

Child-Friendly Pre-trial Gaming Systems: Turning Law, Practice, Theory and Professionals' Experiences into Psychoeducational Tools

KYRIAKIDOU, Marilena, WADSWORTH, Caitlin, SANDS, Matthew and CRAIG, Claire <<http://orcid.org/0000-0002-3475-3292>>

Available from Sheffield Hallam University Research Archive (SHURA) at:
<https://shura.shu.ac.uk/36659/>

This document is the Accepted Version [AM]

Citation:

KYRIAKIDOU, Marilena, WADSWORTH, Caitlin, SANDS, Matthew and CRAIG, Claire (2026). Child-Friendly Pre-trial Gaming Systems: Turning Law, Practice, Theory and Professionals' Experiences into Psychoeducational Tools. Psychiatry, Psychology and Law. [Article]

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Child-Friendly Pretrial Gaming Systems: Turning Law, Practice, Theory and Professionals' Experiences into Psychoeducational Tools

Marilena Kyriakidou^{a*}, Caitlin Wadsworth^a, Matthew Sands^b and Claire Craig^c

^aCentre for Behavioural Science and Applied Psychology, Sheffield Hallam University, Sheffield, England, ^bHelena Kennedy Centre for International Justice, Sheffield Hallam University, Sheffield, England, ^cLab4Living, Sheffield Hallam University, Sheffield, England

*Heart of the Campus Building, Collegiate Crescent Campus, Sheffield Hallam University, Sheffield S10 2BQ, M.Kyriakidou@shu.ac.uk

All authors declare no conflict of interest.

All procedures performed in studies involving human participants were in accordance with the ethical standards of Sheffield Hallam University ethics procedure with approval ID: ER27720856 and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent was obtained from all individual participants included in the study.

The first author has used ChatGPT to proofread the document and assist in reducing its word count.

The paper is 10,700 words in total inclusive of tables, references, tables and figures.

Child-Friendly Pretrial Gaming Systems: Turning Law, Practice, Theory and Professionals' Experiences into Psychoeducational Tools

The EU and UK are calling for child-friendly justice. Yet existing adult-oriented practices disrupt justice and increase children's trauma. We developed a psychoeducational template of a child-friendly gaming system designed for children's court preparation. We reviewed: a) Guidelines for psychometrics tests, b) International, Cypriot, English and Scottish law, c) Psychoeducational programs in the US, d) The Gestalt Play Therapy, Child Centred Play Therapy and Trauma-Focused Cognitive Behavioral Therapy and incorporated them into practical legal approaches. Then, we conducted in-depth interviews with multinational experts discussing professionals' and children's needs. Building on the Polyvagal Theory and past issues, our data also support reforming children's court preparation. Effective common cross-national practices were applied. But inconsistent support led to children's problematic unequal court preparation. Experts feedback contributed to having a user-centred gaming context. We summarize our review and experts input into an Open-Adapt Pretrial Gaming Template for pretrial gaming systems, adaptable to various legal contexts.

Keywords: child-friendly; child; court; pretrial; psychoeducation; game; justice; court preparation

Introduction

Nearly 49% of child abuse cases do not proceed to court (National Statistics, 2020). This challenge intensifies as child abuse affects one in five European children (European Parliamentary Research Service, 2024), with increases in Africa, Asia, Europe, and North America based on systematic reviews studies (Lee & Kim, 2023), alongside a 106% rise in England (NSPCC, 2023). An EU strategy aims for research-based child-friendly justice by 2025 (European Commission, 2020); while UK's

HMCTS urges ‘creative’ approaches (Ministry of Justice, 2020). In response we turned relevant law and practices into a child-friendly gaming system aiming to prepare children victims and/or witnesses for court. Figure 1 provides a visual diagram of how laws, programs, models, and expert input were combined to create the Open-Adapt Pretrial Gaming Template for the structured pretrial system.

Figure 1 here

International Legal Framework of Pretrial Gaming

Among various legal frameworks concerning children, five international laws address children's presence and preparation for court. These laws emphasize children's rights to express opinions based on age and maturity, participate in legal matters, understand their rights, and access legal aid (Council of Europe, 1996; 2010; UNICEF UK, 2016; UN Convention on the Rights of the Child (UNCRC), 1989, Arts. 12 & 40; UN Economic and Social Council (ECOSOC), 2005). They propose making legal proceedings understandable for children and clarifying their roles (e.g., Council of Europe, 1996, Art. 3). The laws recommend child-friendly proceedings, specialized facilities (e.g., Council of Europe, 2010, Section IV.A.1; UN ECOSOC, 2005, Guideline 19), and call for justice professionals to engage sensitively, understand child development, use trauma-informed approaches, promote open communication, and reduce potential trauma (UN ECOSOC, 2005, Guidelines 10, 13, 22, 24).

National Legal Framework of Pretrial Gaming

We have examined further the legal frameworks of Cyprus, England and Scotland to prepare the Open-Adapt Pretrial Gaming Template. These nations were chosen for their linguistic and legal framework similarities, allowing comparative analysis on children's and professionals' needs regarding pretrial services across slightly diverse legal

contexts. Cyprus, England and Scotland's legal frameworks align with those five international laws while being influenced by English common law to varying extents. For Cyprus, these influences came from Cyprus's colonial history (Basilakis & Papasabbas, 2002) and for Scotland from political factors (Brown, 2008). National laws shaping children's court appearance and preparation in Cyprus (Witness Protection Law, L.95(I)/2001; Violence in the Family Laws 2000; 2004), England (Children and Families Act 2014; Youth Justice and Criminal Evidence Act 1999) and Scotland (Children's Hearings Act 2011; Children Act 1995) are developed domestically, reflecting each nation's legislation, culture, and own legal autonomy.

While all three nations recognize children's involvement in court may be distressing, they may require their presence if necessary (CPS, 2019). Child victims or witnesses across the three nations receive special measures easing the court process and ensuring their protection. In the UK, these measures include the removal of wigs and gowns, testifying from a remote location, using an intermediary and cross-examination may be pre-recorded (Youth Justice and Criminal Evidence Act 1999). In Cyprus, these special measures apply, except children are cross-examined in court without intermediaries (European Commission, 2014). In addition to special measures, children in all three nations may ask for a court visit and child victims of sexual abuse are eligible for specialist support provided by a range of organisations throughout the trial process (CPS, 2020).

Barriers to Effective Child Participation in Court

International and national laws do not translate smoothly on the ground. Children struggle to effectively participate in court as the legal process often mirrors factors that trigger trauma e.g., lack of control and understanding, power imbalances, fear of punishment, aggressive cross-examinations and preexisting shame which intensifies

when discussing abuse with strangers (Caprioli & Crenshaw, 2017). These factors parallelised with traumatic triggers and can decrease communication abilities (van der Kolk 2015). Children's autonomic nervous system, based on Polyvagal Theory (Porges, 2011), may react to trauma triggers with protective responses like dissociation and shutdown. These are evident in forensic settings. Ten sexually abused children involved in Swedish courts expressed a strong need for support during their legal process. However, they found the support insufficient, experiencing anxiety and terror when recounting their abuse in court and reported feeling mistreated by lawyers (Back et al. 2011). The existing practices are ineffective. To mobilise these laws, we propose a reconstruction of children's courtroom preparation. We propose structured training programs, standardized tools, and a formalized pretrial process, all centring gaming systems for courtroom preparation.

