Occupational therapy and play

Practice guideline

Royal College of Occupational Therapists

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An associated document: Practice guideline supplement: Evidence tables (see Appendix 2) is available to download from the Royal College of Occupational Therapists' website.

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Contents

This guideline was developed using the processes defined within the *Practice guideline development manual* 4th ed (Royal College of Occupational Therapists [RCOT] 2020).

Readers are referred to the manual to obtain further details of specific stages within the guideline development process, available at:

www.rcot.co.uk/practice-resources/rcot-publications/downloads/practice-guideline-development-manual

The term 'parent', as used in the guideline, should be considered to be inclusive of guardians or caregivers.

Foreword

It is wonderful to see the new guideline by the Royal College of Occupational Therapists on play.

Play is an essential domain of childhood. Put very simply, a child playing is a child who is well, happy, included and participating in their community and society. A child who can play has hope – to grow, to develop, to heal, to connect with others. As the guideline states, play is a fundamental right for all children, and as occupational therapists we must take play, as a therapy outcome, seriously.

However, play is often overlooked, especially as it comes to children and young people with developmental difficulties or disabilities. Evidence from sociology and psychology has long shown that adults, including professionals, typically view disabled children as non-playing, and when we do consider disabled children's play, we tend to frame this through their impairment. We tend to focus on identifying aspects of play the child or young person is perceived to lack, and we tend to consider interventions to correct their play. In this, the notions of play are usually understood and applied by adults, framed using standards based on unarticulated views about 'normal' childhood.

The Royal College of Occupational Therapists' guideline provides all of us with an opportunity to begin to take play more seriously. It brings together evidence from within occupational therapy about what we mean and understand by play. It directs us to pay attention to play as an internal state of being and not just as an observable state of doing. This mirrors wider evidence outside occupational therapy where progress has been made in distilling the key characteristics of good quality play. According to this wider evidence, good quality play actively engages the child so that they drive the activity. According to this evidence, play feels deeply joyful, allowing a sense of discovery, and play is meaningful – it connects new experiences to what is already familiar to the child or young person. Good play is also usually iterative and often socially interactive.

The guideline reflects on potential barriers to its implementation. From a wide range of research into professional practice, including occupational therapy, we know that the everyday, routinised practice actions of frontline professionals are key to effective implementation. It will therefore require us, as therapists, to grow our professional competence in play. To deepen our understanding of the diverse literature and evidence on play – what it is, what it means for health and development, what factors affect it and what we can do to enable all children and young people to play in ways that work for them.

The present guideline focuses on research evidence within occupational therapy. Much of this is about specific diagnostic populations and specific age groups, framed within the individual model of therapy that starts with goal-setting and assessment, followed by intervention. However, much of play happens in a child's everyday life, outside occupational therapy, and much of it can be framed as preventative, universal health provision. There are opportunities for future occupational therapy-led research into play, to advance theory and evidence about what play looks likes within and across child populations, and what the effective common interventions targeted at populations could be. Moving from individual support to considering play in communities of children and young people, and examining the role of occupational therapy in enabling everyday play, for all children and young people across abilities and cultures, will surely keep us all busy for another decade!

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Foreword

Play is a primary occupation of childhood, and as an occupational therapist working with children and young people I would describe it as integral in assessing, intervening and setting therapeutic goals in everyday practice.

This comprehensive new practice guideline brings a renewed occupation-focused perspective on play – how it is defined, utilised and evaluated in occupational therapy practice and education.

This guideline both supports and challenges us to understand play and play development comprehensively, and to translate that understanding to ensure play is personally meaningful to the children and young people we serve. Understanding the impact of context and the factors that may impact how, what and when children and young people play are all emphasised, challenging us to be mindful of our own biases and assumptions to ensure our practice is accessible and impactful.

While the body of evidence informing occupational therapists' use of play is increasing, we know in real-world practice there is often a time lag between evidence publication and translation. The practical implementation guidance published here to accompany the appraised evidence, including an audit tool, is a resource that either an individual or service may find a useful starting point.

I commend these practice guidelines to occupational therapists working with children and young people at all stages of their career, to stimulate and support our evidence-based practice, evolve our practice and to inform approaches to education around play in undergraduate and post-graduate settings.

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Evelina London Children's Hospital
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Foreword

As an occupational therapist with cerebral palsy, I am honoured to write a foreword for this guideline. Having been under children's services during my childhood, I was always amazed by the variety of support my occupational therapists gave me. Carrying out my degree enabled me to recognise how much the philosophy of the whole profession aligned with my values; however, working with children is still my passion. I have done and continue to do a lot of work around critically exploring my experiences in children's services, which is why this play-focused guideline resonates with me.

The integral focus on holistic practice concerning play throughout this document particularly resonated with me. Whenever I write about my experiences, I always ensure to include my parents' perspectives and highlight family-centred practice. This document explores this so well, yet also considers a balanced view by critically exploring how adult perspectives may not specifically be focused on play that is meaningful to a child. My parents were always thinking of ways to make meaningful play more accessible for me as a child, enabling me to have fun while working on my therapeutic goals. This shift to therapeutically address play as a goal is uniquely considered within the guideline by addressing crucial factors such as motivation, freedom, autonomy, subjectivity and self-directed play. All these aspects fit together seamlessly, making future considerations so much more explicit for professionals and thus enhancing the therapeutic process.

The guideline captures cultural relevance by analysing play in its many forms to address sociocultural factors and social determinants of health. Financial and organisational barriers are also considered by asking for feedback from the diverse families occupational therapists work with, thereby exploring how this changes the parameters of practice. The ever-so-important environmental barriers and facilitators are also integrated within these concepts. A clear research process and a consistently used scoring system make this easy to interpret, enhancing accessibility for the wide target audience it appeals to. Personally, I like how disability representation through play is addressed, having seen so little representation of myself when growing up.

