant base for the incidence analyses is presented in eFigure 2 in Supplement 1.

Treatment, Assessment, and Blinding

PROTECT is a theory-driven, school-based, manualized, cognitive behavioral therapy (CBT)-based indicated preventive group intervention. It consists of four 90-minute sessions and is delivered by 2 trained psychologists per group.⁴⁷ Previous research found the best evidence for CBT-based programs for treatment and early intervention for gaming disorder and unspecified internet use disorder.^{35,50-53}

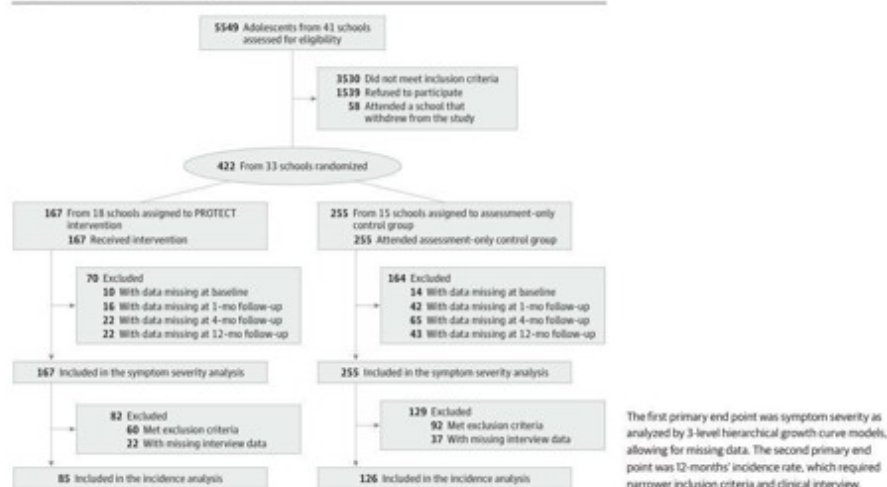
Risk screenings, paper-and-pencil assessments, the diagnostic interview, and the PROTECT intervention delivery were conducted during regular school hours by trained psychologists. The structured clinical interview was recorded on audiotape. Recordings were coded by a second, blinded rater.

We also assessed sex, age, school type, grades, sick days within the past month, and mean time spent online. Race and ethnicity data were not collected.

Primary and Secondary End Points

The primary end point was the symptom severity of gaming disorder or unspecified internet use disorder, as assessed by the CSAS (score range: 0-56, with higher scores indicating greater pathology).³⁴ With permission from the CSAS publisher, we adapted the CSAS items to cover both gaming disorder and unspecified internet use disorder in a common score (eg, item 1: "Even when I am not gaming/online, I think about online gaming/the Internet" for preoccupation). In addition, using the structured clinical interview, we assessed incidence rates of full-syndrome gaming disorder

Figure 1. CONSORT Diagram of Participant Flow Through Trial



or unspecified internet use disorder (defined as meeting ≥ 5 diagnostic criteria of the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* [DSM-5]) and subthreshold gaming disorder or unspecified internet use disorder (defined as meeting ≥ 3 diagnostic criteria of the DSM-5). The clinical interview covered the 9 DSM-5 criteria for internet gaming disorder that were adapted for gaming disorder and unspecified internet use disorder separately, following a branched structure of 107 structured questions per section (214 questions in total).

The secondary end points were procrastination, general psychopathology, depressive symptoms, social anxiety, performance anxiety and school anxiety, emotion regulation, school-related social behavior and learning behavior, and self-efficacy. These comorbid psychopathology and problem behaviors have been found to be associated with gaming disorder and unspecified internet use disorder.^{9,13,16,18-22,25,54-65} Detailed descriptions of all outcome measures are provided in the eAppendix in Supplement 1 and in the trial protocol in Supplement 2.

Statistical Analysis

According to a previous sample size calculation,⁶⁶ a total number of 340 participants (170 per group) was needed to ensure a power of 80%, and a 2-sided $\alpha = .05$ was needed to detect an effect that would reduce incidence rates by one-third through the intervention (incidence rate of 36% [36 per 100 participants] instead of 24% [24 per 100 participants]). To analyze symptom severity (continuous variable), a 3-level hierarchical linear growth curve model was used as the statistical method, which allowed us to model change in nested data in a repeated-measurement design (level 1 units indicating time, level 2 units indicating participants, and level 3 units indicating schools) (Figure 2C). Significant baseline differences were considered by including level-2 and level-3 random intercepts. The rate of change (the slope of the curve) was estimated by the interaction between the time and PROTECT parameters (γ_{10}). The time parameter was scaled from 0 to 12, representing 1 unit per month, and the PROTECT parameter was dummy coded (1 for the PROTECT intervention group, and 0 for the assessment-only control group). A more detailed description of the 3-level hierarchical linear growth curve model specification is provided in the eAppendix in Supplement 1.

To compare incidence rates between groups, we used χ^2 statistic to analyze the number of individuals who had full-syndrome gaming disorder or unspecified internet use disorder (met ≥ 5 DSM-5 criteria) vs those who had subthreshold gaming disorder or unspecified internet use disorder (met ≥ 3 DSM-5 criteria). Because of an unbalanced risk of illness onset between groups at baseline (moderate risk [CIUS score between 20 and 23] vs high risk [CIUS score ≥ 24]; PROTECT intervention group, 29.4% vs 70.6%; assessment-only control group, 41.3% vs 58.7%), we analyzed incidence rates stratified by risk score.