Psychoeducational Programs of Pretrial Gaming

To start forming the gaming systems context we examined programs for children's court preparation. In 2021, when researching these, we identified three child-friendly educational programs preparing children for court, the Kids' Court School in Las Vegas (Nathanson & Saywitz, 2015), the Kids' Court and Teen Court in King County State (www.kingcounty.gov) and the Kids and Teens in Court (KTIC) program in San Diego (Peterson et al. 2020). A comparative analysis shown these programs rely on psychoeducational interventions. Psychoeducational interventions, characterized by their blend of educational and therapeutic methods (Lukens, 2015) and offering a structured approach adaptable to individual needs (Garcia et al., 2022). They inform individuals about emotional well-being and equip them with techniques for addressing mental challenges, integrating aspects of cognitive-behavioural therapy, group therapy, and education (Sarkhel et al., 2020).

Psychoeducational interventions are integrated into the three educational programs through 34 activities. These 34 activities are highlighted in some educational programs, while others may exclude some of them entirely. We organised the activities in contexts related to education, stress management, court familiarization, and other components. The educational context covered: 1) The accused, 2) Law, 3) Crime, 4) Investigation, 5) Evidence, 6) Court personnel's roles, 7) Children's roles, 8) Truth-telling, 9) Taking an oath, 10) Ground rules (e.g., "I need a break"), 11) Courtroom structure, 12) Rules of the courtroom. Stress management context covered: 13) Court-related fears, 14) Breathing techniques, 15) Positive self-talk, 16) Progressive muscle relaxation, 17) Cognitive reframing, 18) Emotion identification, 19) Expression, 20) Relaxation techniques. Court familiarization context covered: 21) Simulated courtroom settings, 22) Play courtroom environments, 23) Interaction with law students in mock courtrooms, 24) Court visits, 25) Interaction with court staff, 26) Gradual exposure to court proceedings, 27) Participation in mock trials. Other program components were: 28) Assistance dogs, 29) Information on trauma symptoms, 30) Children's books, 31) Handouts, 32) Relaxation tapes, 33) Therapeutic interventions, 34) Creation of comfort items. These psychoeducational programs for children notably reduce children's court-related stress (Nathanson & Saywitz, 2015; Peterson et al. 2020). Recognizing their efficacy, we identified their topics covered as potential contexts for integration into our Open-Adapt Pretrial Gaming Template for the pretrial gaming system.

Theoretical Models of Pretrial Gaming

One distinctive feature of KTIC is its reliance on the Trauma-Focused Cognitive-Behavioral Therapy Model (TF-CBT) (Peterson et al. 2020). TF-CBT is a psychotherapeutic approach addressing the interaction of thoughts, behaviours, and feelings (Cohen et al. 2006). The essential components of TF-CBT are described by

PRACTICE. PRACTICE stands for Psychoeducation, Relaxation, Affective Expression and Modulation, Cognitive Coping and Processing, Trauma Narrative, In Vivo Mastery of Trauma Reminders, Conjoint Sessions with Parent or Caregiver, and Enhancing Safety and Future Development. PRACTICE activities address psychoeducation on trauma, stress management through relaxation techniques, affective expression for emotional regulation, cognitive coping of negative thoughts, processing traumatic experiences, in vivo exposure to reduce avoidance, conjoint sessions involving caregivers, and enhancing safety to prevent future trauma.

A meta-analysis of 11 studies researching the impact of TF-CBT upon abused children suggest that TF-CBT resulted in significant positive changes, such as improved emotional management, with considerable effects observed for conditions like PTSD. Some positive effects were maintained for several months after treatment. The effectiveness of TF-CBT seemed to be influenced by factors like children's age undergoing treatment but not by variations in treatment delivery formats, session frequency, or treatment duration (Want, Chen & Zhang, 2023). These may imply that delivering TF-CBT activities through gaming systems could be as productive as delivering them in a usual therapeutic setting. TF-CBT therapeutic components were recognized as potential activities for the gaming systems.

Our theoretical framework to start forming the pretrial gaming system's types draws from Gestalt Play Therapy (Oaklander, 2001) and Child-Centred Play Therapy (Axline, 1947). These theories suggest children select toys and activities in therapy, with therapists offering acceptance and empathy. Thus, pretrial gaming systems should offer choices and feature cooperative games promoting teamwork and communication between children and professionals. These theories suggest that play enables children to explore their emotions and experiences, promoting emotional healing and personal

development. Thus, pretrial gaming systems should be friendly, simulated therapeutic spaces of legal settings, allowing children to explore emotions in a supportive manner and developmentally appropriate activities.

Applying the ABC Framework for the Pretrial Gaming System

The ABC of test construction framework (Zigler, 2014) was used in 2021 to prepare the initial gaming concept, see Table 1 outlining the ABC of Children's Pretrial Gaming System. Although traditionally for test construction, the ABC framework provides a structured approach suitable for developing the proposed gamified psychoeducational tool. Its focus on identifying needs, designing interventions, and tailoring solutions to populations makes it adaptable to game development processes.

Table 1 here

The 'A' step requires defining the construct to be measured. The pretrial gaming system's construct is children's pretrial support which has four dimensions based on the challenges highlighted in the literature: Children's psychological well-being, legal knowledge, court-related stress, and the quality of their courtroom participation.

Emotional trauma and anxiety in court proceedings call for interventions addressing and measuring psychological well-being (Porges, 2011; Back et al., 2011). Limited legal understanding call for interventions addressing and measuring legal knowledge (Council of Europe, 1996; 2010). Stress from unfamiliar and intimidating court environments call for interventions addressing and measuring court-related stress (van der Kolk, 2015). Clarity and accuracy in children's testimonies is critical for effective courtroom participation (Caprioli & Crenshaw, 2017).

The 'B' step requires clarifying the intended uses. The pretrial gaming system's intended use is to achieve a child-friendly justice (European Commission, 2020;

Ministry of Justice, 2020). For children, the gaming system is designed as a friendly tool to learn about the legal process, practice answering questions and asserting their rights, manage court-related stress, familiarize themselves with courtroom environments and procedures, and build emotional resilience in line with recommendations to adapt legal proceedings for children's developmental needs while following relevant theoretical models (Axline, 1947; Cohen et al., 2006; Council of Europe, 1996; Oaklander, 2001; UNCRC, 1989, Arts. 12 & 40). For professionals, the gaming system intends to be a professional tool organising and sequencing all information and activities required for supporting children during pretrial process, addressing inconsistencies in preparation and ensuring a standardized approach as achieved by other structured educational programs for children (UN ECOSOC, 2005; Council of Europe, 2010; Nathanson & Saywitz, 2015; Peterson et al., 2020).

The 'C' step requires clarifying the targeted population. The primary target population includes children requiring tailored support to navigate the court process. The secondary target population consists of professionals who play a crucial role in preparing children for court and ensuring a trauma-informed approach.

The 2021 Gaming Concept

A draft of the gaming activities was developed in March 2021 (Lonsdale, Kyriakidou & Craig, 2021), with the aforementioned laws, psychoeducational programs, and theoretical models organized according to the ABC framework for the game. The 2021 Gaming Concept was created to be presented to experts, gaining feedback to ensure its relevance and practicality in child court preparation.

The 2021 Gaming Concept had seven structured activities. The "Wait! Relax! Go!" and "Ruling the Rules," in which children identify and manage fears while

learning legal terms and courtroom protocols through interactive play and guided reading. "I feel..." sessions help children express emotions and practice relaxation techniques, fostering resilience. "Role Play" immerses them in simulated trials to familiarize with courtroom environments and roles. "Panoramic Court" uses visual aids to introduce court settings gradually, while "Building Comfort" allows children to create personalized comfort items. The "Read Me" session provides essential information on legal proceedings and trauma handling in a child-friendly format, encouraging active engagement through writing and relaxation exercises.

Feedback on the 2021 Gaming Concept

We conducted in-depth interviews with senior experts to gather feedback on the 2021 Gaming Concept and to document existing pretrial services, while also exploring how professional support could be adapted into pretrial gaming systems. The objectives were: The preparation children receive for their court appearance (Obj1) and based on the 2021 Gaming Concept experts' thoughts on converting their support into pretrial gaming systems (Obj2) and on transforming professionals' and children's needs into pretrial gaming systems (Obj3).