The use of person-centred practice to enrich therapeutic outcomes is an integral theme highlighted throughout the document. I know the more meaningful the goal was to me the more motivation I had to work on it. The guideline encompasses these critical topics so clearly by looking at play from different perspectives. I believe it will enhance all professionals' understanding of play, not just occupational therapists', and will be a vital instrument in practice for years to come.

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Introduction

The aim of this guideline is to provide evidence-based recommendations for the use of play by occupational therapists working with children aged 0–18 years in the UK. It has been developed using high-quality contemporary evidence on the occupation of play, in occupational therapy assessment, intervention and as a therapy outcome. Users of the guideline should bear in mind that much of the literature originates from the Global North, with associated influences on the understanding of the childhood occupation of play.

What makes play fun for you?
Downtime from school and being with my friends.
Josh, age 13

Underpinning the recommendations is the belief that children and young people must be part of all processes that relate to them. As part of this guideline development process, children and young people aged 4 to 17 were asked why play is important to them. Their thoughts were obtained via Guideline Development Group members and are included in this introduction.

What is play?

There are different definitions of play (Kuhaneck and Spitzer 2022). In this guideline, play is defined according to the Fourth Edition of the Occupational Therapy Practice Framework (OTPF4), as:

What makes play fun for you?
Playing with friends and taking turns to play each other's games.
Ayla, age 4

> … activities that are intrinsically motivated, internally controlled, and freely chosen and that may include the suspension of reality (e.g. fantasy; Skard and Bundy 2008), exploration, humour, risk-taking, contests, and celebrations (Eberle 2014, Sutton-Smith 2009). Play is a complex and multidimensional phenomenon that is shaped by sociocultural factors (Lynch et al 2016).
> (American Occupational Therapy Association 2020, p34)

In the context of this definition, play is an occupation a child or young person chooses to do for fun, enjoyment or amusement, following their own ideas and interests. The OTPF4 definition of play could be seen as overlapping with leisure; however, in this guideline we consider leisure as activities that occur in discretionary time (time not spent on work or self-care activities) while play might occur at any time where reality is suspended. In addition, sociocultural influences are more apparent in relation to play than to leisure.

To achieve the aim of this guideline to describe the evidence to support the use of play within occupational therapy practice, we must be clear about what we mean by participation in play. According to the International Classification of Functioning, Disability and Health (World Health Organization 2007), participation is 'involvement in a life situation' (Adolfsson et al 2011, p1232). Participation has two elements: attendance and involvement. Attendance relates to the frequency and diversity of activities, while involvement relates to the experience of taking part in the activity (for example, motivation or social connectedness) (Imms et al 2017). For children and young people to participate in play, they must both attend and be involved. Their intrinsic motivation, freedom to engage, autonomy to control the play context, freedom from external direction and ability to attend to the play process itself are all core elements that characterise play as an occupation (Ray-Kaeser and Lynch 2017).

Why is playing important?
It helps you relax.
Ebba, age 7

There are three core themes linked to play in occupational therapy interventions: play as a means to an end, play as a primary occupational outcome and play as a reward (Moore and Lynch 2018). Although this guideline emphasises the importance of play as an occupation, it is also important to recognise that play is used by occupational therapists to assess, promote performance skills or function and as a therapeutic motivator. Occupational therapists must be mindful that play activities used during assessment, as a therapeutic medium or as an intervention goal, may not be perceived as play by the child or young person. Play is subjective. Occupational therapists must consider the purpose of the play activity, and understand how the child experiences play, to ensure that our interventions are meaningful and relevant to them. Central to occupational therapy philosophy is the view that 'doing' can be therapeutic depending on the 'degree of positive meaning associated by the person(s) with the doing' (Pentland et al 2018, p11). In other words, it can be helpful to do something if the person enjoys and values it.

Why is playing important?
Playing is important as it is a way to socialise with my friends online in a way that allows freedom of expression. It is also used as a way to escape reality and its pressures by being able to immerse myself in a completely different world and story.

Euan, age 17

Play is used by occupational therapists in a variety of ways, including for learning, socialisation, therapy and for play's sake. How children play changes in line with their culture, and as skills, interests and abilities develop. How play is expressed in society is also impacted by the constantly evolving nature of play in the 21st century, with the inclusion of virtual and alternate realities. Occupational therapists must also be aware of environmental factors on children and young people's experience of play. This includes physical environments such as homes and outdoor locations, as well as cultural, educational and therapeutic environments. The social environment may also be a facilitator or barrier to play participation. Occupational therapists need to consider the child's parents or carers, educators and the influence of other children on a child's participation in play, as well as the influence of the 'therapist in context' in therapeutic situations (Pentland et al 2018).

Why is playing important?
So friends get to play together.

Arlo, age 4

Play is intrinsically motivated and self-directed. Interactions and activities may not appear playful to an observer but for a child are a playful experience (Graham et al 2018). Occupational therapists should recognise that children may play in ways that appear different or restricted. For example, children with disabilities may require others to facilitate play activities and their play may include adapted activities. Occupational therapists also have an obligation to promote personally meaningful play for neurodivergent children (Dallman et al 2022).

In summary, play is influenced by the characteristics of the player and the environment (social/cultural/educational/home/therapeutic). While play can be used at various stages of the occupational therapy process, the guideline reminds occupational therapists of the importance of person-led occupational engagement.

How to use this guideline

As the first occupation-focused guideline produced by RCOT under its new guideline development process, this practice guideline represents a change in approach. There is a fresh emphasis on the potential impact of occupational therapy for children and young people. It is expected that this guideline will be a catalyst for change within the profession and will contribute to the consolidation of occupational therapy's professional remit in relation to play within multidisciplinary contexts.

As a primary resource for occupational therapists who work with children and young people, this guideline can support therapists in the evidence-based use of play in occupational therapy assessment and intervention, and to evaluate play participation as a meaningful goal or outcome for the child or young person. It is beyond the scope of this guideline to specify models for occupational therapy services or to provide recommendations for specific assessment tools or interventions.