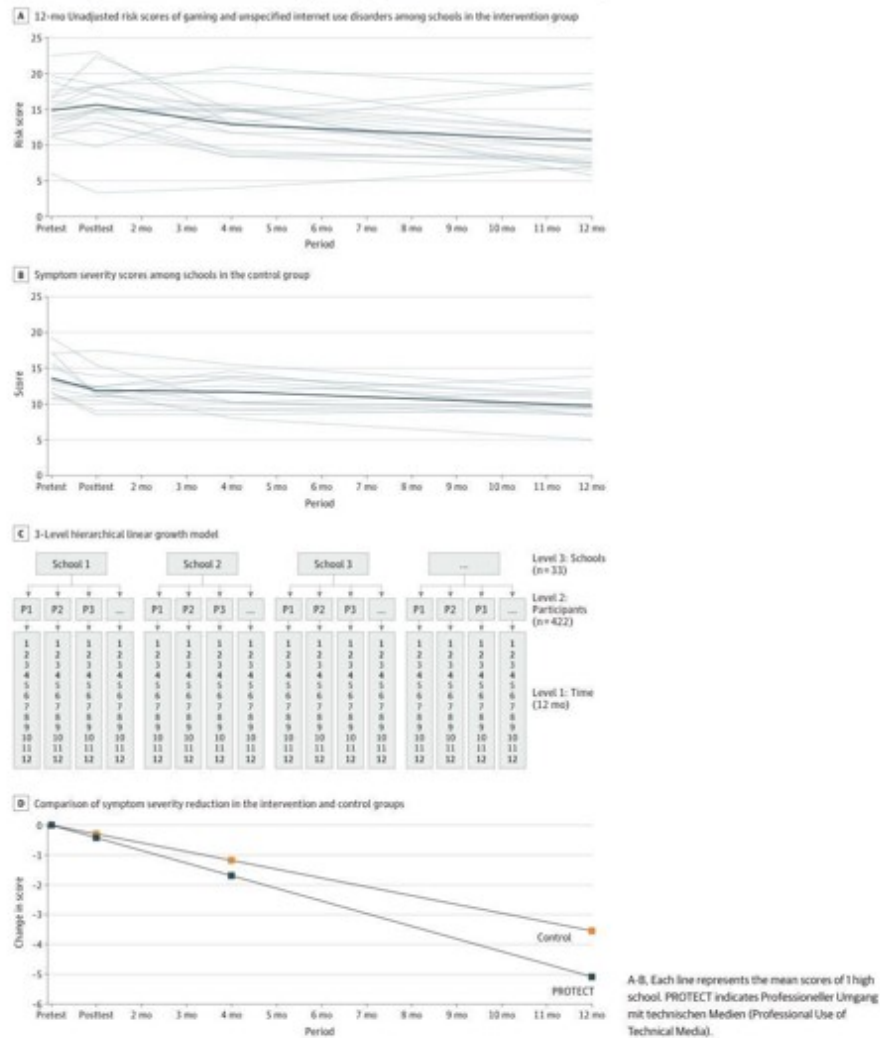
All significance tests were 2-sided, and $P < .05$ was used to indicate significance. All statistical calculations used IBM SPSS Statistics, version 27 (IBM). Based on intent-to-treat principle, data analyses were conducted from February 8, 2019, to May 7, 2021.

Results

A total of 422 at-risk adolescents (mean [SD] age, 15.11 [2.01] years; 229 female [54.3%] and 193 male [45.7%] participants) were randomized to the PROTECT intervention group ($n = 167$; mean [SD] risk score, 29.05 [6.98]) or to the assessment-only control group ($n = 255$; mean [SD] risk score, 26.21 [5.01]) and were included in the symptom severity analyses.

The intervention was delivered in 24 groups consisting of 3 to 11 adolescents. The mean (SD) number of attended sessions was 3.7 (0.45) of 4 sessions. Participants evaluated the intervention favorably: 90.7% ($n = 137$) were satisfied with PROTECT, and 85.5% ($n = 127$) would recommend PROTECT to a friend. The mean evaluation score was 7.53 out of 10 points, with 1 being very poor and 10 being very good.

Figure 2. Gaming Disorder or Internet Use Disorder Symptom Changes Over 12 Months



Primary Outcomes

Raw scores of the symptom courses of gaming disorder and unspecified internet use disorder over 12 months, stratified by groups and schools, are displayed in Figure 2A and B. The raw scores showed an initial increase in symptom severity in the PROTECT intervention group (Figure 2A) within the first month, compared with a decrease in symptom severity in the assessment-only control group (Figure 2B), followed by a larger decrease in symptom severity in the PROTECT intervention group between months 2 and 12. Descriptive statistics and effect sizes of gaming disorder and unspecified internet use disorder symptom courses stratified by group are shown in eTable 2 in Supplement 1. Group means were corrected by level-3 baseline differences. Level-3 baseline data are presented in eTable 3 in Supplement 1.

We found a significantly greater reduction in symptom severity of gaming disorder and unspecified internet use disorder in the PROTECT intervention group compared with the assessment-only control group ($\gamma_{11} = -0.128$; 95% CI, -0.246 to -0.011 ; $P = .03$) as demonstrated by a significantly steeper slope in Figure 2D. The incremental improvement among PROTECT participants compared with control participants represented a 39.8% vs 27.7% reduction of symptoms over 12 months, with an effect size of Cohen $d = 0.67$ in the PROTECT group. Parameter estimates of fixed effects are shown in the Table. Random effects and a comparison of model fit are shown in eTable 4 in Supplement 1.

A total of 12 participants (5.7%) developed unspecified internet use disorder (6 in the PROTECT group and 6 in the control group), meeting at least 5 DSM-5 diagnostic criteria of internet gaming disorder after 12 months. Any subthreshold gaming disorder ($n = 10$ [3 in the PROTECT group and 7 in the control group]) or unspecified internet use disorder ($n = 33$ [10 in the PROTECT group and 23 in the control group]) that met 3 or 4 DSM-5 diagnostic criteria of internet gaming disorder was found in 40 individuals (19.0% of the sample). Three participants (1.4%) met DSM-5 diagnostic criteria for both subthreshold gaming disorder and subthreshold unspecified internet use disorder. Differences in incidence rates between treatment groups were not significant. In the high-risk group, incidence rates for subthreshold gaming disorder or unspecified internet use disorder were 18.3% ($n = 11$) in the PROTECT intervention group and 29.7% ($n = 22$) in the assessment-only control group ($\chi^2 = 0.420$; $P = .519$) (eTable 5 in Supplement 1).

Secondary Outcomes

Pearson correlations of secondary outcomes with gaming disorder or unspecified internet use disorder are presented in eTable 6 in Supplement 1. Group differences in secondary outcomes were analyzed by comparing the slopes (interaction between time and group) in 3-level hierarchical linear growth models (random intercept and random slope). We found a significantly greater reduction in procrastination in the PROTECT intervention group compared with the assessment-only control group ($\gamma_{18} = -0.458$; 95% CI, -0.735 to -0.180 ; $P < .001$) (eFigure 3 in Supplement 1). Fixed and random effects for procrastination and a comparison of model fit are shown in eTable 7 in Supplement 1.