Method

Ethics

Our study was approved through our institutional research ethics review process (ID: ER27720856). Data were collected, handled, stored and analysed based on the GDPR (2016), UK GDPR and Data Protection Act 2018 (ICO, n.d). Online data collection was transformed into a secured safe environment during the in-depth interviews (e.g., password protected links), data were stored on our institutional safe online drive and data handling went through pseudonymization followed by

anonymisation which completely removed the ability to trace back our senior expert participants.

Participants

Purposive sampling recruited five senior experts in children's court preparation active in Cyprus, England, and Scotland. These nations were chosen for their similar languages and laws, allowing a comparison of children's and professionals' pretrial needs. Our experts' prominent roles make them identifiable. Complying with GDPR (2016), to protect participants' identities, we provide organization features and omit participants' details:

- **Hope for Children:** is an international organisation hosting the Children's House in the Republic of Cyprus: A non-governmental organisation following the Barnahus Model which among other services is supporting children (alleged victims of sexual abuse) prior, during and after their appearance in court.
- **Crown Prosecution Service** in Yorkshire and Humberside: A public agency responsible for prosecuting criminal cases.
- **Intermediaries for Justice** in England: A registered charity which among other services supports children prior and during their appearance in court.
- **Victim Support** in Scotland follows the Victim Support Europe scheme that represents national member organizations across Europe: It is a registered charity which among other services supports children prior, during and after their appearance in court.

All participants had long experience supporting children for court. Four participants have been directly involved in children's court preparation. One participant manages this indirectly through their managerial role. Each participant supported a big number of

children annually, whether directly or indirectly, although exact figures were not provided. Participants supported children aged 2.5 to 17 years. Four participants hold leading roles as managers, coordinators, supervisors, overseeing volunteers or employees preparing children for court. Three participants had responsibilities in communicating with specialist prosecutors who deal with youth court cases, conducting clinical psychological assessments prior and after children's court appearances and offering support after children's court appearances e.g., on anxiety, post-traumatic stress. Three participants engage with children from their police interview all through their court appearances.

Data Collection and Materials

Semi-structured interviews were used with specific, open and wh-questions, allowing discussion revealing new topics (Adams, 2015). This suited our work as we were uncertain about participants' challenges and their reactions on gaming systems. The interviews followed our Child-Centric Pretrial Justice Survey (ChPJS; Appendix) relying on surveys gathering legal personnel feedback on professional tools (ACC, 2021; Batastini et al. 2020). ChPJS Section One recorded the services provided, as per established surveys (Judiciary UK, 2021), addressing Objective Oj1 (Q1). It asked the professionals' and children's needs for court preparation, addressing Objective Oj2 (Q2). Objectives Oj3 and 1Oj4 were addressed in Sections Two and Three. Section Two described the 2021-Gaming concept (see D1 from Appendix) and invited feedback (Q3, Q4), narrowing discussion to specific aspects of the game (Q5) (Empson & Conus, 2021). The description of the 2021-Gaming concept was general, encouraging unbiased feedback. Section Three, relied on consumer experience surveys (Martin et al., 2015), assessing perceived ease of use, usefulness, benefits, and risks through hypothetical scenarios (Q6, Q7). Inviting experts to comment on the pretrial concept and its fictional

usage, aligns with the User-Centred Design framework ensuring a detailed analysis of the pretrial gaming concept based on real-world insights (Lowdermilk, 2013). Section Four concludes with an open question (Q8) while avoiding general questions (e.g., any other comments?) narrowing the topic without restricting answers (O’Cathain & Thomas, 2004).

Data Coding

Thematic analysis was used to identify commonalities among participants' experiences and attitudes. This analysis is appropriate for under-researched areas like ours (Braun & Clarke, 2006). We used 'Reflexive' thematic analysis, wherein themes emerge from coders' interpretations of the data. Unlike 'coding reliability' or 'codebook' thematic analyses which may have preexisting themes (Braun & Clarke, 2020).

In reflexive thematic analysis, coding reliability measures such as inter-rater reliability are not considered appropriate or conceptually fitting, as they are for ‘coding reliability’ or ‘codebook’ forms of thematic analysis. This is because reflexive thematic analysis involves an interpretive and reflexive coding process and does not aim for replicability or coder agreement (Braun & Clarke, 2021, 2024). We report our coding approach to reflexive thematic analysis in line with how it is presented in the literature (Bruckler et al., 2023; Clarke & Braun, 2025). As in previous studies, this coding process supported coders in approaching the data in a coherent way based on their interpretive engagement in order to deepen interpretation rather than aiming for an ‘accurate’ coding (Yardley, 2008; Braun & Clarke, 2022).

Data coding was conducted by the first author, a researcher and a student associate. To add meaning to participants’ responses, we discussed between us how our analysis should draw from the three psychoeducational programmes on children’s court preparation and TF-CBT model (Cohen et al., 2006; Peterson et al., 2020; Saywitz &

Nathanson, 2015). Responses were reread several times. After all, three of us got familiarised with the data, we have made notes individually and came together to discuss how we have coded the data based on their semantic context which were justifications, ideologies, ideas, assumptions, underlining the context (Braun & Clarke, 2006). Initially data were coded within each question by using broad codes such as '*in favour of games*'. Having in mind these broader codes we have decided to read the data again for the second time to identify commonalities arising across the whole dataset and not within their semantic context. At this stage we have disregarded in which question the participants responded and revised our codes by adding more detail and complexity such as '*Inconsistent Support*'. We met again for the third time, reviewed our individual codes and allocated the codes we had identified into possible themes. During this meeting we have revisited the suitability of our earlier themes and created provisional themes. Following a three-month break (Clarke & Braun, 2025), at the final phase of our coding, we have re-examined the participants' answers to determine the fit of possible themes.

Results and Discussion

The final themes were (Theme 1) Common Pre-Trial Practices addressing Oj1; (Theme 2) Inconsistent Pre-trial Practices addressing Oj1; (Theme 3) Reactions to Gaming Systems addressing Oj2; (Theme 4) Meeting Children's Needs addressing Oj2 and Oj3; (Theme 5) Considerations for Caution addressing Oj2 and Oj3; and (Theme 6) Child Court Barriers, while no direct objective was addressed with this theme 6, it highlighted unexpected insights of child welfare within legal proceedings relevant to our work. We present these with data examples following qualitative frameworks by not quantifying respondents.

'Information power' and Suitability of the Sample

This small sample of experts was sufficient, aligning with the concept of ‘*information power*’ addressing the relevance of information a sample holds (Malterud, Siersma & Guassora, 2016). Our sample meets the criteria of Malterud, Siersma, & Guassora’s (2016) Model for small sample sizes in qualitative studies as our study: a) had a narrow focus (identifying pretrial preparation services, eliciting feedback on specific aspects of pretrial gaming systems), b) recruited participants which met highly specific criteria relevant to our research meaning our sample was the best source to address our objectives, c) relied on established theories, TF-CBT Model, d) had semi-structured clear interviews conducted by two experienced interviewers, and e) involved an in-depth analysis of narratives. Repetitive ‘codes’ emerged for Themes 1 to 4, with no new ‘codes’ or information emerging after completing reflexive thematic analysis. This shows high ‘*information power*’ validating our in-depth qualitative work.

Theme 1: Common Pre-Trial Practices

Eleven common pretrial practices were evident in the data. Each organisation took its own measures for offering these ‘*We have a kind of list for our volunteers that we go through, and we make sure that they’ve signed everything*’ (Parti:3). We outline these in the order they are offered, even if variations in sequence may occur: 1) Offer psychological support to children prior their court appearance, 2) Assess children’s level of communication and report to court, 3) Assess children’s need for their court appearance e.g., any further special needs, 4) Court visits, 5) Practice live link, 6) Explaining roles of people involved in court proceedings, 7) Explaining the court proceedings, 8) Explaining the ground rules e.g., I need a break, 9) Answering children’s questions, 10) Memory refresh (when children watch their testimony at the police), 11) Accompany children during their court appearance.