In addition to the recommendations, users are strongly advised to study Section 10 to understand the guideline methodology, together with the evidence summaries in Section 5 and evidence tables (Appendix 2), to become fully aware of the outcome of the literature search and limitations of the available evidence. This includes the lack of research found specifically investigating play for young people aged over 11. The articles that were found also included younger children, so no syntheses could be developed for those aged over 11 and no recommendations could be developed specifically for this age group.

This guideline may be used to:

- support evidence-based occupational therapy practice
- support occupational therapists' decision-making and clinical reasoning
- audit current practice and bring about service quality improvements
- identify continuing professional development needs
- advocate for additional resources and build a service business case
- identify gaps in the research
- support funding bids for further research to address the research gaps.

Information about how to implement the guideline and an audit tool to evaluate current practice along with links to resources can be found in Section 7.

Key recommendations for implementation

The aim of this guideline is to provide evidence-based recommendations for the use of play by occupational therapists working with children aged 0–18 years. These recommendations support occupational therapists in the way they recognise and encourage play as an occupation and use play as a tool within their practice throughout the occupational therapy process.

The guideline supports occupational therapists' decision-making and professional reasoning. Occupational therapists will need to consider the recommendations in the context of their own practice. Because the guideline is based on evidence, it cannot cover all aspects of occupational therapy and play.

Recommendations should not be taken in isolation and must be considered with the contextual information provided, together with the details on the strength and quality of the recommendations and in line with the principles of evidence-based practice. The recommendations and a summary of the supporting evidence can be found in Section 5, with further details about the evidence in Appendix 2.

The recommendations are graded based on the Grading of Recommendations Assessment, Development and Evaluation (GRADE) process (GRADE Working Group 2004) as described in RCOT's *Practice guideline development manual* 4th edition (RCOT 2020). All recommendations have been scored as a 1 (strong) or 2 (conditional) and given an A–C grade based on the highest level evidence used to underpin it. The quality of the supporting evidence was graded individually on a scale of A (high) to D (very low). It is strongly advised that readers review Section 10 to understand the guideline methodology.

The recommendations for occupational therapy, based on the best available evidence to date, are set out in three categories broadly aligned with the occupational therapy process:

- goals and outcomes
- assessment
- intervention.

Recommendations by category

The overall quality of evidence grade reflects the robustness or type of research supporting a recommendation, but not necessarily the recommendation's significance to occupational therapy practice.

For all recommendations, benefits appear to outweigh the risks for the majority of the target group; therefore most people who access services should be offered this intervention or action.

Goals and outcomes recommendations

Recommendation and supporting evidence	Strength
1. It is recommended that play participation is recognised as an important goal and outcome of occupational therapy for children and young people. (Schaaf et al 2018 [A]; Kuhaneck et al 2020 [A]; Ramugondo et al 2018 [B]; Jasem et al 2020 [B]; Moore and Lynch 2018 [C])	1A
2. It is recommended that occupational therapists elicit the child or young person's perspective when play participation is identified as a therapy goal or outcome. (Rousseau-Harrison and Rochette 2013 [A])	1A
3. It is recommended that occupational therapists consider the influence of adults' perspectives regarding children and young people's play participation when setting and evaluating intervention goals. (Engelen et al 2013 [A]; Crawford et al 2014 [B]; Sterman et al 2016 [B]; Jasem and Delport 2019 [B]; Sterman et al 2019 [B]; Coussens et al 2020 [B]; Graham et al 2015 [C]; Román-Oyola et al 2018 [C])	1A
4. It is recommended that occupational therapists consider the influence of the social context of play on children and young people's play participation when setting and evaluating intervention goals. (Wilkes-Gillan et al 2016 [A]; Kent et al 2021 [A]; Moore and Lynch 2015 [B]; Stagnitti et al 2012 [C])	1A

Assessment recommendations

Recommendation and supporting evidence	Strength
5. If using a standardised assessment of play, it is recommended that occupational therapists consider the psychometric properties of the measure and their suitability to the clinical presentation and cultural context of the child. (Romli and Wan Yunus 2020 [A])	1A
6. When assessing participation in play of 0–5 year olds, it is recommended that occupational therapists consider both the child's attendance (frequency of taking part) as well as the child's involvement (experience of taking part) in play. (Mobbs et al 2021 [B])	1B

7. When assessing play, it is recommended that occupational therapists consider the impact of the physical environment (wheelchair use, play items and equipment) and the social environment (other people) on participation in play. (Engelen et al 2013 [A]; Rousseau-Harrison and Rochette 2013 [A]; Guerette et al 2013 [C]; Sonday and Gretschel 2016 [C])	1A

Intervention recommendations

Interventions to support participation in play	
Recommendation and supporting evidence	Strength
8. For children with **attention deficit hyperactivity disorder** (ADHD), it is recommended that occupational therapists consider structured interventions with peer-to-peer interactions to improve social play skills where social play is the goal of therapy. (Wilkes-Gillan et al 2016 [A])	1A
9. For children with **autism spectrum disorder** (ASD), it is recommended that interventions using imitation and/or modelling interventions can benefit play. (Kuhaneck et al 2020 [A])	1A
Interventions that use play to cope with life situations	
10. For **hospitalised children**, it is recommended that occupational therapists promote play opportunities to reduce the stress of being in hospital. (Potasz et al 2013 [A]; Mohammadi et al 2021 [A])	1A
Interventions that use play to promote performance skills	
11. For children with **intellectual impairments**, **developmental delays and learning disabilities**, it is recommended that occupational therapists promote positive mental health outcomes through activity-based interventions including play activities. (Arbesman et al 2013 [A])	1A
12. For children with a **specific learning difficulty**, it is recommended that occupational therapists consider group therapy-led peer play activities including practice play, symbolic play and games with rules to improve executive function skills and behaviour regulation. (Karamali Esmaili et al 2019 [A])	1A