Over time, the secondary outcome measures of general psychopathology, depressive symptoms, social anxiety, emotion regulation, and school-related social and learning behaviors

Table. Results of Fixed-Effects Parameters for Symptom Severity

Variable	Parameter ^a	Estimate	SE	t value	P value	(95% CI)
Gaming disorder or unspecified internet use disorder symptom severity, assessed by CSAS	Intercept (γ_{00})	12.762	0.565	22.592	<.001	(11.589 to 13.934)
	Time (γ_{10})	-0.295	0.038	-7.775	<.001	(-0.379 to -0.221)
	PROTECT $\times$ Time (γ_{11})	-0.128	0.060	-2.148	.03	(-0.246 to -0.011)

Abbreviations: CSAS, Computerspielabhängigkeitsskala (modified German video game dependency scale; score range: 0-56, with higher scores indicating greater pathology); PROTECT, Professioneller Umgang mit technischen Medien) Professional Use of Technical Media).

^a The time parameter was scaled from 0 to 12, representing 1 unit per month. The PROTECT parameter was dummy coded, with 1 for the PROTECT intervention group and 0 for the assessment-only control group.

showed significant improvement in both groups. Yet the interaction between time and group did not reach significance. Other secondary outcomes did not differ significantly between groups. Descriptive statistics and effect sizes of secondary outcomes are presented in eTable 8 in Supplement 1, and parameter estimates of fixed effects can be found in eTable 9 in Supplement 1. Because of multiple comparisons, the α level was corrected by the number of tests using the Bonferroni correction ($\alpha = .05$ divided by 9 = .006).

Discussion

To our knowledge, this trial is the first to investigate the long-term effects of a school- and CBT-based indicated preventive intervention (PROTECT) for symptom reduction of gaming disorder or unspecified internet use disorder in adolescents vs an assessment-only control group. We believe it is also the first study in the field to be preregistered and to use a theory-driven, manualized intervention in accordance with American Psychological Association guidelines,⁴⁴ and to analyze incidence rates as measured by a diagnostic interview. The findings from this trial correspond with previous findings on psychotherapeutic treatment of gaming disorder and unspecified internet use disorder, which demonstrated the beneficial effects of CBT-based interventions on symptom severity.^{35,50-53}

Results indicated a significantly greater reduction in symptom severity of gaming disorder or unspecified internet use disorder in the PROTECT intervention group compared with the assessment-only control group. Although both groups showed a significant symptom reduction over 12 months, a significantly greater incremental effect was found in the PROTECT intervention group. This finding indicates that the intervention had an effect that was above and beyond spontaneous remission. To our knowledge, only 1 other prevention study with a randomized clinical design could prove preventive effects.⁶⁷ In contrast to the PROTECT intervention, the other preventive approach was a universal, knowledge-based, media-literacy curriculum that addressed unselected adolescents in 6th and 7th grades between 2010 and 2012.⁶⁷

Incidence rates were lower than expected. The number of subthreshold cases that we found was approximately equal to the number of expected full-syndrome cases. Descriptive analyses showed that in individuals with high risk at baseline, fewer participants in the PROTECT intervention group than in the assessment-only control group developed a full-syndrome or subthreshold gaming disorder or unspecified internet use disorder. However, the power was too low to statistically validate the effect, and the study did not find a significant reduction in incidence rates. Power analysis was sensitive to base rate overestimation or underestimation, and the incidence rate that was identified by clinical interviews in this at-risk population was much lower than assumed based on paper and pencil-based epidemiologic studies (trial protocol in Supplement 2).⁶⁸ Nevertheless, we believe incidence rates that were assessed by structured clinical interviews should be considered as the ultimate proof of preventive effects and should be an approach used in future studies. To avoid underpowered samples, adaptive designs that allow for a sample size recalculation after a planned interim analysis could be a method of choice when exact base rate estimations are unknown.

The spontaneous symptom reduction effect on gaming disorder or unspecified internet use disorder in the control group was higher than expected. This finding is in line with results from studies that indicated a rather low temporal symptom stability in adolescents and high spontaneous remission rates over 1 year.^{31,32} However, it could also be a regression to the mean effect or an increased problem awareness. Moreover, the symptom reduction in the PROTECT intervention group was significantly greater than that in the assessment-only control group, suggesting a true effect of the PROTECT intervention that went beyond mere problem awareness, regression to the mean, or spontaneous remission.

In addition, descriptive symptom analyses showed an initial increase in symptom severity of gaming disorder or unspecified internet use disorder within the first month in the PROTECT intervention group, compared with a decrease in symptom severity in the assessment-only control

group. A similar result was found in another study that assessed the effects of an early intervention program (called PROTECT+), which was developed and conducted at our university and was based on the same concept.⁵⁰ This paradox reaction could be explained by an elevated awareness of problematic internet behavior, which was induced by the PROTECT intervention. It seemed unlikely that the intervention itself was harmful because symptoms significantly decreased at the 4-month follow-up and the 12-month follow-up.

Besides the effects of the PROTECT intervention on the primary outcome, we found significant incremental effects on procrastination as a secondary outcome. Previous research has shown that procrastination is closely related to gaming disorder and unspecified internet use disorder.^{65,68,69} The specificity of the intervention's effects on gaming disorder, unspecified internet use disorder, and procrastination symptoms vs other comorbid symptoms might be explained by the content of the PROTECT intervention manual, which specifically addresses 3 problem behaviors: (1) boredom and motivational problems, (2) procrastination and test anxiety, and (3) social anxiety. Although procrastination was decreased significantly, the effects of the interaction between time and group on social anxiety as well as on school and performance anxiety were marginally significant, which is a promising result and a step in the right direction.

Other secondary outcome measures (general psychopathology, depressive symptoms, social anxiety, emotion regulation, and school-related social and learning behaviors) improved in both groups over time. Yet the interaction between time and group did not reach significance. All secondary outcomes were associated with gaming disorder and unspecified internet use disorder (small to medium-size effects; correlations are presented in eTable 6 in Supplement 1). Thus, a decrease in comorbid symptoms along with a decrease in symptoms of gaming disorder or unspecified internet use disorder were consistent with our assumptions. The dose (four 90-minute sessions) was not high enough to achieve statistically significant effects on all comorbid symptoms, which were more generic and not directly addressed by the PROTECT intervention.

