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Case Report

Internet Gaming Disorder (IGD) in Children: Clinical Treatment Insights

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Abstract

Introduction: The objective of this case series study was to provide an in-depth account of the profile, associated risk factors and impacts on development of Internet Gaming Disorder (IGD) and Gaming Disorder (GD) in cases aged between 11-13 years old, representing the youngest cohort to date in the IGD and GD case study literature. A further aim was to evaluate a multi-modal parent/child treatment approach. **Methods:** Case files from six children at the Screens & Gaming Disorder Clinic (Sydney) were analysed for evidence of a range of factors including: amount of daily screen use, risk factors for developing IGD and GD, impact on development, symptoms relevant to IGD and GD diagnostic criteria and treatment outcomes. This paper provides summary data from all cases and a detailed account of two cases. **Results:** Risk factors for developing IGD and GD were prominent, with both cases displaying evidence of at least four risk factors. The younger case (aged 11 years) displayed less impact on development than the 13-year-old case. The study found evidence that the multi-modal parent/child treatment approach used facilitated positive outcomes and reduced negative impacts on development and functioning. **Conclusions:** The multi-model parent/child treatment approach used may be an effective means to address risk factors and increase protective factors in the development of IGD/GD, forming a "circuit breaker" for developmental impacts and functioning and reducing symptoms of IGD in children. Future randomized controlled trials are needed in early intervention strategies for problematic screen use and IGD and should focus on primary school aged children before the pivotal transition to high school where developmental impacts can compound in a more chronic or comorbid course.

Keywords: Adolescents; Children; Youth; Gaming Disorder; Internet Gaming Disorder; Parenting; Problematic screen use; Screen time

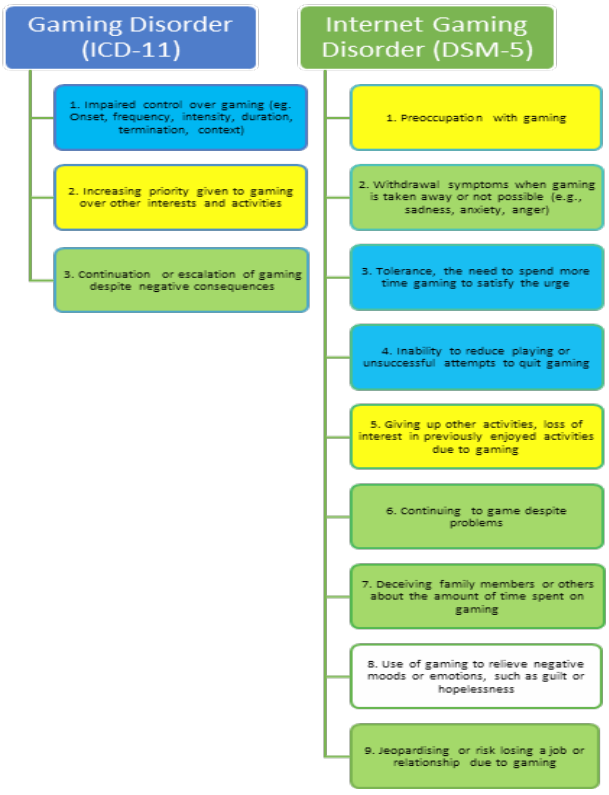
Introduction

Children and young people around the world have access to improved technology by way of advancing devices and internet connection availability, and recent years have seen a steady increase in the recreational use of screens by children and teenagers. For example, a 2017 study found that Australian teenagers aged 13-17 years used screens recreationally an average of 6:09 hours per day, with their primary school counterparts aged 6-12 years not far behind at 4:24 hours [1]. Northern American youth averaged even more: 7:22 hours per day for adolescents and 4:44 hours for primary aged children [2]. These averages exceed any recommendations for moderate screen use [3] and a growing number of children and adolescents have been identified as having levels of screen use that might be considered "disordered" [4,5].