13. For children and young people with, and at risk of, **poor mental health,** it is recommended that occupational therapists use play-based interventions, particularly to increase social participation. (Cahill et al 2020 [A])	1A
14. It is recommended that occupational therapists consider the use of gaming technology, which is recognised as a meaningful occupation for children and young people, across a range of settings to develop performance skills such as motor skills, perception of motor ability and sensorimotor functioning. (Wuang et al 2011 [A]; Salem et al 2012 [A]; Hammond et al 2014 [A]; Bonney et al 2017 [A]; Axford et al 2018 [C])	1A

Best practice suggestion

Where the evidence is still emerging and so the risks and benefits are more closely balanced, or there is uncertainty in the values and preferences of people who are likely to access services, a best practice suggestion rather than a recommendation for practice can be developed. Suggestions are graded as 2 (conditional).

Best practice suggestion	
Suggestion and supporting evidence	**Strength**
1. To enable play for children with a **motor impairment,** it is suggested that potentially modifiable factors across body function/structure, activity, environmental and personal factors are observed during assessment. (Kolehmainen et al 2015 [B]; Stanton-Chapman et al 2018 [C])	2B

It is recommended that occupational therapists use the audit tool (see Section 7) to audit their practice against these recommendations and best practice suggestion.

1 Background

1.1 Practice requirement for the guideline

This guideline is intended to support occupational therapists who work with children and young people aged 0–18 years.

1.2 Topic identification process

In 2019, RCOT identified that 'play' was an occupation with sufficient evidence for a guideline despite no UK-focused guideline existing for occupational therapists using play in their practice. A group of RCOT members, public contributors and a Royal College of Paediatric and Children's Health (RCPCH) representative developed the guideline scope in consultation with stakeholders, occupational therapists and children and young people, confirming the timeliness and need for a guideline on play and occupational therapy.

The National Institute for Health and Care Excellence (NICE) has accredited the process used by RCOT to produce its practice guidelines. Accreditation is valid until 31 December 2023 and is applicable to guidance produced using the processes described in the *Practice guideline development manual* 4th ed (RCOT 2020).

1.3 Context of service delivery

The United Nations Convention on the Rights of the Child Article 31 states that every child has the right to relax, play and take part in a wide range of cultural and artistic activities (UNICEF 1989). Across the nations of the UK, play policies and strategies have outlined the importance of play for all children (Welsh Assembly Government 2002, Department for Children, Schools and Families 2008, Northern Ireland Executive 2009, Scottish Government 2013). These country-specific policies were the first of their kind in the world, demonstrating the value of play.

Additionally, NICE and other government bodies have published guidelines that highlight the importance of play in childhood.

- NICE guideline on ASD (2013) states that psychosocial interventions should consider play-based strategies and include techniques to expand interactive play.
- NICE guideline on social and emotional wellbeing (2012) in the early years states children's readiness for school is achieved through processes of play as well as interaction with parents.
- Active play for all children is promoted in the *UK Chief Medical Officers' physical activity guidelines* (2019) and in the NICE guideline *Physical activity for children and young people* (2009).

Other practice guidelines also support the use of play in assessment and interventions for children and young people with disabilities (RCPCH 2017, Blank et al 2019, Cahill and Beisbier 2020, Jackman et al 2022). RCOT's professional standards (2021a) encourage the use of occupation-focused, person-centred practice that should also be at the core of every occupational therapist's service provision. Building on that, family-centred practice should

underpin occupational therapy provision with children and young people. Family-centred practice shows that children and young people are best served through the context of their family (McCarthy and Guerin 2022).

Play can take place in any of the child or young person's everyday environments: home, community, playgroup, school or college. Local UK communities are expected to provide safe outdoor play resources which are accessible (NICE 2009). The child's cultural, social and family background, and their attitudes to the benefits of play, will also influence the play opportunities that the child experiences.

2 The occupational therapy role

The primary and unique goal of occupational therapy is to enable participation in meaningful occupations, and play is a primary occupation of childhood (World Federation of Occupational Therapists 2012, RCOT 2021a). Occupational therapists promote and enable children and young people to participate in play for its own sake as a meaningful occupation and to facilitate development and learning. Occupational therapists work to ensure there is occupational balance between activities of daily living, instrumental activities of daily living, health management, rest and sleep, education, work, social participation, leisure and play (American Occupational Therapy Association 2020).

Children's play develops and changes over time; in the early years sensorimotor and exploratory play predominate, with functional, constructive play and social play developing over the years. Children learn to play with others for longer periods and in larger groups and develop the ability to participate in games with increasingly complex rules. Occupational therapists need to understand the development of play occupations that children and young people typically engage in across developmental stages to facilitate appropriate play development and opportunities.

Occupational therapists work with parents, carers, teachers and others to provide guidance on techniques and strategies that enable the co-occupation of play. Parents are helped to interact with their children and respond to playful cues. Occupational therapists enable children and young people to explore and participate in a wide range of play activities. They may work directly with children and young people and with peers and family members to promote and develop the child and young person's play experiences and skills.

At times, the role of occupational therapists in play is targeted and they work distinctly from other multidisciplinary colleagues. More often, occupational therapists work in partnership with multidisciplinary colleagues and family members to meet a shared goal of participation in play.

3 Objective of the guideline

The guideline objective is:

To describe the high-quality, contemporary evidence on the occupation of play and the use of play in occupational therapy assessment, intervention and as an outcome of therapy, to inform occupational therapy practice for those working with 0–18 year olds in the UK.

This guideline should be used with the current versions of the following professional practice documents (knowledge of and adherence to these standards is assumed):

- *Standards of conduct, performance and ethics* (Health and Care Professions Council [HCPC] 2016).
- *Standards of proficiency – occupational therapists* (HCPC 2013, revised version available September 2023).
- *Professional standards for occupational therapy practice, conduct and ethics* (RCOT 2021a).