Prevention of gaming disorder or unspecified internet use disorder is especially relevant in the ongoing COVID-19 pandemic.^{29,36,37} The knowledge gained from this trial may be applied in follow-up studies using larger samples and focusing on high-risk participants to confirm a reduction in incidence rates. In addition, further investigation into the effectiveness of the PROTECT intervention in a routine setting is needed, in which educators instead of trained psychologists deliver the intervention.

Limitations

This study has several limitations. First, the proportion of eligible adolescents who participated in the study was only 1 of 5. This proportion might limit the generalizability of the findings; however, we did not find systematic differences in screening data between adolescents who agreed to participate and those who refused to participate. Moreover, this proportion is in line with previous research that demonstrated low help-seeking behavior and treatment motivation associated with gaming disorder and unspecified internet use disorder.^{34,35,70} Second, the number of incidence events was lower than expected, leading to an underpowered sample for the incidence analyses. Third, because of limited resources, we conducted diagnostic clinical interviews only at the 12-month follow-up to assess incidence rates, and we used questionnaire data to exclude cases that met 5 or more DSM-5 criteria at baseline. Fourth, we found differences in all outcome measures between schools, which were reflected in the disparities between the treatment conditions because of cluster randomization. These differences were controlled for in all statistical analyses. Yet these variations cannot be explained by differences in educational level⁶⁹ or by any other variable that we assessed, and the reason for the differences between schools remains open to speculation. We recommend the use of randomization within schools (individuals within schools as the unit) in future studies, although this approach might be logistically more challenging.

Conclusions

To our knowledge, this cluster randomized clinical trial is the first to investigate the long-term effects of a manualized prevention program (PROTECT). This intervention effectively reduced symptoms of gaming disorder or unspecified internet use disorder over 12 months, which is a clinically, scientifically, and politically important step in dealing with this newly recognized disorder. Knowledge gained from this trial could be used in follow-up studies with larger samples and high-risk participants to confirm the reduction in incidence rates. Further research is needed to investigate the effectiveness of the PROTECT intervention in a routine setting in which educators deliver the intervention.

ARTICLE INFORMATION

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Efficacy of cognitive behavioral treatment in adolescents video game users

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Summary

Video games are a problem that is becoming more frequent in adolescents, evidenced in poor school performance, behavior problems, social, family and academic isolation.

Objective: To analyze the efficacy of cognitive behavioral treatment in adolescent video game users in the tenth grade, afternoon shift of the Instituto Reino de Sweden Estelí, second semester 2019.

Methodology: The research approach is mixed with a quantitative predominance with a quasi-experimental design. It was carried out with tenth grade students from the Kingdom of Sweden institute selected through a stratified probabilistic sampling. The data was obtained through instruments such as free list, Likert scale addiction test

Results: There was a decrease in the use of video games, showing a change within the classroom, since the use of cell phones was observed less frequently, showing the results obtained in the statistical package made with the SSPS program, cross tables and chi square. . And Excel.

For the analysis of these data, items were made that were validated by performing a pilot test which, before applying it, was validated by a specialist in the psychological field.

Conclusions: Cognitive behavioral treatment was shown to be effective in working on the behavior of video game users, which can be applied in any setting, be it group, individual or family, said treatment helps to change automatic or erroneous thoughts, changing them or replacing them with other more adaptive.

Keywords: Cognitive Behavioral Treatment, Videogames, Addiction, Frequency of use, Adolescents.

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Introduction

The present investigation is referred to the topic of the Efficacy of cognitive behavioral treatment in adolescent video game users of tenth grade, evening shift of the institute of the Kingdom of Sweden, Esteli second semester 2019.

Games are defined as voluntary action or activity, carried out within certain limits of time and place in accordance with a freely consented rule, but absolutely imperative, provided with an end in itself, accompanied by a feeling of tension and joy and of the awareness of being otherwise than in real life these types of games may never be presented separately, but in certain amalgamations. (Maldonado, 2009).

The main characteristic of video games is the interaction between the player or players and the electronic device where the video game is executed, it can be individual or multiple, through the use of a video game console (A PC, Mobiles) or through the Internet (Games). online) (Available, and auto-advance or sideways, huge boss fights at the end of each mission), which, in most cases, take up more than half of the screen. (Maldonado, 2009).

The behavioral cognitive approach considers that behaviors are learned in various ways through one's own experience, the observation of other classical or operant processes, the language that all people develop throughout their lives are learnings that are incorporated into their biographies and that can be problematic, those that explain how the general behavior changes. For this, it is necessary to know what the problematic behavior is, in what situations it happens, with what frequency and intensity, after analyzing its consequent antecedents, biological conditions and social environments (Cognitive Behavioral Approach).

A study carried out at the University of Granada, Spain, by topic *Habits and uses of video games in visual communication: influence on special intelligence and school performance* This work was carried out in 2009 for which it was proposed as a general objective to investigate the attitudes of users, reaching the conclusions that minors are selective in their opinion and preference over video games, males are more, if they do not start from very young, the result that could be related to a clearly cultural influence, since it is adults and parents/guardians who mostly acquire it. (ML., 2009).

The following study conducted by UNAN Managua Nicaragua based on a *programming of the game between enemy lines first person type in three-dimensional environment, under the Windows platform in the period from March to November 2013*, The objective of this research is to develop between enemy lines first-person type in a three-dimensional environment, using the Unity 3D engine in Microsoft Windows, they raised habits of video game use and analyzed game patterns and identified significant relationships between parental control and performance. academic. The results indicate that parental control was effective and continuous in view of the results, which could confirm that moderate gaming is beneficial and abusive is harmful, at high levels of frequency and

intensity that are associated with poorer school performance. (Llores Irlles, Cabrera Perona, & Sanz Baños, 2013)

The purpose of this research is to analyze the efficacy of cognitive behavioral treatment in adolescent video game users in the tenth grade, evening shift of the Instituto Reino de Sweden Estelí, second semester 2019, since it is intended to address said treatment so that in this way they can reach the intervention giving a possible solution.

Among adolescents and young people, a pandemic has developed that consists of the excessive use of video games, these are very little used as an educational and informative medium. Active users are more interested in fashionable games such as war games, wrestling, soccer, among others, in which it is a problem that affects behavior and academic performance, since young people prefer to play video games than to carry out an activity uninteresting. They become disinterested in school activities, losing motivation and therefore causing difficulties in responsibility for classes, losing track of hours, investing money, affecting relationships with their family, physical and possibly psychological problems.