The first screen disorder suggested as a potential psychiatric disorder was Internet Gaming Disorder (IGD), which was included as a disorder requiring further study in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders [6]. In 2017 the World Health Organisation included Gaming Disorder (GD) and Hazardous Gaming (HG: a sub-clinical category for problematic but not pathological levels of video game use), in their draft 11th revision of the International Classification of Diseases (ICD-11) [7]. Both were formalised as disorders in 2019. Consequently, literature about the research and treatment of IGD and GD is fairly recent, and although some case studies do exist [8-12] they are few in number, tend to provide little detailed information about each

case and typically use the cases of older teenagers 14 to 19 years old [8,10,13]. The objective of the current case series study is to evaluate the symptom profile, assessment process, treatment and outcomes for a case series of young adolescents aged 11-13 years who had presented to a treatment clinic seeking help for IGD/GD.

Diagnosis of IGD requires five or more of nine criteria over a 12-month period (6; see Figure 1). GD criteria (7) have some overlap but centre around three areas of dysfunction (see Figure 1). Diagnosis requires continuous symptom presentation in the three areas for at least 12 months at a severity level that results in significant impairment in personal, family, social, educational, occupational or other important areas of functioning, as well as significant associated distress [7]. Prevalence rates for both disorders are hard to determine, as studies use a range of differing measures for IGD, GD or problematic levels of video game use, but are typically between 1-10% in Western Countries [14]. Studies that follow a similar definition and criteria outlined in the DSM-5 for IGD typically find a child and adolescent prevalence rate between 1-5% [11,15,16]. To date, studies on Australian child and adolescent populations have documented an IGD prevalence rate around 3% [17,18].



Note: Gaming Disorder (GD) symptoms are colour coded, with related Internet Gaming Disorder (IGD) symptoms coded the same colour..

Figure 1: Comparative diagnostic criteria for IGD and GD.

A number of studies have assessed the efficacy of different IGD/GD treatment modalities for children and adolescents, although a recent systematic review of such studies concluded that out of 22 studies reviewed, not one treatment program had been "studied with enough rigor to establish efficacy" [19]. The most common two treatment approaches are Cognitive Behavioural Therapy (CBT) [20-23] and pharmacological (medication) interventions using buproprion, atomoxetine, methyl phenidate, escitalopram or a combination of these medications [24-30], with a combination of both pharmaceutical and psychological therapies sometimes being used [31]. Whilst many clinicians and researchers support the idea of family and parent treatment interventions for children [32,33], there is minimal empirical research about parenting strategies for the treatment of youth with GD or IGD, and existing research has either focused on changes to parenting style or screen time reductions rather than clinical and developmental outcomes for the child [34-36]. The current study, through a series of case analyses, examines the efficacy of an IGD/GD treatment program with a strong family/parent focus in terms of a range of child clinical and developmental outcomes for early adolescents.

Clinical Approach

On the basis of cumulative evidence in this field [4,17,20,32,33,37-40], the treatment approach used by the therapist in the current case studies encompasses three core elements: working with parents and families, individual therapy using CBT and motivational interviewing techniques, and focusing on IGD/GD risk factors (e.g., social isolation, difficulties with self-control, impulsivity, family conflict, lack of warmth in family environment, low self-esteem and bullying [17]) and developmental domains (social, educational, behavioural and general health). Treatment is tailored to each child's symptoms and functioning, and relies on one parent at a minimum being willing to attend appointments and implement strategies at home. Treatment sessions are not applied in a strict order, but encompass the following components:

1. Assessment
2. Rapport Building (usually centres around the child's chosen online game or activities)
3. Parent Education: the psychological underpinnings and strategies used by gaming and screen products to make their product more appealing and how this impacts the developing child/teenager's brain.
4. Child/Teenager Education: comparable rationale to the parent education component.
5. Motivational Interviewing: focusing on what the child/teen would like to change in regards to their screen use (e.g., conflict with family, school functioning etc.).