This support aligns with international guidelines and each nation's legal framework concerning children in court proceedings (e.g., Children's Hearing in Scotland Act 2011), which seem to shape the internal published and unpublished guidelines of the four organizations involved and in turn, form the actual practices of frontline practitioners in Cyprus, England, and Scotland. This cross-national consistency portrays children's common needs and suitable common responses from professionals.

Theme 2: Inconsistent Pre-Trial Practices

Professionals acknowledged practice inconsistencies causing unequal support per child. Some professionals omit or underestimate certain services (e.g., child's wellbeing) while overemphasizing others (e.g., procedural):

'I go to courts and every visit is different cuz everybody does it differently and you have some people that just go 'da da' at the child... I have to stop them and go 'ooh look, this is the room, this is the link, this is all we need to know' ... we don't need all that ... they get a mixed kind of level of information... some children get great visits, others get terrible visits, you know' (Parti. 1).

Participants voluntarily give reasons for these inconsistencies, citing high caseloads and time constraints: *'It was almost like a rush to try and tell them everything...'*

(Parti:3) and *'It doesn't always happen because it all depends on time scales'* (Parti:4).

Similar time constraints affect school psychologists who struggle to provide quality support (Puhly et al. 2021) and police interviewers conduct poor interviews with children an hour prior their end of their shift due to time constraints (Kyriakidou et al. 2022). But standardised tools e.g., mHealth, NICHD (Puhly et al. 2021; NICHD) can improve professionals' performance. Participants echo this by stating inadequate equipment as another reason for these and personal feelings contribute to these inconsistencies: *'everybody has had different feelings... we're doing our own way we're*

each doing what we feel' (Parti:4). Similarly, lawyers' emotions affect client handling, despite efforts to adhere to ethics (Kadowaki, 2015). Adoption workers prioritize feelings over guidelines when selecting foster families (Bacinelli, 2007). Professional training can help reduce the influence of professionals' personal feelings on their service delivery. (Carvalho et al. 2018; McCarty et al. 2022). Participants raised concerns about inconsistent pretrial support and its impact on children: *'She did break down and she said she just wasn't prepared because it was rushed, and we're finding that happening a lot as well'* (Parti. 3).

Theme 3: Reactions to Gaming Systems

All participants backed pretrial gaming systems *'it sounds brilliant, I think it sounds amazing'* (Parti:1) demonstrating its acceptance as an original innovative concept. They also acknowledged the lack of standardized tools: *'This is a gap we have in our profession'* (Parti:2); *'there's no resources for us whatsoever... we don't have anything like that right now and that would be incredibly helpful'* (Parti:4). This highlights how the game introduces a new, much-needed resource in the field. Despite the availability of standardized tools in forensic settings for children (e.g., the Child Advocacy Center Interview Protocol (Rivard et al., 2017), anatomically dolls (Simkins & Renier, 1996)), beyond professionals' training, standardised tools for children's court preparations are absent.

Consistency and professionalism from standardised tools were highlighted:

'if there was a tool that would enable people like us to do that that would just be amazing ... it would make sure that everybody is giving the same approach...Because at the minute it's very subjective - yeah absolutely erm and so it would erm yeah it would evaluate the fact that everybody suddenly we've got some consistency' (Parti:4).

This also addresses an unmet need. They referred to professionalism and elimination of subjectivity in preparations, making it easier for professionals, improving services, emphasizing the convenience of having a ready-to-use tool, saving time and effort in materials preparation:

‘yes, it will be useful because I will have a tool to work with, a ready to use tool, I will not have to prepare materials every time I meet a child. Is going to be standardised so everyone will be using the same approach, and all children will be prepared in the same way, it will improve our services to have one common way to prepare children for court...it will be professional having a game readily available rather than ones I've created or crafts I've made is definitely much more convenient. It will save me time, it will save me energy, and I believe it will be much more helpful for the children to understand’ (Parti:2).

This also demonstrated that the pretrial game could fill a gap in current resources. These perceptions are supported by research indicating that consistency and professionalism in services among professionals improves with standardized tool implementation (Knight et al. 2008; Schouten et al. 2021).

Participants complimented games’ visual aspects mentioning their potential in engaging children, facilitating understanding of complex concepts, and reinforcing recall: *‘anything that you do visual stays with them, they understand it and... I can say can you remember when we did that game, that’s that person...’* (Parti:4). This is a promising quote for the gaming’s potential in having a transformative impact on practice. These align with the benefits of visual tools on children in dentist visits, reducing anxiety (Barbosa et al., 2023), and in education, promoting learning through visual books (Aleixo & Norris, 2007).

Participants refer to either a combination of both board and digital games, with some referring to solely board games but there were no references to have only digital games, as they were perceived as less interactive and omitting that *‘personal contact’* (Part:5) and

‘erm because I just, I like doing those kind of interactive games. Erm, and that’s the thing with the digital, isn’t it? If it’s purely digital, there can be very little talking with the person that’s giving them the game. Whereas if you’ve got a board game, you’ll also be talking, aren’t you as well?’ (Part:1).

Participants use some kind of playful approaches on their own or through organisational apps: *‘I’ll have my own kind of little games that I play’* (Parti:1). These include personalized games like dice games, photographs familiarizing children with court settings, likening court proceedings to a football game. *‘I put together erm some photographs of that court ... I often draw it out, draw a court room out and I talk about it like a football game, so there are two sides...’* (Parti:4). Additionally, professionals use specialized apps, such as those illustrating truth and lies, or informational resources like books explaining courtroom procedures, although the efficacy of these were questioned *‘A book that explains the court...and presents the role of each person in court...It is a drawing on a paper which is not very helpful’* (Parti:2).

Theme 4: Meeting Children’s Needs

Participants advised a focus on personal contact *‘have that more personal contact, which obviously is kind of key’* (Parti:5) and explaining why children’s participation is necessary *‘get across why it’s important they need to do it’* (Parti:1). This aligns with psychoeducational programs on children’s court preparations in which the child’s role is explained (Peters & Nunez, 1999; Peterson et al. 2020). An overall advice was to start

by focusing on serious complex offences like sexual assault, to normalize vocabulary and behaviour putting children at ease when giving evidence.

Legal knowledge

All professionals stressed legal knowledge due to children's unfamiliarity with legal terms. This replicates literature stating children's lack of legal knowledge (Block et al. 2010). Emphasizing the people involved was advised '*Words that are said a lot the clerk, judge, barrister, jury, erm defendant... that would be helpful because those words they do hear.*' (Parti:1) with other participants echoing this '*the people who are going to be questioning them, it's important to explain exactly who they are, who they're going to see, cuz quite often they are speaking to loads of different people and they just don't know*' (Parti:3). These replicate research demonstrating children's lack of understanding of the roles and responsibilities of legal professionals (Quas et al., 2009). Covering the formalities was advised, ensuring children learn the interactions with court personnel, understand the process and what to expect on their court day. Professionals mentioned expectations, including potential procedural changes and long wait times:

'where they're going, what they're gonna do, who they're gonna talk to ... they do need to understand the ground rules about listening, good listening, paying attention all of that... what's it gonna look like on the day, how we're gonna get through this, what's the process like... what will the different people say and when will it end' (Parti:4).

These replicate research demonstrating children's lack of understanding court proceedings (Flin et al. 1989; Saywitz et al., 1990).

'Gaming' Court Visits

'Gaming' court visits (models, visual tools) were discussed extensively. Participants viewed them as ensuring consistency '*it would make it more consistent for every child*'

(Parti:1) and ensuring understanding occurs *‘in a nice, controlled way’* (Parti:3).