This study is of social belonging, since it starts from an observation of the community, with unique characteristics, it is a novel investigation working with adolescents, being one of the main characteristics of video game users. A cognitive behavioral approach treatment is provided benefiting tenth grade students of the Kingdom of Sweden institute in the city of Estelí, it is very important to provide treatment or psychological care to adolescents or children who also use video games. , although it has been seen that it is stronger in adolescents since they are constantly changing, due to their academic performance, their destructive behavior, their emotional state,

Material and method

Philosophical approach to research

The present investigation is of a mixed approach with a predominance of the quantitative approach, since in this concrete information was collected as figures, and qualitative instruments were used; These data are structured and statistical, they provide the necessary space to reach the conclusion since the scale that refers to studies that point to measurement, the use of statistical techniques and mathematical language in general was taken into account.

Kind of investigation

It is of a quasi-experimental type, Pretest and Posttest modality, useful for measuring social variables that are similar to quantitative, qualitative experiments, but in the random designation of the appropriate control groups to carry out a final evaluation to know the efficacy of the cognitive treatment. behavior in video game users

The quasi-experimental designs include the test to compare the equivalence between the groups, and that do not necessarily have two groups (the experimental and the control), they are known as quasi-experiments.

Due to its scope and level of depth, this research is exploratory in nature because it is a study of a problem that is not clearly defined.

Due to its temporal scope, it is cross-sectional because it was carried out in the period from September to December.

This research corresponds to the Mental Health line; because it was carried out in the area of Psychology, applying a psychological intervention treatment.

Population and sample

Being a quantitative study with a quasi-experimental type experimental design, Pretest and Posttest modality, we worked with a population of 264 tenth grade students for a sample of 40 students in total, from all sections of tenth A, B, C, D, E, F of both sexes, 37 men and 3 women between the ages of 14 and 19 years. It is a probabilistic stratified sampling where the entire population is divided into subgroups or strata, then the final subjects of the different subgroups are randomly selected proportionally. In order to obtain a representativeness in the conformation of the sample of each group of students, it was selected using random sampling stratified by proportional affixation, taking into account that the students are divided into strata.

To be part of the research, the study group had to meet the following criteria or characteristics:

- 10th grade high school students from the Kingdom of Sweden. Let
- them be both sexes.
- interest in participating.
- Consent signature. any
- age range

Data collection methods and techniques

For data collection, different qualitative and quantitative techniques were used, including: the free list, addition test and Likert scale, which are described below.

Likert-type scale: The Likert scale is a psychometric instrument where the respondent must indicate their agreement or disagreement about a statement, item or item, which is done through a one-dimensional ordered scale using response alternatives that are not linked to agreement or disagreement. , expressing an exposure in accordance with the attitude to be measured.

It is a measurement method used in social sciences and market studies, its origin due to the psychologist *Rensis Likert*. (AM., 2016).

Free listing technique: It is a method based on cognitive anthropology, its purpose is to generate a list of words that lead to recognize and define cultural domains relevant to a particular topic, it produces qualitative and quantifiable data, where a word, phrase or topic is presented that relates to the object of study. (AB., 2018). This instrument consists of two items aimed at knowing the perception that adolescents have about the behavior of video games.

Addiction video game addiction test: It is an instrument consisting of answering 10 questions with the answer option yes/no/ that served to measure the level of addiction in video game users to know the frequency with which they use them, to know if adolescents meet the criteria for the sample .

Data processing and analysis

The data obtained through the different techniques and instruments applied were analyzed and processed according to the formulated objectives, using Microsoft Excel and the SPSS statistical package. For the statistical analysis, the Chi square statistical test was used, which serves to see if there is statistical significance between the variables.

In the case of free listing, a graphic representation of the words associated with the term videogames and those that stand out the most in Microsoft Excel and a qualitative analysis of the adolescents' arguments was made. This method is a current and quite popular approach.

In the case of the video game addiction test, a graphic representation was made and a quantitative analysis was made through SPSS.

The Likert Scale consists of a series of items in the form of a statement that each point is assigned a numerical value.

The data obtained through the different techniques and instruments applied were analyzed and processed according to the formulated objectives, using Microsoft Excel and the SPSS statistical package. For the statistical analysis, the Chi square statistical test was used, which serves to see if there is statistical significance between the variables.

In the case of free listing, a graphic representation of the words associated with the term videogames and those that stand out the most in Microsoft Excel and a qualitative analysis of the adolescents' arguments was made. This method is a current and quite popular approach.

Ethical aspects

To carry out this study, the ethical principles were taken into account during the process:

- Participate voluntarily as a sample of the investigation.
- Protect the identity of the students who were treated and controlled following what was established in the investigation.
- Maintain the confidentiality of the evaluation data until the application of the treatment.
- That during the process the students could withdraw when they considered it.

research hypothesis

If a cognitive behavioral treatment is applied, it will be possible to reduce the excessive use of video games in adolescents of the Kingdom of Sweden Institute, Estelí second semester 2019

Results

Table 1. Sociodemographic data of adolescent video game users.

Characteristics / background	Values	
Age	Average 16 Minimum 14 maximum 19	
	Frequency N=50 Percentage %	
Sex:		
Men:	31	38.3
Women:	9	11.1
Total:	40	100
Origin:		
Urban area Rural area Total:	40	100.

The ages of the adolescents range between 14 and 19 years with an average age of 16 years. In terms of sex, the sample is made up mostly of males (38.3%); females are a percentage (11.1%). The members of the sample come only from the urban area, for which the frequency is from (40) to (100%).

Table 2. Attitudes and frequency of adolescent video game users

		Frequency	Percentage Valid
Have you played so-called video games?	Yes. No Total	40	100.0
Have they called attention to you in your home for having gone to play?	Yes No Total No answers Total	25 15 40	62.5 37.5 100.0
In a week, how many times on average are you going to play?	Yes No No answers Total	3 25 12 40	7.5 62.5 30.0 100.0

The data in this table respond to the second objective of the research, which refers to the attitudes of adolescent video game users.