Occupational therapists must only 'provide a service that is within [their] professional competence, appropriate to the needs of those who access the service, and within the range of activities defined by [their] professional role' (RCOT 2021a, p12). This guideline should be used with the therapist's professional expertise and the recognition of children and families' needs. The therapist is responsible for the interpretation of the recommendations within their service context.

4 Guideline scope

4.1 Clinical question

The key question identified in the scope for this guideline was:

What is the evidence for the use of play in occupational therapy during assessment, intervention and as an outcome with 0–18 year olds?

This guideline looks at all aspects of play – for example, play being used as an assessment, intervention or outcome within occupational therapy. In other words, it is interested in play as both a means and an end. While play as an occupation is a lifelong activity, the guideline will focus on play for those aged 0–18 years, as this is when play as a fundamental human occupation is more prominent and provides a clear focus for the guideline.

For the purposes of this guideline, play is defined as:

> … activities that are intrinsically motivated, internally controlled, and freely chosen and that may include suspension of reality (e.g., fantasy; Skard and Bundy 2008), exploration, humour, risk taking, contests, and celebrations (Eberle 2014, Sutton-Smith 2009). Play is a complex and multidimensional phenomenon that is shaped by sociocultural factors (Lynch et al 2016).
>
> (American Occupational Therapy Association 2020, p34)

4.1.1 Key outcome

The key outcome was to develop a guideline based on the available literature related to occupational therapy that focused on the occupation of play to support occupational therapists who work with children and young people aged 0–18 years in the UK.

4.1.2 Key areas for inclusion in the guideline scope

Key areas for inclusion are:

- research conducted with children or young people aged 18 or younger
- research on play as an intervention, outcome, or assessment
- research related to occupational therapy
- (top-up search only) research that used a systematic review or randomised controlled trial methodology.

4.1.3 Key areas for exclusion from the guideline scope

The following areas are excluded from the scope of this guideline:

- play not in conjunction with occupational therapy
- research conducted exclusively among participants over 18 years of age
- research conducted exclusively on leisure

- research conducted prior to 2011
- research not published in English
- grey literature.

4.2 Target population

The target population is children and young people aged 0–18 years. While play as an occupation is a lifelong activity, the guideline will focus on play for those aged 0–18 years. This is when play as a fundamental occupation is most prominent.

4.3 Target audience

The principal audience for this guideline is occupational therapists working with children and young people aged 0–18 years in the UK.

This guideline is also relevant to a wider audience:

- children and young people, and their parents and carers, including grandparents
- occupational therapists working across all age groups
- other health and social care professionals who incorporate play into their practice, such as play specialists, play therapists, music therapists, paediatricians, neurologists, child psychologists, educational psychologists, psychiatrists, child and adolescent mental health services practitioners, speech and language therapists, physiotherapists, residential childcare officers, parent coaches, social workers, youth workers and health visitors and any associated professional body
- service commissioners and providers
- public health bodies
- educators and education providers, including those working in schools and nurseries, and playworkers
- youth organisations and charity and voluntary organisations that work with children and young people
- young offender centres
- national and local policymakers, particularly in health and the built environment
- those interested in social inequalities
- occupational therapy and other allied health and social care education providers
- commercial businesses who encourage children to engage in play (for example, by selling toys or through gaming).

5 Recommendations and supporting evidence

The recommendations are underpinned by the evidence available to date that supports the delivery of occupational therapy for children and young people. Details of the guideline methodology, including the development process and the literature search strategy, are set out in Sections 9 and 10.

This guideline focuses on the broad stages of a structured occupational therapy process. As such, recommendations have been categorised under the following headings:

- goals and outcomes
- assessment
- intervention.

While the recommendations have been set out within these categories, it should be noted that there are overlaps. Individual recommendations must not be considered in isolation, but in the wider context of the child and their family and occupational therapy practice.

The strength of the recommendations is identified via a scoring of 1 (strong) or 2 (conditional) based on the balance of benefits and risks in the supporting evidence. A recommendation grade considers the consistency of the individual items of evidence used to support the recommendation. If all evidence supports a similar conclusion, the highest graded evidence is assigned to the recommendation. If the evidence is mixed, the evidence with the lowest grade is assigned. The quality of the supporting evidence was graded individually during appraisal on a scale of A (high quality) to D (very low quality). See Section 10.4 for more detail.

All recommendations were agreed by the Guideline Development Group as being strong; that is, most children and young people should be offered the intervention or action stated. Additional details on individual studies (for example, on study design, methodological limitations, recruitment numbers and statistical significance) can be accessed in the evidence tables (Appendix 2).

Recommendations have been written based on the appraised evidence and will not cover the full scope of paediatric occupational therapy practice.

Very little evidence was found on children and young people aged 11 and older, and those articles that were found pertaining to this age group also included younger children. As such, no recommendations could be developed specifically for this age group.

Intended outcomes, generalisability and social determinants of health associated with the recommendations are outlined in Section 5.5. Potential barriers to implementation are discussed in Section 7.1.

5.1 Goals and outcomes recommendations

5.1.1 Introduction

Occupational therapists recognise play as a key occupation for children and young people, yet play participation is rarely identified as the goal or outcome of intervention (Lynch and Moore 2016). When it is, tools used to capture the outcome of play-related interventions typically evaluate how 'well' a child or young person plays – for example, the diversity of play activities, their intensity, duration and who the child plays with – rather than the child or young person's enjoyment, motivation or autonomy to choose what, how and when to play (American Occupational Therapy Association 2020). Evidence regarding the outcomes of play interventions is therefore limited by the standardised, observation-based tools used in research, which may not capture the play goals or outcomes that are meaningful to children and young people. Occupational therapists are reminded that intervention plans should be based on the occupational performance needs, choices and aspirations of people who access their service (RCOT 2021a). The perspectives of children and young people and the impact of interventions on their experience of play (Watts et al 2014, Graham et al 2018, Graham et al 2019) should therefore be captured alongside objective measures of play performance if these are used.