Participants addressed the limitations of solely verbal explanations in court visits *‘it’s all verbal, so the child just zones out, drifts off ... so something like that would make it much more, erm well visual so they’ll actually completely understand it’* (Parti:1).

Gradual exposure was praised. Showing the court without physically taking children to the courthouse was a step forward *‘putting them in that courtroom without physically being there’* (Parti: 3) as well as minimising children’s contact with the court

‘minimise their contact with a court building... is a nice way to introduce the court system, it’s a nice way for them, for us ... because the feeling of being in court alone, even if you’re just in the waiting room, can be too much for some children... a board game, to take their mind off things a little bit and to help them understand’ (Parti:3).

Gradual exposure was suggested through gaming activities *‘building up the court room you’re learning what all those people do... I wish I had a model that I could use’* (Parti:4). These align with gradual exposure methods applied in therapeutic models such as Virtual Reality Exposure Therapy (Eshuis et al. 2021).

Alleviating fear was an expectation from ‘gaming’ court visits: *‘it takes some of the fear out of going into this building that they’ve never seen before and they don’t know about... anything that is interactive like that would certainly benefit them’* (Parti:5). These support research indicating that court education eases children's unfounded fears that they may be subjected to punishment, imprisonment, or trial (Back et al., 2011). Children with more knowledge were less stressed about attending hearings (Block et al., 2010; Quas et al., 2009).

Involving prosecutors or advocates in 'gaming' court visits could improve children's evidence by easing transition to trial

‘a relationship as far as we are concerned, makes it easier for them to settle and to give that evidence, so it may be something that a prosecutor or an advocate could participate within earlier than the trial process itself, because that might establish that relationship before they get to a trial situation’ (Parti: 5).

Involvement of legal personnel is another established practice for children’s court preparation (Peterson et al. 2020). Other suggestions were tailoring these ‘gaming’ court visits for different age groups and practicing with equipment such as microphones and video links.

Emotional Support

Professionals recommended techniques for managing anxiety, fear, panic, shame, and teaching children to signal breaks based on their emotions. Normalising emotions like nervousness, anxiety, and fear *‘recognise how they might feel... so it’s okay to feel nervous, it’s okay to not know all the answers, it’s okay to feel anxious, these are all normal emotions to go through’* (Parti:3). Providing reassurance and examples to relate to their experience. These are common feelings frequently cited in the literature on children's court appearance (Finnegan & Gothard, 2003). Normalization is an existing process supporting children before court (Fouché & Fouché, 2017; Peterson et al., 2020;), along with children hearing examples of others' experiences (Finnegan, 2002; Peterson et al., 2020).

Role-Playing

This should help children say, *‘I don't know’*, *‘I don't remember’*, *‘I need a break’* in court by simplifying and making legal processes fun like *‘what’s the name of my dog?’ and amazing how many children will go, ‘erm, Felix’ [laugh]...no, you don’t know’* (Parti:1). Participants proposed matching games with scripts simplifying legal

processes: *'you could play the roles with them once you've matched everybody you could then go oh you be Mr D-defence, barrister and I'll be the judge what the judge is gonna say blah... write out little scripts for each of them so we could have a little practise'* (Parti:4). These are welcoming as role-play is a recognized method in children's court preparation (Bala et al., 2001) with advantages like encouraging children to ask clarifications in familiar, fun settings (Revelle et al., 1985) and reducing their anxiety (Hébert & Tourigny, 2010).

Age-Grouping

Participants recommended tailoring game designs to children's chronological ages (e.g., 5-7, 8-12, 12-17) but also suggested to be able to match game activities to each child's cognitive abilities. For example, an activity from a younger child could be used for older children if necessary.

Theme 5: Considerations for Caution.

Concerns about the gaming systems were noted to identify potential issues: Avoiding activities that may influence children's evidence

'if it was suggested that that game was influencing the evidence that was being given by that child... avoid scenarios that are similar to the one on which the case is built because obviously that would give potential to the defence to say, 'you're preparing that witness,' 'you're coaching,' (Parti:5).

Ensuring the game engages children. Train the users and provide clear guidelines to manage expectations. Considering the practicalities of integrating game sessions within existing schedules *'the police aren't gonna pay for us to spend an hour to go and play a game with them it's got to be something we can fit in'* (Parti:4).

Theme 6: Child Court Barriers.

Unexpectedly, participants voluntarily explained children's trials failures by the inability to get children to court or obtain quality evidence *'the main reason we lose trials or trials don't go ahead is because we can't get the victims either into court in the first place, or when they come to court, their evidence isn't of a sufficient quality'* (Parti:5). Children's and supporters' fear was another reason

'You've got the youth's own fear, but also the adult who supervises that child's fear for the child ... it's going to have a significant impact, but even so we still lose a lot of witnesses and we lose a lot of cases because of that' (Parti:5).

Involving young children in complex legal processes was another reason *'it is the most complex process and yet we're taking 4-year-olds through this'* (Parti:4). These findings extend child psychology research to real-life forensic settings. Children's fear affects daily decisions, like street crossing (Shen et al., 2015), social and academic functioning (Cummings et al., 2014). Researchers stress the importance of age-appropriate experiences for children's cognitive skills (Zelazo et al., 2003). Fear and complexity are plausible factors influencing children's decisions not to attend court or to provide insufficient evidence. These reinforce the need for innovative child-friendly approaches, such as gaming systems, to ease fear and legal process complexity.

Open-Adapt Pretrial Gaming Template

This integrative review of legal frameworks, psychoeducational programmes and therapeutic models identified several shared recommendations and practices that informed the initial 'gaming concept'. These were then refined through insights drawn from in-depth interviews with experts from different jurisdictions and programmes to ensure a feasible user-centred tool. The resulted consolidated findings are presented in the form of an evidence-based and practice informed, Open-Adapt Pretrial Gaming Templated (OPA-GamiT) (Table 2).

Table 2 here

OPA-GamiT is like an open-source software, in the sense that it is adaptable. It can help services generate their own gaming systems for their own vulnerable populations e.g., children, individuals with special requirements. With this in mind, OPA-GamiT provides the essential components and overall guidance that can be used for psychoeducational gaming systems in vulnerable populations' pretrial preparations. The detailed content and delivery methods are intentionally left open for each service to tailor accordingly. This aligns with Equality, Diversity and Inclusion (EDI) principles in which services from different nations and with slightly different purposes, can create culturally responsive and inclusive court-preparation games that meet the needs of diverse vulnerable populations across different legal systems (UK Research and Innovation, 2025).

The existing psychoeducational programmes (e.g., Peterson et al., 2020) tend to follow a broadly similar sequence in the topics they deliver. Similarly, theoretical models support the logic of this progression in their own way (e.g., Cohen et al., 2006), and experts confirmed with us that this order could be the most effective way to present pretrial information. Thus, based on our findings, we recommend delivering gaming systems that follow the three main themes of OPA-GamiT in this order:

- *SubG1*: Legal Knowledge
- *SubG2*: Emotional Support and Wellbeing
- *SubG3*: Court Familiarisation

During adaptation, these three themes may be delivered as three separate sub-games, one for each theme, or expanded into additional sub-games within each theme, depending on the needs of the population and the complexity of roles and legal systems.

SubG1: Legal Knowledge

Experts viewed legal knowledge as the strongest foundational component at the heart of pretrial preparation for vulnerable populations. Psychoeducational programmes (e.g., KTIC) also place substantial emphasis on legal knowledge within their activities, and many legal frameworks repeatedly return to it in different ways, such as clarifying children's roles in proceedings (e.g., Council of Europe, 1996, Art. 3). Each service has its own legal terminology and the terms we provide here are the usual patterns identified from the integrative review and the experts' insights e.g., court personnel.