This table evaluates whether adolescents use video games, resulting in 40% of adolescents using video games, which means that the total sample, also if adolescents had problems with their parents due to the use they make of video games. video games marking that 25% of frequency, how much they played on average, so we would know if they met the addictive characteristics to proceed with the application of the treatment

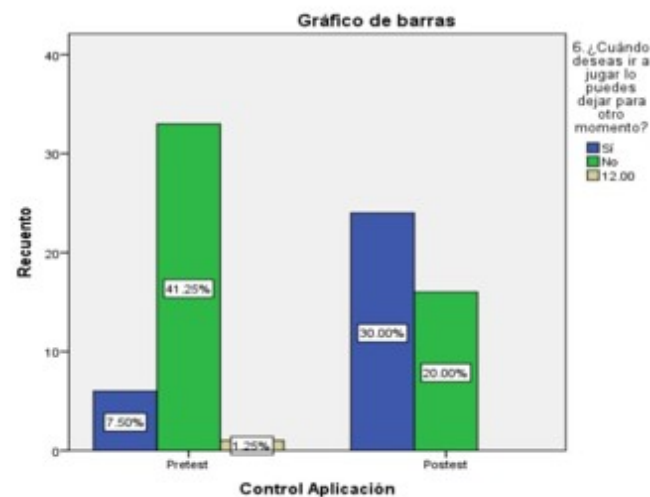
The attitudes of adolescents regarding video games where a video game addiction test was applied in this way to obtain the initial evaluation result with the question Have you played the so-called video games? where the table shows that adolescents had a frequency of (40) for a (100.0%) who answered that they played video games.

With the following question, have they called attention to you in your home for having gone to play? a frequency of (25) is shown for a valid percentage of (62.5) adolescents who answered Yes, a frequency of 15 for a valid percentage of (37.5) who answered No.

The data in the table with the question In a week, how many times on average are you going to play? show that there is a frequency of (3) for a (7.5) valid percentage in which adolescents answer that (1 to 3 times) on average they go to play in a week, a frequency of (25) for a (62.5 %) answer that (5 or more times) on average they are going to play, a frequency of (12) for (30.0%) of adolescents do not answer. This affectation indicates that adolescents play (5 or more times) on average in a week than (1 to 3

times). This result gives rise to the specific objective Frequency with which adolescents use video games.

Illustration 1. Relationship between the Pretest and Posttest of the application in adolescent video game users.

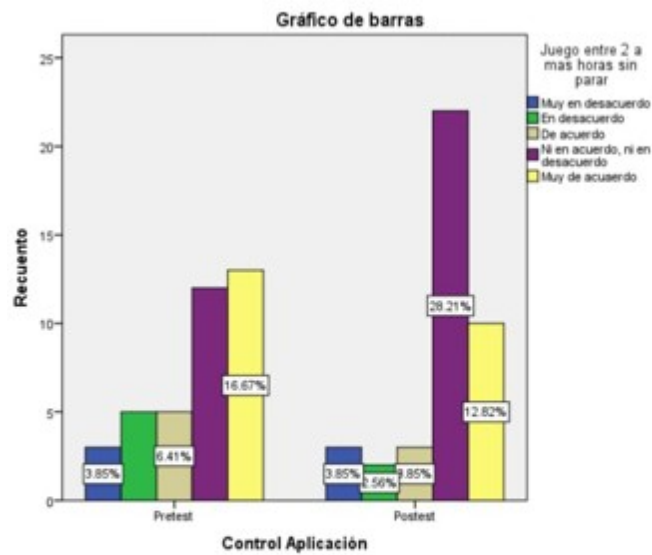


Before carrying out the intervention, a Pretest of the video game addiction test was carried out in order to know the attitude of adolescents towards video games as well as the frequency with which they use them.

Subsequently, the test was applied again to compare the results obtained and observe a resignation.

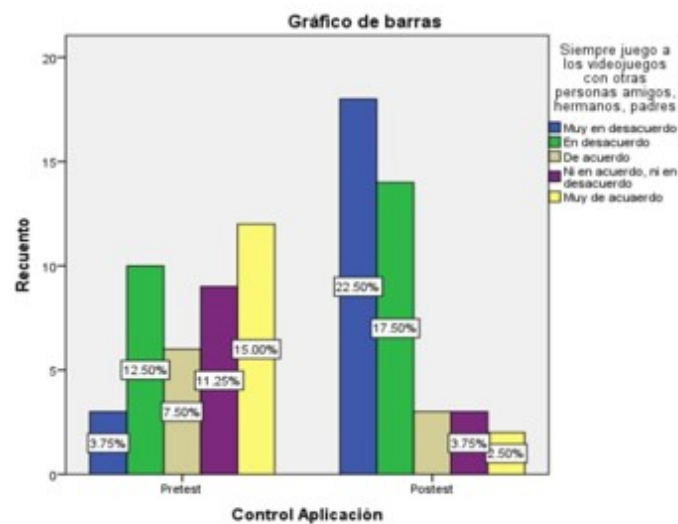
In the Pretest, (7.50%) answered Yes when they want to play, they can leave it for another time, and (41.25%) said No, as for the Posttest, (30.00%) said that if they could leave it for another time, and (20.00%) said that they could not.

Figure 2. Evaluation of frequent use of video games Likert Scale



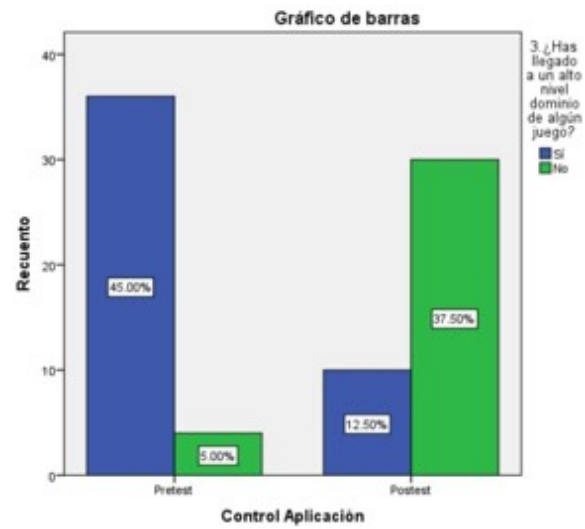
In the Pretest with the item the Game between 2 or more hours without stopping, (3.85%) strongly disagree, (6.41%) agree, (16.67%) strongly agree. Regarding the Posttest, (3.85%) strongly disagree, (2.56%) disagree, (9.85%) agree, (28.21%) neither agree nor disagree, and 12.82 strongly in agreement.