Occupational therapy play goals and outcomes can also be considered from the perspective of adults and peers. Adults (including parents) may have predetermined ideas about what play looks like and the ability of children and young people to play depending on their circumstances (Graham et al 2014, Angelin et al 2018). A goal and outcome of occupational therapy therefore may be to change parents' and adults' perceptions about the value of participation in play, what play looks like and their role in enabling play participation. Likewise, there is some evidence that an occupational therapy goal may focus on changing the social context of play (including peer perceptions) to enable play participation.

Goals and outcomes recommendations	
Recommendation and supporting evidence	**Strength**
1. It is recommended that play participation is recognised as an important goal and outcome of occupational therapy for children and young people. (Schaaf et al 2018 [A]; Kuhaneck et al 2020 [A]; Ramugondo et al 2018 [B]; Jasem et al 2020 [B]; Moore and Lynch 2018 [C])	1A
2. It is recommended that occupational therapists elicit the child or young person's perspective when play participation is identified as a therapy goal or outcome. (Rousseau-Harrison and Rochette 2013 [A])	1A
3. It is recommended that occupational therapists consider the influence of adults' perspectives regarding children and young people's play participation when setting and evaluating intervention goals. (Engelen 2013 [A]; Crawford et al 2014 [B]; Sterman et al 2016 [B]; Jasem and Delport 2019 [B]; Sterman et al 2019 [B]; Coussens et al 2020 [B]; Graham et al 2015 [C]; Román-Oyola et al 2018 [C])	1A

4. It is recommended that occupational therapists consider the influence of the social context of play on children and young people's play participation when setting and evaluating intervention goals. (Wilkes-Gillan et al 2016 [A]; Kent et al 2021 [A]; Moore and Lynch 2015 [B]; Stagnitti et al 2012 [C])	1A

5.1.2 Recommendation 1: Participation in play as an occupational therapy goal and outcome

Schaaf et al (2018) conducted a systematic review examining the efficacy of occupational therapy using Ayres Sensory Integration to support functioning and participation. Five studies were included. Outcome measures included the Revised Knox Preschool Play Scale (one study) and Goal Attainment (two studies). The authors conclude that the best evidence is for outcomes that focus on areas of functioning and participation that are meaningful to parents and families, including play.

Kuhaneck et al (2020) conducted a systematic review examining the efficacy of strategies used in occupational therapy to improve play in autistic children and young people aged 3–18 years. Twenty studies were included. The review shows that improving play participation is a primary concern for occupational therapists working with autistic children and young people, and that the outcome of occupational therapy interventions can be evaluated through children's participation, complexity, creativity and novelty in play.

Ramugondo et al (2018) conducted a randomised controlled trial evaluating the feasibility and preliminary effectiveness of a play-informed, carer-implemented, home-based intervention for improving playfulness of children with HIV and progressive HIV encephalopathy living in challenging socio-economic areas in South Africa. The intervention comprised 10 monthly sessions facilitated by an occupational therapist and involved group discussions with carers plus periods of experiential play. The study highlights the importance of addressing play in children at risk of occupational deprivation because they are unable to engage easily in play owing to their health and/or social circumstances.

Jasem et al (2020) carried out a scoping review exploring play in children with life-threatening and life-limiting conditions. Thirteen articles were included. Findings demonstrate the importance of being able to play, especially when in hospital. They also indicate that children's play is influenced by their health conditions and the impact of access to play equipment, spaces and playmates on play participation. The authors highlight the importance of promoting participation in play as a therapy goal for children who are hospitalised.

Moore and Lynch (2018) carried out a survey exploring 65 paediatric occupational therapists' perspectives on play within their practice. While most used play as a means to an end, as a tool in home/school programmes or as a reward, very few focused on play as a therapy outcome. The authors highlight the importance of occupational therapists recognising play as a meaningful occupation and evaluating play participation as a therapy outcome.

Evidence overview

A number of studies highlight the importance of enabling play participation as a therapy goal. While the focus and findings of studies vary, using play as an outcome or goal is a meaningful and useful focus for occupational therapy for children and young people. The evidence supporting this recommendation consists of two systematic reviews, one randomised controlled trial, one scoping review and one qualitative study, ranging from high to low levels of evidence.

5.1.3 Recommendation 2: Eliciting the child or young person's perspective when play participation is identified as a therapy outcome

Rousseau-Harrison and Rochette (2013) conducted a systematic review to explore the impacts of wheelchair acquisition on children's social participation (including play), personal factors and social environment. The authors express surprise, given that play is a central activity in children's lives, that only one of the nine included studies examined the perceptions and experiences of children with physical disabilities on the impact of the wheelchair on their play. The results highlight the importance of eliciting children's views when evaluating the impact of wheelchair acquisition on their participation in daily activities including play.

Evidence overview

The evidence supporting this recommendation consists of one high-level systematic review. Occupational therapists should include children's perspectives when evaluating the outcome of interventions focusing on play participation, rather than relying on objective measures of play performance alone.

5.1.4 Recommendation 3: Considering adults' perspectives on play when setting and evaluating intervention goals

Engelen et al (2013) carried out a clustered, randomised controlled trial exploring the effects of a school-based intervention for increasing physical activity while simultaneously helping adults reconsider views that free play is risky. A total of 226 typically developing Australian children aged 5–7 years took part in a 13-week intervention that included introducing loose materials into the playground. A teacher–parent intervention group helped adults reconsider their views of free play as risky, which increased children's physical activity at break times.

Crawford et al (2014) conducted an integrative review examining strategies for inclusion in play among children with physical disabilities in childcare settings. Nine studies were included and two main strategies were identified: the role of the adult facilitator and environmental factors. Occupational therapists are encouraged to include the education of childcare providers about the needs of children with disabilities, the importance of their engagement in play and strategies to facilitate inclusion as a therapy goal. The review recommends evaluating the effectiveness of such programmes on children's inclusion in play.