6. Child/Teenager Individual Therapy (dependent on any other co-morbid psychological symptoms at time of assessment/ treatment plan (e.g., Depression, Anxiety, ADHD, Autism Spectrum Disorder etc.).
7. Child/Teenager Motivational Interviewing and Individual Therapy (dependent on any other co-morbid psychological symptoms at time of assessment/treatment plan: e.g, Depression, Anxiety, ADHD, Autism Spectrum Disorder etc).
8. Identifying and managing risks and developmental impacts.

All assessments and interventions for the cases in this study were conducted by the same male Psychologist with over 10 years of experience in working in the IGD/GD field with youth.

The cases

Potential case studies where case notes would be analysed were identified by a systematic review of all files in the Screens & Gaming Disorder Clinic under the care of a Registered Psychologist between 2014-2020. Cases were included where the referring practitioner had identified internet, gaming or screens as a major concern for the mental health of a young adolescent. However, cases were excluded where an approach to participate might cause distress to parent or child, where provision of informed consent may be difficult due to likely ongoing mental illness, or where the child was actively seeking treatment or had ceased within the last three months. In total, 55 invitations to participate in this study were sent to parents, and of the 11 who agreed to participate, six were chosen as meeting all inclusion criteria. The characteristics of the six cases are summarised in Table 1. Two cases were chosen for a detailed analysis – one case where the child was 11 years, and to date, the youngest case study of its type, and the second, a 13 year old adolescent was selected for comparison because of his significant symptom profile and extensive (30 sessions) treatment period. Table 1 provides demographics, IGD/GD risk factors, developmental impacts, diagnostic criteria and treatment data for all cases. The table also includes a summary of the number of risk factors, developmental impacts and IGD symptoms for each case. The names provided for the in-depth case studies are pseudonyms.

	Client 1	Client 2	Client 3	Client 4	Client 5	Client 6
				"Ryan"	"Adam"	
DEMOGRAPHICS AND BACKGROUND						
Age	13	12	13	11	13	13
Primary Game or Platform	Minecraft, Rust, and Youtube	Smart Phone and Tablet: Social media and Clash Royal	PC: Fortnite	PC and Smart Phone: Fortnite and Youtube	PC: Counter Strike Global Offensive	Roblox and Fortnite
		PS4: Call of Duty and Destiny	Smart Phone: Youtube gameplay	Streaming TV and Creative Destruction		
Estimate Daily Recreational Screen Use (weekdays)	4 to 6 hours	3 to 5 hours	10 to 12 hours	2 to 4 hours	6 to 8 hours	2 to 3 hours
Estimate Daily Recreational Screen Use (weekend or holidays)	6 to 10 hours	5 to 6 hours	12 hours	6 to 8 hours	8 to 12 hours	4 to 6 hours
Diagnosed Comorbid Disorders	Nil	Nil	ADHD, ODD, Grief, Learning Disorder	ADHD, ODD, Sub-Clinical Anxiety	Nil	ODD, Anxiety
Number of sessions	6	4	6	7	30	19
Previous Health/Medical treatment	Nil	Functional Neuroscience, Diet, Sound Therapy	Intensive Child Mental Health Service and Child Psychiatrist	Child Psychiatrist	Nil	Child Psychiatrist and Psychologist