Illustration 3. Behavior regarding the use of video games



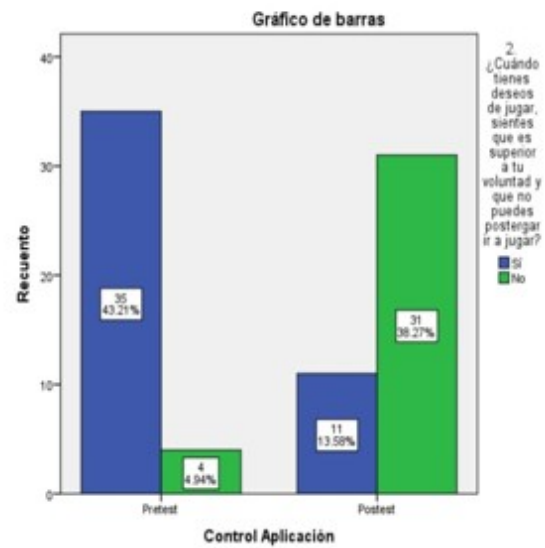
In the Pretest, (3.75%) answered Strongly disagree that they always play video games with other people, friends, siblings, parents, (12.50%) Disagree, (7.50%) Agree, (11.25%) Neither agree nor disagree, and strongly agree (15.00%). In the Posttest, (22.50%) Strongly disagree, (17.50%) Disagree, (3.75%) Neither agree nor disagree, (2.50%) Strongly agree.

Illustration 4. Video game proficiency level, addiction test.



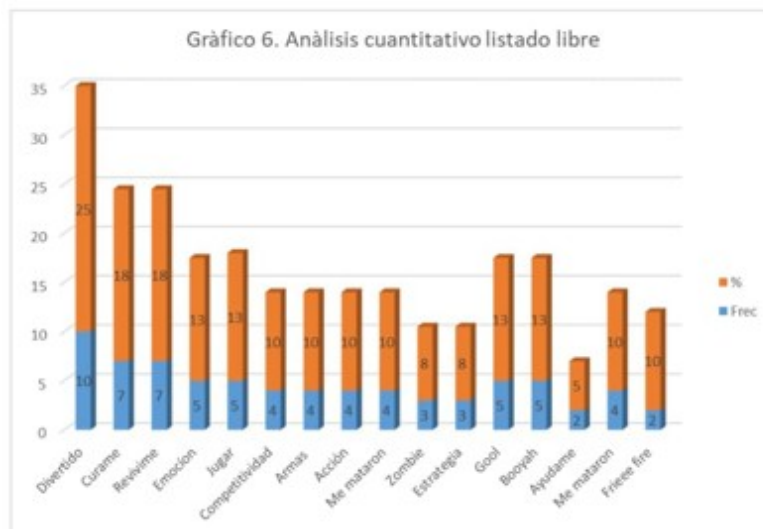
In the Pretest, (45.00%) answered that Yes they have reached a high level of mastery of some game, and (5.00%) answered that No, as for the Posttest, (12.50%) answered that they have not reached a high level and (37.50%) answered yes.

Illustration 5. Video game use control



In the Pretest, (43.21%) answered Yes, when they want to go play, they feel that it is superior and that they cannot postpone going to play, and (4.94%) answered No, in the Posttest, (13.58%) answered that Yes, and (38.27%) answered No.

Illustration 6. Quantitative analysis of free skipjack



The data in this graph indicates that adolescents associate the word video games with fun (25%), heal me, revive me (18%), emotion, play (13%), competitiveness, weapons, action, they killed me (10%), Zombie , strategy (8%), Goal, Booyah (13%), help me (5%) free fire (10%).

Table 3. Arguments of adolescents and young people associated with video games.

Fun: because it entertains us and in this way we feel satisfaction and adrenaline, by playing my video games when I play online I have a lot of fun talking to them and enjoying the game, spend a few hours of adrenaline and what matters most in the end is having fun, I feel happy and I have fun. Playing distracts me a bit and I like some games to show that I'm good and they are games that I like.
Heal me: because it is used frequently in the game it is used when there are many wounded in the character and not to die, they heal when they do things almost impossible to do heal me because I need to heal myself.
Revive me: because I listen to it when I play we feel like dying and not continuing to blurt it out, when they kill me in a video game I tell them to revive me and I get stressed when they knock me down and I don't have any friends nearby I tell them to revive me.
Emotion: the excitement of playing a video game and also knowing that a new video game will come out makes me excited, I feel that this way my mind feels better, so do I, because it is something that I will not leave behind, when I won the game I was very excited because it is an achievement. some games arouse a sense of excitement for some achievement or goal achieved in the game.

<i>play: I like to play as much as possible the skill of a game is required to be able to get rid of everything are games that I like I feel better when I play it distracts me a little playing.</i>
<i>Competitiveness: nowadays terms of some games are created and prizes of up to 1,000,000 dollars are awarded, it is a good way to test people's skills, when I play in a team we always compete to obtain the highest prize. The desire to overcome and be better help in the fun of oneself.</i>
<i>Weapons: Weapons are the things that stand out in video games, they are fun and impressive, the shots are interesting, full of emotion and suspense, I learn from the name of weapons.</i>
<i>Action: It is the main thing that draws the attention of a video game action of playing in a video game are the phrases that come to mind depending on the video game</i>
<i>They killed me: because it is frequently used because I was killed in the game when I get knocked down is what I use the most and I get angry I ask for help because they killed me when I play war games and they can not revive.</i>
<i>Zombie: The games where you have to kill. To survive and thus move on to the next one, this game is very interesting since you pass the level and at the same time you have to save Angela's life.</i>
<i>Fun: because it entertains us and in this way we feel satisfaction and adrenaline, by playing my video games when I play online I have a lot of fun talking to them and enjoying the game, spend a few hours of adrenaline and what matters most in the end is having fun, I feel happy and I have fun. Playing distracts me a bit and I like some games to show that I'm good and they are games that I like.</i>
<i>Heal me: because it is used frequently in the game it is used when there are many wounded in the character and not to die, they heal when they do things almost impossible to do heal me because I need to heal myself.</i>
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<i>They killed me: because it is often used because they killed me in the game when I knock down is what I use the most and I get angry and ask for help because they killed me when I play games of</i>

war and cannot revive.

Zombie: The games where you have to kill. To survive and thus move on to the next one, this game is very interesting since you pass the level and at the same time you have to save Angela's life.