During adaptation, each service should ensure that the content of its gaming system is adjusted to its own legal terminology. For example, in Cyprus a child is 'testifying' in court, whereas in the UK a child is 'appearing' in court, reflecting the different legal procedures and the different roles children have in each jurisdiction. Furthermore, each service should tailor the presentation of the gaming activities to its cultural values and physical environment. For instance, services operating in predominantly cold climates may incorporate snow-based mazes, and services located in areas with extensive greenery may use theme parks as a way of introducing legal terms.

SubG2: Emotional Support and Wellbeing

TF-CBT techniques such as relaxation and cognitive coping are incorporated into OPA-GamiT (Cohen et al., 2006), alongside principles from Gestalt Play Therapy and Child-Centred Play Therapy that emphasise emotional expression, choice and relational safety, all of which inform the psychoeducation on wellbeing within OPA-GamiT (Oaklander, 2001). Experts, without disputing the theoretical models and treatments, directed us towards areas more directly related to pretrial preparation, such as managing anxiety, fear, panic and shame, teaching children to signal when they need

a break based on their emotions, and normalising these emotional responses. All these are outlined on OPA-GamiT.

During adaptation, we strongly recommend the incorporation of culturally relevant and developmentally appropriate settings, when delivering this theme, to facilitate discussion of these sensitive topics. For example, they are cultural differences when making eye contact, as cultural norms shape the social meaning and comfort of direct gaze (Akechi et al., 2013), and neurodivergent conditions, such as autism, can further affect patterns of eye-contact behaviour (Strömberg et al., 2025).

SubG3: Court Familiarisation

Experts welcomed the idea of ‘gaming’ court visits, which represents a different approach compared with the actual court visits used in other psychoeducational programmes and recommended in legislation. ‘Gaming’ court visits also align with the principle of gradual exposure to challenging environments proposed by TF-CBT. Finally, ‘role play’ serves as an important mechanism for consolidating the information provided, offering children an opportunity to apply their knowledge in practice.

During adaptation, services again need to adjust content and delivery methods to their legal system, culture and their targeted population particular needs.

All of the above should be adjusted to each service’s legal system, cultural and physical environment, population needs, and language or accents. These elements can then be incorporated into a variety of gaming activities, such as *Who’s Who?* games to identify court personnel, story-building activities, puppet-based games and other developmentally appropriate tools. Kyriakidou et al., (under review) details the adaptation of OPA-GamiT into a board game within the Cypriot legal framework and presents findings from its real-world field testing. Pretrial gaming systems aspire to

minimize inconsistencies in current practices, providing professionals with a structured, standardised and user-friendly tool. We encourage services to consider gaming-based approaches as a means of enhancing the child-friendliness of justice systems.

.

Reference

- Adams, W. C. (2015). Conducting semi-structured interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of practical program evaluation* (4th ed., pp. 492–505). Jossey-Bass. <https://doi.org/10.1002/9781119171386.ch19>
- Akechi, H., Senju, A., Uibo, H., Kikuchi, Y., Hasegawa, T., & Hietanen, J. K. (2013). Attention to Eye Contact in the West and East: Autonomic Responses and Evaluative Ratings. *PloS One*, 8(3), e59312. <https://doi.org/10.1371/journal.pone.0059312>
- Aleixo, P., & Norris, C. (2007). Comics, reading and primary aged children. *Education and Health*, 25(4), 70–73.
- Association of Corporate Counsel (ACC). (2021). *ACC 2021 legal tech report*. https://www.acc.com/sites/default/files/2021-09/ACC_2021_Legal_Tech_Report.pdf
- Axline, V. (1947). *Play therapy: The inner dynamics of childhood*. Houghton Mifflin.
- Bacinelli, C. R. (2007). *The personal values of permanency professionals and the impact of values upon the selection of adoptive resource families: Implications for child welfare practice and policy* (Doctoral dissertation, ProQuest Dissertations Publishing).
- Back, C., Gustafsson, P. A., Larsson, I., & Bertero, C. (2011). Managing the legal proceedings: An interpretative phenomenological analysis of sexually abused children's experience with the legal process. *Child Abuse and Neglect*, 35(1), 50–57. <https://doi.org/10.1016/j.chiabu.2010.08.004>.
- Bala, N., Lee, J., & McNamara, E. (2001). Children as Witnesses: Understanding their Capacities, Needs, and Experiences. *Journal of Social Distress and the Homeless*, 10(1), 41–68.
- Barbosa, N. B., Rodrigues, B. R., Madalena, I. R., de Menezes, F. C. H., Lepri, C. P., de Oliveira, M. B. C. R., Campos, M. G. D., & Oliveira, M. A. H. de M. (2023). Effect of the Case for Carpule as a Visual Passive Distraction Tool on Dental Fear and Anxiety: A Pilot Study. *International Journal of Environmental Research and Public Health*, 20(3), 1793-. <https://doi.org/10.3390/ijerph20031793>
- Basilakis, H., & Papasabbas, S. (2002). *Στοιχεία Κυπριακού Δικαίου* [Elements of Cyprus Law]. Sakkoula Press.
- Batastini, A. B., Pike, M., Thoen, M. A., Jones, A. C. T., Davis, R. M., & Escalera, E. (2019). Perceptions and use of videoconferencing in forensic mental health assessments: A survey of evaluators and legal personnel. *Psychology, Crime & Law*, 25(9), 901–920. <https://doi.org/10.1080/1068316X.2019.1597089>
- Block, S. D., Oran, H., Oran, D., Baumrind, N., & Goodman, G. S. (2010). Abused and neglected children in court: Knowledge and attitudes. *Child Abuse & Neglect*, 34(9), 659–670. <https://doi.org/10.1016/j.chiabu.2010.02.003>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2020). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.

- Braun, V., & Clarke, V. (2024). A critical review of the reporting of reflexive thematic analysis in Health Promotion International. *Health Promotion International*, 39(3), Article daae049. <https://doi.org/10.1093/heapro/daae049>
- Brown, K. M. (2008). *The union of the crowns: The formation of the British state, 1603–1707*. Palgrave Macmillan.
- Buckler, E. J., Mâsse, L. C., Faulkner, G. E., Puterman, E., McConnell-Nzunga, J., & Naylor, P.-J. (2023). Implementing active play standards: a qualitative study with licensed childcare providers in British Columbia, Canada. *Health Promotion International*, 38(3), Article daac036. <https://doi.org/10.1093/heapro/daac036>
- Caprioli, S., & Crenshaw, D. A. (2017). The Culture of Silencing Child Victims of Sexual Abuse: Implications for Child Witnesses in Court. *The Journal of Humanistic Psychology*, 57(2), 190–209.
- Carvalho, E., Castro, P., León, E., Del Río, A., Crespo, F., Trigo, L., Fernández, S., Trilla, A., Varela, P., & Nicolás, J. M. (2019). Multi-professional simulation and risk perception of health care workers caring for Ebola-infected patients. *Nursing in Critical Care*, 24(5), 256–262. <https://doi.org/10.1111/nicc.12396>
- Clarke, V., & Braun, V. (2025). “The unexpected wheelchair”: Exploring U.K. university students’ social perceptions of dating and physical disability using story completion. *Qualitative Psychology (Washington, D.C.)*. <https://doi.org/10.1037/qup0000342>
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2006). *Treating trauma and traumatic grief in children and adolescents*. Guilford Press.
- Council of Europe. (1996). *European Convention on the Exercise of Children's Rights*. Council of Europe Treaty Series, No. 160. <https://rm.coe.int/european-convention-on-the-exercise-of-children-s-rights/1680a40f72>
- Council of Europe. (2010). *Guidelines on Child-Friendly Justice*. <https://rm.coe.int/16804b2cf3>
- Crown Prosecution Service (CPS). (2020, June 16). Child sexual abuse: Guidelines on prosecuting cases of child sexual abuse. <https://www.cps.gov.uk/legal-guidance/child-sexual-abuse-guidelines-prosecuting-cases-child-sexual-abuse>
- Crown Prosecution Service (CPS). (2019, October). Safeguarding children as victims and witnesses. <https://www.cps.gov.uk/legal-guidance/safeguarding-children-victims-and-witnesses>
- Cummings, C. M., Caporino, N. E., & Kendall, P. C. (2014). Comorbidity of anxiety and depression in children and adolescents: 20 years after. *Psychological Bulletin*, 140(3), 816–845. <https://doi.org/10.1037/a0034733>
- Empson, L. A., & Conus, P. (2021). Video ethnography: Introducing a new tool from research to psychiatric practice? *Psychosis*, 13(1), 24–34. <https://doi.org/10.1080/17522439.2020.1745874>
- Eshuis, L. V., van Gelderen, M. J., van Zuiden, M., Nijdam, M. J., Vermetten, E., Olff, M., & Bakker, A. (2021). Efficacy of immersive PTSD treatments: A systematic review of virtual and augmented reality exposure therapy and a meta-analysis of virtual reality exposure therapy. *Journal of Psychiatric Research*, 143, 516–527
- European Commission. (2014). *Study on children’s involvement in judicial proceedings: Contextual overview for the criminal justice phase – Cyprus*. <https://data.europa.eu/doi/10.2838/84384>