Sterman et al (2016) carried out a systematic review of qualitative articles examining outdoor play decisions by carers of children with disabilities. Eleven studies were included in the analysis. Multiple factors affecting decision-making of carers (mainly parents or teachers) regarding outdoor play were identified and presented within an ecocultural framework. The authors conclude that children's right to participate in outdoor play could be championed by facilitating collaboration between and within the layers of the ecocultural model that they present.

Jasem and Delport (2019) conducted a qualitative study with eight mothers of children with ADHD in Kuwait, exploring parents' perspectives on their children's play preferences, the impact of play on ADHD symptoms and the strategies used to regulate their child's ADHD symptoms. The authors conclude that professionals need to support both children and their mothers, enabling mothers to use strategies to support their child's play.

Sterman et al (2019) adopted a multiple-perspective case study approach to understand outdoor play decision-making for children with disabilities from the perspectives of local government and families of primary school-aged children with disabilities in Australia. The authors conclude that occupational therapists should engage with parents, carers and local government representatives to ensure the needs of families of disabled children are understood and to enable increased choice and participation by disabled children in outdoor play.

Coussens et al (2019) carried out a systematic scoping review, synthesising peer-reviewed literature examining barriers and facilitators to participation (including play participation) from the perspective of parents of children younger than 6 years with ADHD, ASD and/or developmental coordination disorder (DCD). Thirteen articles were included. Parents reported that limitations in feeding or toileting hindered children's participation in leisure and play activities. Parents experienced more efficacy and satisfaction regarding their child's participation when interventions were embedded in family routines and settings. Parents highly valued training that facilitated their skills in improving communication, play and behavioural outcomes.

Graham et al (2015) carried out in-depth, semi-structured interviews with parents of seven children with cerebral palsy aged 3 months to 9 years. The research explored parents' understanding of play and how play was used as a therapeutic tool and in home programmes. Four themes emerged: 'typical play', 'burden of play', 'expanding the concept of play' and 'therapy and play'. With 'typical play', parents discussed how play was the primary occupation of the child and that they played in similar ways to typically developing children. In 'burden of play', parents noted how they needed to facilitate and engage their child's play. For many this stemmed from their child's physical disability and inability to manipulate toys. 'Expanding the concept of play' emerged from parents noting how their child participated in play vicariously and in play through communication. Finally, some parents saw therapy as a form of play ('therapy and play'). The study highlights enabling parents' understanding of facilitating play for play's sake as an appropriate therapy goal.

Román-Oyola et al (2018) carried out a qualitative study exploring the perspectives of parents of autistic children regarding play experiences and self-efficacy during play encounters. The authors reported differences between mothers and fathers in their motivation for playing with their child, with mothers motivated to play to promote children's progress and fathers motivated to play for emotional connectivity. Promoting parental self-efficacy by increasing parents' understanding of play and playfulness is identified as an appropriate occupational therapy goal.

Evidence overview

Eight studies demonstrate that including adults' perspectives when setting goals and evaluating the outcome of play interventions provides valuable information about factors affecting play participation. The evidence supporting this recommendation consists of one high-level randomised controlled trial, five moderate-level papers and two low-level qualitative studies.

5.1.5 Recommendation 4: Considering the social context of play when setting and evaluating intervention goals

Wilkes-Gillan et al (2016) conducted a high-quality randomised controlled trial examining the effectiveness of a seven-week parent-delivered play-based intervention to improve the peer-to-peer play skills of children with ADHD. The Test of Playfulness was the primary outcome measure. Children's play skills increased significantly from pre to post-intervention and from pre-intervention to one-month follow-up. The Test of Playfulness social items improved significantly for children with ADHD and their peers from pre to post-intervention and from pre-intervention to one-month follow-up. This study shows the value of considering changes in social context of play provided by peers for children with ADHD as an intervention goal and of evaluating the impact of those changes as a therapy outcome.

Kent et al (2021) conducted a randomised controlled trial examining the effectiveness of a peer-mediated intervention to improve play in autistic children. The intervention comprised weekly one-hour clinic intervention sessions for 10 weeks, plus a home play session facilitated by the parents of the child between clinic sessions. Follow-up clinic and home assessments were conducted three months after completion of the intervention. Primary outcome measures were the Test of Playfulness, Home and Community Social Behaviour Scales, Parenting Relationship Questionnaire and the School Social Behaviour Scales (completed by a teacher). Results showed a significant moderate intervention effect from pre to post-intervention ($p<0.016$), which was maintained at three months and was generalised to the home environment. This study demonstrates that addressing the social context in which autistic children play is an appropriate therapy goal, and that evaluating changes in the social context is a useful way to measure therapy outcomes.

Moore and Lynch (2015) carried out a scoping review exploring the accessibility and usability of playground environments for children aged under 12 years. Fourteen studies were included, with physical, social and political factors all found to have an impact on children's play participation. The authors recommend occupational therapists shift their focus from individualised interventions, using their knowledge and skills to influence the planning, design and provision of playground environments with the goal of enabling more children and young people to participate in play. The outcome of this approach would be determined by the inclusion of children of all abilities in playground play.

Stagnitti et al (2012) conducted a cohort study investigating changes in the relationship between play, language and social skills of children aged 5–8 years before and after taking part in the Learn to Play intervention programme with other disabled peers. Participants were 19 children with additional needs, including 10 with autism. The intervention was a six-month, child-led, play-based group intervention to develop self-initiated pretend play. Data was collected at baseline and after six months of intervention. Outcome measures were the Child-Initiated Pretend Play Assessment, the Penn Interactive Peer Play Scale and the Preschool Language Scale. Results indicated that the Learn to Play programme was associated with increases in children's social interaction, decreases in children's social disconnection and increases in language over a six-month period. This study shows the value of addressing the social context of play provided by peers as an intervention goal and evaluating changes in the social context as an intervention outcome alongside objective measures of play performance.