Discussion and Conclusions

The results agree with the findings of the study of the theoretical foundations about addictive behavior to the use of video games of psychological intervention: which was to analyze the effectiveness of psychological intervention with the objective of the study to present a proposal for cognitive behavioral treatment for addiction. internet and video game addiction through the analysis of cases with the following results, it can be observed that from the first treatment session there was a decrease in frequency and trend duration that was maintained until follow-up.

The results show a significant reduction in the time spent playing games and on the Internet, as well as in the degree of loss of control. There is also a decrease in subjective discomfort and an improvement in personal functioning (Chóliz, 2013).

According to the results obtained from the different instruments applied, it can be said that adolescents through the video game addiction test with the questions Have you reached a high level of mastery of a video game? When you have deaths from playing do you feel that it is superior to your will and that you cannot postpone going to play? The response options Yes with (45.00%) and (43.21%) indicating that adolescents had a high frequency of use and addiction to video games.

The Likert-type scale with the items I play between 2 or more hours non-stop and I always play video games with other people, friends, siblings, parents are in very much agreement, neither agree nor disagree response options.

Through the free list, the attitude of adolescents was known, and the frequent use of video games, showing that they have a broad command and knowledge of video games, adopting attitudes regarding the type of game they use the most; such as aggressiveness, challenging behaviors, what is most observed is poor academic performance due to the time spent playing video games, among others.

Teenagers make frequent use three or more times a week playing several hours a day, neglecting other activities, giving priority to video games, losing communication with friends, parents and others. This reflects the state in which the participants were, it was quite worrying since they did not receive classes or interact with their peers, excluding themselves from any group, only through online games.

Based on the objectives set in the study, the following could be identified and corroborated:

war and cannot revive.

Zombie: The games where you have to kill. To survive and thus move on to the next one, this game is very interesting since you pass the level and at the same time you have to save Angela's life.

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Based on the objectives set in the study, the following could be identified and corroborated:

Regarding the sociodemographic characteristics, it was known that the sample is constituted mainly by the male sex with a number of 37 adolescents from the urban area, with a percentage of 3 women participating, who were the ones who wanted to be part of the sample and who use video games, but it does not mean that there are fewer women who use them, these behaviors predominate between the ages of 16 and 17.

It was found that adolescents had a high level of mastery of the game, it was also observed that adolescents make frequent use of three or more times a week playing several hours a day, neglecting other activities, giving priority to video games, losing the communication with friends, parents and others.

This reflects the state in which the participants were, it was quite worrying since they did not receive classes or interact with their peers, excluding themselves from any group, only through online games.

It was observed that there was a change that was verified through the different instruments applied, taking into account that not all the sessions considered could be carried out and the intervention time was short, so a complete improvement was not achieved.

Finally, recommendations are made aimed at:

Students:

- Make a video game schedule, so that according to the hours they play, they can reduce this behavior
- That they prioritize other activities such as interest in classes or practicing or learning a trade in their free time, or practicing a sport.

Teachers:

- Establish rules within the classroom that have to be respected That they can teach the class in a dynamic way.

Fathers:

- Assign household chores for children to do Share
- family time with children in mind
- Be authoritarian, and be able to control, setting rules for your children regarding the time they spend playing video games.

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We thank God because without him this would not have been possible, for giving us wisdom and being able to complete this stage of our lives, for guiding us and giving us strength and persuasion always.

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LEMBAR KONSULTASI PEMBIMBINGAN PROPOSAL DAN SKRIPSI
 PROGRAM STUDI ILMU KEPERAWATAN
 UNIVERSITAS dr.SOE BANDI

Judul Skripsi

: E F E K T I V I T A S C O G N I T I V E B E H A V I O U R T H E R A P Y (C B T) T E R H A D A P K E C A M P U A N
 G A M E O N L I N E P A D A R E M A J A (L i t e r a t u r e R e v i e w) .

Nama Mahasiswa : Dzalu Ananda Edytia

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Pembimbing I				Pembimbing II			
No.	Tanggal	Materi yang dikonsultasikan dan masukan pembimbing	TTD DPU	No.	Tanggal	Materi yang dikonsultasikan dan masukan pembimbing	TTD DPA
1	7/11/2021	- ACC Judul		1	22/11/2021	- Ace. Judul - Review Sub 1. - Baca ulang paragraf.	
2	7/12/2021	- Revisi Bab 1 - Lanjut Bab 2		2	25/11/2021	lanjut sub 2	
3	7/1/2022	- Revisi Bab 2 - Perbaikan kerangka teori		3	10/2/2021	Perbaiki kerangka teori lanjut sub. 3.	



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4	2/1/2022	- Perbaikan kerangka teori - Perbaikan Bab 5.	kt	4	29/12/2021	Uji tuntas y penalaran kritis 4. pelanan presentasi.	Dr. Fy
5	20/1/2022	- Revisi kerangka teori - lampiran	kt	5	11/1/2022	Tugas akhir Ys dan Simulasi lampiran.	Dr. Fy
6	22/1/2022	- Perbaikan diagram flow dan Pegembangan materi Subbab 2	kt	6	24/2/2022	Acc kipro.	Dr. Fy
7	27/1/2022	- ACC kerangka teori dan bab 3.	kt	7			
8	28/1/2022	- Acc Sim Pro.	kt	8			



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9	22/02/2022	- Ringkas karakteristik CBT - Perbaiki Bab 4	Stik	9	21/02/2022	- Revisi bab 4 - Perbaiki tabel - tambahkan di bagian hasil	
10	30/02/2022	- Perbaiki tabel - Perbaiki dan Perbaiki dalam Sistem dan Sistem	Stik	10	29/02/2022	- Perbaiki Pembahasan - Perbaiki kesimpulan	
11	3/03/2022	- Perbaiki Pembahasan - Persingkat kesimpulan - Perbaiki Abstract	Stik	11	4/03/2022	Partisipasi di pendulum. Kasus & opini. Tambah uraian penelitian selanjutnya.	
12	14/03/2022	- Acc Semesta	Stik	12	3/03/2022	Acc. kasus.	

Lampiran 3 Rencana Penyusunan Skripsi

Rencana Penyusunan Skripsi

[illegible]

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B. RIWAYAT PENDIDIKAN

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- 2 SMP NEGERI 1 UMBULSARI
- 3 SMA NEGERI 2 TANGGUL
- 4 S1 ILMUKEPERAWATAN UNIVERSITAS dr. SOEBANDI JEMBER