- European Commission. (2020). *EU strategy on victims' rights (2020–2025): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions*. European Union. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0258>
- European Parliamentary Research Service. (2024). *The EU's role in addressing child sexual abuse in sport*. European Parliament. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/757611/EPRS_BRI\(2024\)757611_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/757611/EPRS_BRI(2024)757611_EN.pdf)
- Finnegan, M. J., & Gothard, S. (2003). Preparing children for court. In N. K. Ribner (Ed.), *California School of Professional Psychology handbook of juvenile forensic psychology* (pp. 454–471). Jossey-Bass.
- Flin, R. H., Stevenson, Y., & Davies, G. M. (1989). Children's knowledge of court proceedings. *British Journal of Psychology*, 80(3), 285–297. <https://doi.org/10.1111/j.2044-8295.1989.tb02321.x>
- Fouché, A., & Fouché, D. F. (2017). Pre-trial therapy for child witnesses in cases of sexual abuse: A scoping literature review. *Journal of Psychology in Africa*, 27(5), 462–471.
- Garcia Rodrigues, M., Rodrigues, J. D., Pereira, A. T., Azevedo, L. F., Pereira Rodrigues, P., Areias, J. C., & Areias, M. E. (2022). Impact in the quality of life of parents of children with chronic diseases using psychoeducational interventions: A systematic review with meta-analysis. *Patient Education and Counseling*, 105(4), 869–880. <https://doi.org/10.1016/j.pec.2021.07.048>
- General Data Protection Regulation (GDPR). (2016). *Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation)*. Official Journal of the European Union, L119, 1–88. <https://eur-lex.europa.eu/eli/reg/2016/679/oj>
- Hébert, M., & Tourigny, M. (2010). Effects of a Psychoeducational Group Intervention for Children Victims of Sexual Abuse. *Journal of Child & Adolescent Trauma*, 3(2), 143–160. <https://doi.org/10.1080/19361521003726930>
- Information Commissioner's Office (ICO). (n.d.). *Guide to the UK General Data Protection Regulation (UK GDPR)*. <https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/>
- Judiciary of England and Wales. (2021). *Judicial annual statistics 2020: England and Wales - Tribunals*. <https://www.judiciary.uk/wp-content/uploads/2022/07/JAS-2020-EW-UK-TRIBS-8-Feb-2021-complete.pdf>
- Kadowaki, J. (2015). Maintaining professionalism: Emotional labor among lawyers as client advisors. *International Journal of the Legal Profession*, 22(3), 323–345. <https://doi.org/10.1080/09695958.2015.1071257>
- King County Government. (n.d.). *Kids' Court and Teen Court*. King County. <https://www.kingcounty.gov>
- Knight, L., Mussell, M., Brandl, T., Herschbach, P., Marten-Mittag, B., Treiber, M., & Keller, M. (2008). Development and psychometric evaluation of the Basic Documentation for Psycho-Oncology, a tool for standardized assessment of cancer patients. *Journal of Psychosomatic Research*, 64(4), 373–381. <https://doi.org/10.1016/j.jpsychores.2008.01.003>

- Kyriakidou, M., Blades, M., Cherryman, J., Christophorou, S., & Kamberis, A. (2020). The impact of interviewers' working hours on police interviews with children. *Journal of Police and Criminal Psychology*. doi: 10.1007/s11896-020-09372-4
- Kyriakidou, M., Drousiotou, I., Zalaf, A., Powers, L., Ellison, E., Mo, S, G., Sinclair, N., Kirkby, J. (under review). Children's Pretrial Gaming System: Professionals' Feedback and Field Testing. *Under Review*.
- Lee, H., & Kim, E. (2023). Global prevalence of physical and psychological child abuse during COVID-19: A systematic review and meta-analysis. *Child Abuse & Neglect*, 135, 105984. <https://doi.org/10.1016/j.chiabu.2022.105984>
- Lonsdale, N., Kyriakidou, M., & Craig, C. (2021, March). *Responding to COVID-19 emerging needs for children's sexual abuse testimonies in court: Developing the KiCGAME (Kids' Court Game) prototype*. REFFund Application/Project, Sheffield Hallam University.
- Lukens, E. (2015). Psychoeducation. *Oxford Bibliographies in Social Work*. <https://doi.org/10.1093/obo/9780195389678-0224>
- Lowdermilk, T. (2013). *User-centered design: A developer's guide to building user-friendly applications*. O'Reilly Media. <https://www.oreilly.com/library/view/user-centered-design/9781449359805/>
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
- Martin, H. S., Collado, J., & Rodriguez, M. (2015). User satisfaction with mobile websites: The impact of perceived usefulness (PU), perceived ease of use (PEOU), and trust. *Nankai Business Review International*, 5(3), 258–274. <https://doi.org/10.1108/NBRI-01-2014-0005>
- McCarty, R. J., Cooke, D. L., Lazaroe, L. M., Guzick, A. G., Guastello, A. D., Budd, S. M., Downing, S. T., Ordway, A. R., Mathews, C. A., & McNamara, J. P. H. (2022). The effects of an exposure therapy training program for pre-professionals in an intensive exposure-based summer camp. *Cognitive Behaviour Therapist*, 15, e7. <https://doi.org/10.1017/S1754470X22000010>
- Ministry of Justice. (2020). *HMCTS recovery – COVID-19: Overview of HMCTS response (PDF)*. UK Government. https://assets.publishing.service.gov.uk/media/5efb61143a6f4023c77a134f/HMCTS368_recovery_-_COVID-19-Overview_of_HMCTS_response_A4L_v3.pdf
- Nathanson, R., & Saywitz, K. J. (2015). Preparing children for court: Effects of a model court education program on children's anticipatory anxiety. *Behavioral Sciences & the Law*, 33(4), 459–475. <https://doi.org/10.1002/bsl.2191>
- National Statistics. (2020). Child abuse and the criminal justice system, England and Wales. *Office for National Statistics*. <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/childabuseandthecriminaljusticesystemenglandandwales/yearendingmarch2019>
- NSPCC. (2023, December 7). *106% increase in child cruelty and neglect offences in England in the past 5 years*. National Society for the Prevention of Cruelty to Children. <https://www.nspcc.org.uk/about-us/news-opinion/2023/2023-12-07-106-increase-in-child-cruelty-and-neglect-offences-in-england-in-the-past-5-years/>