RISK FACTORS						
Social Isolation	Yes	No	Yes	No	Yes	Yes
Self Control Difficulties	No	Yes	No	Yes	Yes	Yes
Impulsivity	Yes	Yes	Yes	Yes	Yes	Yes
Family Conflict	No	Yes	Yes	Yes	Yes	Yes
Lack of Warmth in Family Environment	Yes	No	Yes	No	No	Yes
Victim of Bullying	Yes	Yes	Yes	No	Yes	Yes
Low Self-Esteem	No	No	No	Yes	Yes	Yes
IMPACT ON DEVELOPMENT						
Impact on Social Activities/ Development	Yes	No	Yes	No	Yes	Yes
Impact on Hygiene	No	No	No	No	No	No
Impact on Sleep Hygiene	Yes	Yes	Yes	Yes	Yes	Yes
Impact on Exercise/Sport	Yes	No	Yes	Yes	Yes	Yes
Impact on Physical Health	No	No	Yes	No	Yes	No
Physical Aggression	Yes	No	Yes	Yes	Yes	Yes
AVO (Restraining order)	No	No	Yes	No	Yes	Yes
Verbal Aggression	Yes	Yes	Yes	Yes	Yes	Yes
Property Destruction	No	Yes	Yes	Yes	Yes	Yes
Oppositional and Non Compliant	No	Yes	Yes	Yes	Yes	Yes
Impact on School Attendance	No	No	Yes	No	Yes	Yes
Impact on completing Homework	Yes	Yes	Yes	No	Yes	Yes
Impact on completing School Assessments	Yes	No	Yes	No	Yes	Yes
EVIDENCE OF DIAGNOSTIC CRITERIA						
Preoccupation	Yes	No	Yes	Yes	Yes	Yes
Withdrawal	Yes	Yes	Yes	Yes	Yes	Yes
Tolerance	Yes	No	No	Yes	Yes	Yes
Inability to Reduce or Quit	Yes	No	Yes	No	Yes	Yes

Loss of Interest in Other Activities	No	No	Yes	Yes	Yes	Yes
Deception	Yes	Yes	Yes	Yes	Yes	Yes
Escape Negative Moods or Emotions	Yes	No	Yes	No	No	No
Jeopardizing or Risk Losing a Significant Relationship or Life, Education or Job Opportunity	No	No	Yes	No	Yes	No
Continued Use Despite Problems	Yes	No	Yes	Yes	Yes	Yes
Meets Criteria for IGD (number of symptoms)	Yes (7)	No (2)	Yes (8)	Yes (6)	Yes (8)	Yes (6)
Meets Criteria for GD	Yes	No	Yes	No	Yes	Yes
Meets Criteria for Hazardous Gaming	NA	Yes	NA	Yes	NA	NA
TREATMENT						
(NB: Any given appointment may contain multiple treatment modes within that session)						
Number of Sessions Containing Parent Education and Management Strategies	4	3	6	5	18	12
Number of Sessions Containing Child Psychoeducation on Healthy Gaming	2	1	1	2	4	2
Number of Sessions Containing Parent/Child Therapy	6	3	5	5	16	12
Type of Therapy Used During Individual Sessions	Motivational	Motivational Interviewing (1)	Motivational Interviewing (5)	Motivational Interviewing (2)	Motivational	Motivational
	Interviewing (4)				Interviewing (12)	Interviewing (3)
	Interpersonal Therapy (2)				Interpersonal Therapy (7)	Cognitive Behaviour Therapy (8)
					Cognitive Behaviour Therapy (5)	
Symptoms and/or Functional Improvement on Discharge	Yes	Yes	Yes	Yes	Yes	Yes

SUMMARY DATA						
Total number of risk factors (/7)	4	4	5	4	6	7
Total number of developmental impacts (/11)	7	5	11	6	11	10
Total number of IGD symptoms (/9)	7	2	8	6	8	6

Table 1: Summary of key factors by case.

Case Report 1

Ryan (Client 4) was 11 years old at the time of first presentation. He was referred by his family doctor (General Practitioner) and his treating Child Psychiatrist, who reported a history of ADHD, Oppositional Behaviour and Sub-Clinical Anxiety. The primary reason for referral was concerns around him being "*addicted to the internet to the point of self-harm when things don't go his way*", with using the internet for gaming the key presenting issue. Ryan's parents identified the same primary concern. Ryan had damaged several walls in the house and could become physically aggressive when his parents tried to set limits around his gaming or screen use. Ryan reported that his parents were being unfair and "*none of my friends get limits on gaming*" and was aggrieved. He was under the care of a Child Psychiatrist at the time of assessment, and while stimulant medication was improving his behaviour and impulsivity at school it would typically wear off by the time he returned home. Ryan had no other significant medical history. Ryan attended the first appointment accompanied by his mother. He presented as a delightful boy who was engaged and keen to chat about his interest in sports as well as his primary game of choice, Fortnite. He was observed to be oppositional and argumentative at times, usually triggered by any perceived criticism from his mother around her observations of his past behaviour. While the family reported there are "*no screens during the week*", they did detail how most nights he would steal or sneak a device for several hours. On some occasions the parents attempted to enforce the rule although at other times, they described not wanting to deal with the "fall out". On weekends the family reported 2 to 3 hours of gaming per day, but on further assessment they believed it to be more accurately 6 to 8 hours of total recreational screen time on a weekend or school holiday. Ryan reported some difficulty falling asleep and was taking melatonin to aid his sleep cycle. His mother reported long standing verbal aggression (swearing, yelling, etc) towards all family members which could be especially significant when implementing boundaries with screens. She also described Ryan as increasing in physical aggression and property destruction over the last 6 to 12 months in response to screen-based boundaries. Ryan reported some anxiety-based symptoms (e.g., being scared of the dark) but this was assessed as being sub-clinical in nature as it was not significantly impacting his functioning. Ryan and his parents attended seven (50-min) treatment sessions at the clinic. Given his younger age, all treatment sessions consisted of some elements of individual motivational interviewing and improving emotional expression, along with parent/child therapy to improve communication and parent only education and behavioural management strategies. While an initial plan around screen management was established, this did require several reviews and changes during the parent/child sessions. In session two, Ryan was observed as gaming on his smartphone in the waiting room. When asked what he was playing he proudly explained that, to circumvent the limited data he had been restricted to, he had started playing Creative Destruction as it offered a low-resolution alternative which used less mobile data. During the third session it was reported that Ryan had stolen his grandmother's credit card to purchase items within Fortnite. He presented as teary and remorseful and agreed to family chores around the house to pay off his debt. Session four outlined further use of the credit card (in which he admitted keeping a photo of the card) and a further $500 AUD spent on gaming items. Despite the emotionally charged events, Ryan's parents were able to stay reasonably calm and follow through on the agreed consequence (48 hours off all internet). At least one of Ryan's parents were in attendance for all sessions, and had active participation (parent education and/or parent/child therapy) in five out of seven sessions. There were improvements in both symptomology and function at discharge.

Case Report 2

Adam (Client 5) was 13 years old at the time of first assessment. He was referred by his family doctor (General Practitioner) who reported "Family issues, sleep disorder and internet gambling" as the primary areas of concern. Adam lived at home with his parents (who are both white collar professionals with successful careers) and his older brother. Adam had no history of medical or mental health intervention but was taken to