- O'Cathain, A., & Thomas, K. J. (2004). "Any other comments?" Open questions on questionnaires – a bane or a bonus to research? *BMC Medical Research Methodology*, 4(1), 25. <https://doi.org/10.1186/1471-2288-4-25>
- Oaklander, V. (2001). Gestalt play therapy. *International Journal of Play Therapy*, 10(2), 45–55. <https://doi.org/10.1037/h0089479>
- Peters, W. W., & Nunez, N. (1999). Complex language and comprehension monitoring: Teaching child witnesses to recognize linguistic confusion. *Journal of Applied Psychology*, 84(5), 661–669. <https://doi.org/10.1037/0021-9010.84.5.661>
- Peterson, L., Rolls Reutz, J. A., Hazen, A. L., Habib, A., & Williams, R. (2020). Kids and teens in court (KTIC): A model for preparing child witnesses for court. *American Journal of Community Psychology*, 65(1–2), 35–43. <https://doi.org/10.1002/ajcp.12390>
- Porges, S. W. (2011). *The polyvagal theory: Neurophysiological foundations of emotions, attachment, communication, self-regulation*. New York, NY: Norton.
- Puhy, C. E., Litke, S. G., Silverstein, M. J., Kiely, J. R., Pardes, A., McGeoch, E., & Daly, B. P. (2021). Counselor and student perceptions of an mHealth technology platform used in a school counseling setting. *Psychology in the Schools*, 58(7), 1284–1298. <https://doi.org/10.1002/pits.22541>
- Quas, J. A., Cooper, A., & Wandrey, L. (2009). Child victims in dependency court. In B. L. Bottoms, C. Nadjowski, & G. S. Goodman (Eds.), *Children as victims, witnesses, and offenders* (pp. 128–149). Guilford Press.
- Republic of Cyprus. (2000/2004). *Violence in the Family Laws* (2000, 2004).
- Republic of Cyprus. (2001). *Witness Protection Law, L.95(I)/2001*.
- Revelle, G. L., Wellman, H. M., & Karabenick, J. D. (1985). Comprehension monitoring in preschool children. *Child Development*, 56(3), 654–663. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/4006572/>
- Rivard, J. R., & Schreiber Compo, N. (2017). Self-reported current practices in child forensic interviewing: Training, tools, and pre-interview preparation. *Behavioral Sciences & the Law*, 35(3), 253–268. <https://doi.org/10.1002/bsl.2290>
- Sarkhel, S., Singh, O. P., & Arora, M. (2020). Clinical practice guidelines for psychoeducation in psychiatric disorders: General principles of psychoeducation. *Indian Journal of Psychiatry*, 62(Suppl 2), S319–S323. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_780_19
- Saywitz, K. J., Jaenicke, C., & Camparo, L. (1990). Children's knowledge of legal terminology. *Law and Human Behavior*, 14(6), 523–535. <https://www.jstor.org/stable/1394133>
- Shen, J., McClure, L. A., & Schwebel, D. C. (2015). Relations between temperamental fear and risky pedestrian behavior. *Accident Analysis and Prevention*, 80, 178–184. <https://doi.org/10.1016/j.aap.2015.04.011>
- Scotland. (1995). Children Act 1995. Legislation.gov.uk. <https://www.legislation.gov.uk/ukpga/1995/36/contents>
- Scotland. (2011). Children's Hearings (Scotland) Act 2011. Legislation.gov.uk. <https://www.legislation.gov.uk/asp/2011/1/contents>
- Schouten, M. J. E., Nieuwenhuijsen, K., Wind, H., Andriessen, S., & Frings-Dresen, M. H. W. (2021). Usability and consistency in findings of the work support needs assessment tool. *Work (Reading, Mass.)*, 68(1), 243–253. <https://doi.org/10.3233/WOR-203371>

- Simkins, L., & Renier, A. (1996). An Analytical Review of the Empirical Literature on Children's Play with Anatomically Detailed Dolls. *Journal of Child Sexual Abuse*, 5(1), 21–45. https://doi.org/10.1300/J070v05n01_02
- Strömberg, D., Awasthi, S., Bertilsson, E., Odom, S. L., Mounzer, W., & Roll-Pettersson, L. (2025). Shaping Social Eye Contact in Children With Autism Via Telehealth: A Parent-Implemented Intervention. *Behavioral Interventions*, 40(4). <https://doi.org/10.1002/bin.70044>
- United Kingdom. (1999). *Youth Justice and Criminal Evidence Act 1999*. Legislation.gov.uk. <https://www.legislation.gov.uk/ukpga/1999/23/contents>
- United Kingdom. (2014). *Children and Families Act 2014*. Legislation.gov.uk. <https://www.legislation.gov.uk/ukpga/2014/6/contents/enacted>
- UK Research and Innovation. (2025). *Equality, diversity and inclusion (EDI)*. <https://www.ukri.org/what-we-do/supporting-healthy-research-and-innovation-culture/equality-diversity-and-inclusion/>
- United Nations. (1989). *Convention on the Rights of the Child*. United Nations General Assembly. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>
- United Nations Children's Fund (UNICEF) UK. (2016). *Fairness for children: UK's Report Card 13*. <https://www.unicef.org.uk/publications/fairness-for-children-report-card-13/>
- United Nations Economic and Social Council. (2005). *Guidelines on Justice in Matters Involving Child Victims and Witnesses of Crime*. <https://www.un.org/en/ecosoc/docs/2005/resolution%202005-20.pdf>
- van der Kolk, B. A. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking Press.
- Wang, W., Chen, K., & Zhang, H. (2023). Effectiveness of Trauma-Focused Cognitive Behavioral Therapy Among Maltreated Children: A Meta-Analysis. *Research on Social Work Practice*, 33(8), 913–928. <https://doi.org/10.1177/10497315221147277>
- Yardley, L. (2008). Demonstrating validity in qualitative psychology. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 235-251). Sage.
- Zelazo, P. D., Müller, U., Frye, D., & Marcovitch, S. (2003). The development of executive function in early childhood. *Monographs of the Society for Research in Child Development*, 68(3), i–163. <https://doi.org/10.1111/j.1540-5834.2003.06803001.x>
- Ziegler, M. (2014). Stop and state your intentions! Let's not forget the ABC of test construction. *European Journal of Psychological Assessment*, 30(4), 239–242. <https://doi.org/10.1027/1015-5759/a000228>

Appendix

The Child-Centric Pretrial Justice Survey (ChPJS)

Section One: Services Offered

Q1: Discuss how you usually support children for their forensic testimonies, in relation to court and if applicable in relation to police interviews.

Q2: Outline the key things needed to be considered when supporting children for their testimonies in court. (Prompt: Explain why these are important).

Section Two: Feedback on the proposed gaming tool

D1: We aim to develop a board and/or digital game to support children in their court appearance. We are considering introducing children to the below issues through playful activities:

- The roles of the different people involved in the Justice System,
- Legal terms,
- Legal knowledge,
- The courtroom (through 3D Cardboard glasses),
- The opportunity to practice the ground rule e.g., saying I need a break,
- Practice breathing techniques and
- Taking their time.

Q3: Based on your experience what do you think it is important for us to consider when supporting children for their court appearance? Please elaborate (narrow discussion to specific aspects of the game mentioned by participant)

Q4: Any suggestions on how best to support children?

Q5: Which age groups you believe we should focus on and why? What do you think about the (refer to the different activities if the participants did not comment on them in previous answers).

Section Three: Hypothetical Consumers' Experience

Q6: What do you think the benefits of these will be and why? (Prompts: Usefulness, benefits).

Q7: What do you think the limitations of these will be and why? What can go wrong? (Prompt: Risks).

Section Four: A strategic Open-Question

Q8: Anything else to add on this proposed gaming system?