the local hospital Emergency Department one week prior, due to an argument about limiting screens that resulted in him "*taking a knife and running away*" with vague threats of self-harm. Adam's parents described an increase in concern around his behaviour and screen use for many years. However, the primary presenting concern that prompted their referral was his decreasing academic performance and in the previous week threatening self-harm in the context of setting boundaries. In response, Adam denied any thoughts of self-harm and described them as a strategy to get his parents to "back off" so he could game. Adam had no previous psychiatric or medical diagnosis at the time of assessment. He was referred by his Family Doctor but had received no historical treatment or intervention. Adam and his parents attended the initial assessment. He was observed as being pleasant and an intelligent young man eager to discuss his interest in his chosen game, Counter Strike Global Offensive (CSGO). He was a diligent student who routinely achieved very high marks, but in the last 12 months his grades had deteriorated. He was evasive around his accurate daily recreational screen use, but he and his parents eventually agreed it was around 6-8 hours per weekday and more on the weekends. He was insightful that he struggled to manage his emotions and behaviour at times, and disclosed gambling within CSGO and losing approximately $3,000 AUD. He had also taken on a role of consulting with other teenagers on how to gamble online for a percentage of their winnings. He described having a good group of friends at school but did report some verbal bullying in the past. His parents reported significant family stress in the proceeding years including the father's cancer treatment and ongoing health and financial concerns. The parents also identified he was waking up in the middle of the night over the last year in an attempt to hide his gaming, gambling and emotional eating. Adam and his parents attended a total of thirty sessions (50-min each) over approximately two years. Sessions were scheduled to be fortnightly but at times were more or less frequent dependent on holidays and other family commitments. Nineteen of these were individual and parent/child sessions, while the remaining eleven sessions solely involved the parents. Adam displayed insight and interest when engaged in motivational interviewing and psychoeducation around gaming, screens and gambling within games. However, he ultimately struggled to self-monitor or follow through with various boundaries and plans negotiated in session with his parents. The parent sessions focused on psychoeducation and specific strategies to manage screen time at home. While the parents showed some ambivalence and were overwhelmed at times, they did follow through with most agreed strategies only to be undermined by Adam's superior technological knowledge in circumventing most of the advertised parental controls. Adam was school avoidant throughout a two-year period largely due to incomplete work and assessment and averaged 30-40% attendance. Therefore, the behavioural parent strategies focused on rewarding school attendance. Adam refused to attend for almost 12 months during the two-year treatment period, in which time parent only sessions continued. Adam later initiated a further three sessions after being charged with assault which resulted in an Apprehended Violence Order (AVO) following an altercation with his mother related to screens and boundaries. At least one of Adam's parents were in attendance for 22 of the 30 total sessions and had active participation (parent education and/or parent/child therapy) in 18 sessions. The final three sessions for Adam primarily involved MI and goal setting around what he wanted to change in his family, life and school. At discharge Adam demonstrated improved insight around the impact his behaviour was having on his parents and his brother's education, was more motivated to change, was attending school four days a week, and was engaged with the social group at a part-time job.

Discussion

The six cases examined provided substantive information on the background, presenting problems, symptoms, assessment, and treatment of the children involved, allowing analysis of likely risk factors and developmental impacts for IGD/GD. Importantly, data were available from younger participants, such data being rare or non-existent in the IGD case study literature. To the authors' knowledge these case studies are the youngest cohort reported in the published IGD case study literature to date. While previous research points to the adolescent years being the most common age for IGD [16], this case series data indicates that primary school aged children can also be at substantial risk. The fact that substantial pathology was found in children of this age supports the notion that early intervention strategies for IGD need to also target this younger age bracket and not wait until a child progresses to high school, where chronic symptoms may require longer and more intensive treatment. Of most interest was the finding that the two younger children of the sample (aged 11 and 12 years) displayed less developmental impacts than their 13-year-old counterparts. One possible explanation for this is a phenomenon that could be termed the "Domino Effect". Once a child or adolescent presents with several net risk factors for a screen disorder [17], there are impacts on their development which may then have a compounding effect on other functional developmental domains. For example, if a child experiences family conflict and then uses screen time and/or gaming as a means of escape, they may then be prone to poor sleep hygiene, which in turn may negatively impact school attendance, behaviour, participation in off-screen activities, social relationships and so on. In addition, if screen use impacts the structure and function of the frontal lobes, this may further impact the child's ability to control behaviour, manage emotions and find rational solutions to their problems [4]. Thus, the greater symptomology and impact in older children may reflect compounding and cascading risk factors across time.

Parent/Child Model of treatment in IGD/GD

The multi-modal treatment approach employed in this study does appear to have had a modest impact in several areas, including: improved family communications and relationships, reduced behavioural outbursts (anger and impulsivity), improved school attendance, social and peer connections and sleep hygiene. However, it is difficult to determine which specific aspects of treatment were responsible for these gains due to a lack of detail or validated measures in the case notes. The current treatment approach employed "parent education strategies" in assisting parents to more effectively implement screen time boundaries at home through technological solutions, and an integrational mix of CBT, MI and interpersonal therapy. Analysis of the data gave no clear indications of which strategies had led to which outcomes, and it is clear that future RCTs with clearly delineated program elements are needed to tease this out.

Recommendations to Clinicians

This study offers potentially valuable information for health professionals who may come across children with IGD/GD symptoms. As noted, approximately 3% of Australian children and adolescents present with clinical IGD and a larger proportion with problematic or "sub clinical" use [17,18]. Therefore, the notion that anyone working with this population can dismiss it as rare or unlikely to impact their clinical practice would be unwise. The following are some key findings that those in clinical practice may find helpful.

Early Intervention

As already noted, this study provides support for early intervention at a Primary School level (i.e., ages 8-12). Clinicians and health professionals should consider younger children with some IGD/GD symptoms, IGD/GD risk factors or screen-related developmental impacts as candidates for pre-emptive parent education or a shorter episode of care at the time of presentation, as opposed to dismissing their symptoms as "not severe enough" and thus risking the child deteriorating further in the transition to high school.

Comprehensive Assessment

There is a temptation to ask basic and direct questions when assessing IGD, the most common of which is to base a child's assessment on the number of screen hours per day or week. The detailed case studies in this paper, while not indicative of the level of detail in the entire clinical file, should serve as a guide to clinicians that a comprehensive assessment of not only screen use, but risk factors, functional impacts, comorbid symptoms, which games or social media platform that child used, plus other background information, is needed to adequately assess IGD and GD. This is not to suggest clinicians need to understand every nuanced detail of a certain game or social media application. However, clinicians should have enough knowledge to show a genuine interest, and to understand whether a game or application is meeting an unmet need and thus contributing the child's screen overuse problem.

Case Formulation and Intervention

Given that in this sample the number of risk factors was linked to the number of developmental harms, which in turn were linked to the number of IGD symptoms, this study provides support for use of a Risk and Resilience approach [41] in a clinically disordered IGD/GD population [15, 17]. With that in mind (and consistent with best practice in many complex mental health disorders [42,43,44], clinicians would benefit from establishing a detailed case formulation around the key risk factors that may be present, the presenting developmental impacts, and any protective factors that may offset risk factors (or risk factors that may be turned around to be protective such as helping the socially isolated child to develop warm supportive offline friendships). With a comprehensive formulation, clinicians can target one or two of these areas at a time, starting with ones that are having the biggest impact and/or those most likely to change. Hence the treatment implications are clear: it's not necessary to treat every single risk factor or developmental impact, but just enough to bring back balance and reduce symptomology to non-clinical levels. The current case studies are evidence that a parent/child intervention approach is one mode (and not necessarily the only one) that does effect change in the net risk factors and developmental impacts. There are some areas of risk where this model's advantage is obvious. For example, it is very difficult to effect change in the risk factor "Family Conflict" if you are working in an individual clinical model without a parent/s. However, even in the less obvious areas like "Social Isolation" or "Impulsivity", guidance, education and support from parents and family can be integral in any intervention strategy.

The Domino Effect

As noted, the term 'domino effect' has been used in reference to developmental impacts of IGD compounding as the disorder progresses. This would suggest clinicians could benefit from using a case formulation that takes into account key developmental domains (education, general health, social and behavioural) to assess which areas could be targeted for intervention first. For example, if a child is presenting with impacts of social isolation and education due to routinely missing school and/or being late, but the assessment has identified this is a result of poor sleeping patterns while gaming at night, a clinician (and the family) may feel overwhelmed trying to fix all areas at once. The clinician in this example may elect to target the sleep patterns first in parent/child sessions on the assumption the other domains are likely to improve or resolve as a result.

The authors note the observed difference in the impact and symptoms of primary school vs high school student cases. Future Randomised Controlled Trials (RCTs) are needed to establish if intervention strategies (parent education and management or individual therapy modes) are effective, and if so, are they are more beneficial to wellbeing when delivered to students in primary school as opposed to high school.

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