Evidence overview
A number of studies demonstrated the importance of addressing and assessing the impact of changes to the context in which play takes place as therapy goals and outcomes. The focus of contextual changes varies between studies and the level of evidence ranges from high to low. The evidence supporting this recommendation includes two high, one moderate and one low-level study.

5.2 Assessment recommendations

5.2.1 Introduction

Assessment is fundamental to effective occupational therapy. It underpins all subsequent decisions including agreeing individual goals and selecting appropriate interventions. In paediatric occupational therapy in particular it is essential to assess play, as play is a key area of childhood occupation (Tanta and Knox 2015).

There are many norm-referenced assessment measures that purport to assess children and their ability to engage in play. In some cases, these measures capture play skills and the component skills that facilitate play – for example, motor skills, communication skills and adult interactions. In other cases, participation in play as an occupation is the focus. Measures of participation in play most often capture how often a child plays, using frequency measures. Critiquing individual play assessments is outside the scope of this guideline. Other papers that undertake a review of play assessments (for example, Phillips et al 2013) are available.

Assessment recommendations	
Recommendation and supporting evidence	**Strength**
5. If using a standardised assessment of play, it is recommended that occupational therapists consider the psychometric properties of the measure and their suitability to the clinical presentation and cultural context of the child. (Romli and Wan Yunus 2020 [A])	1A
6. When assessing participation in play of 0–5 year olds, it is recommended that occupational therapists consider both the child's attendance (frequency of taking part) as well as the child's involvement (experience of taking part) in play. (Mobbs et al 2021 [B])	1B
7. When assessing play, it is recommended that occupational therapists consider the impact of the physical environment (wheelchair use, play items and equipment) and the social environment (other people) on participation in play. (Engelen et al 2013 [A]; Rousseau-Harrison and Rochette 2013 [A]; Guerette et al 2013 [C]; Sonday and Gretschel 2016 [C])	1A

5.2.2 Recommendation 5: Psychometric properties and clinical and cultural context

Romli and Wan Yunus (2020) conducted a systematic review of play instruments to identify which are relevant to occupational therapy and to examine their psychometric properties. The review included 30 studies mostly from Global North countries. The studies underwent methodological quality assessment, and the psychometric properties of each instrument was assessed using a checklist to extract the clinical utility of each instrument. In total, eight play instruments were examined, and the authors found that most of these focused on extrinsic elements such as developmental elements, behaviour and attitude and skills performance, and focused on pre-school and school-aged children.

The review identified that there are several play assessments available for occupational therapists and the development of assessments is constantly evolving and improving. The authors conclude that good clinical reasoning should be exercised by occupational therapists when selecting a play instrument to use in practice, considering several aspects such as the person's needs, support and condition.

Evidence summary

The study demonstrates that exercising good clinical reasoning in the selection of play assessment instruments and considering each child's individual context are equally important in the assessment of play. This recommendation is supported by one high-level systematic review.

5.2.3 Recommendation 6: Attendance and involvement of the child

Mobbs et al (2021) conducted a systematic review of participation measures for infants and toddlers aged from birth to 23 months. The review aimed to identify and evaluate the psychometric properties of participation measures for this age group, and four measures were found that met their inclusion criteria and methodological assessment of quality and validity. The COnsensus-based Standards for selection of health Measurement INstruments (COSMIN) checklist was used to examine the psychometric quality of the measures.

Each of the measures measured 'attendance' and three of the four also measured 'involvement'. The authors defined 'attendance' and 'involvement' according to the Family of Participation Related Constructs (Imms et al 2017), where they are described as the two key elements of participation. '"Attendance" pertains to the number of activities or frequency of taking part in activities and "involvement" pertains to the "in the moment" experience of participation' (Imms et al 2017, p33).

The review identified that the Child Engagement in Daily Life measure had the best reliability and validity for children aged 18 months to five years and the Daily Activities of Infants Scale had the best validity for infants under 12 months of age, but its use as a participation measure was underresearched. The authors conclude that further research is required to explore infant and toddler participation, including participation in play, helping to describe attendance and involvement.

Evidence summary

The study demonstrates that the definition of participation used and the elements of attendance and involvement are important considerations in the assessment and selection of measures of participation in infants and toddlers. This recommendation is supported by one moderate-level systematic review.

5.2.4 Recommendation 7: Impact of physical and social environments

Engelen et al (2013) conducted a cluster randomised controlled trial of 221 children aged 5–7 years from 12 Australian primary schools. The study aimed to explore the effects of a school-based play intervention for increasing children's physical activity. The 13-week intervention comprised altering the school playground by introducing loose materials and a teacher–parent intervention exploring perceptions of risk associated with children's free play. Schools were randomly allocated to intervention or control conditions. The outcome measures were total accelerometer counts and moderate–vigorous physical activity during break times.

The authors identify that children in the intervention group had a small but significant increase on total counts and minutes of moderate–vigorous physical activity ($p<0.006$) and a decrease in sedentary activity ($p<0.01$) during break times. The authors conclude that capturing children's intrinsic motivations to play while simultaneously helping adults reconsider views of free play as risky increased physical activity during break times. In one intervention school, children retested after two years were found to have maintained the gains in increased physical activity.

Rousseau-Harrison and Rochette (2013) conducted a systematic review to explore the impacts of wheelchair acquisition on children's social participation, personal factors and social environment. The review included studies of children from birth to 12 years of age where the intervention was the acquisition of a powered wheelchair. In total, nine studies were reviewed.

While most of the studies analysed observed the children's perceptions, the collated results of the studies showed a trend towards improved participation in mobility, play, interpersonal relationships and personal care. The review identified that data regarding the effect on the development of cognitive functions was contradictory. However, for the social environment, the authors report that a positive change in parents' attitude was also observed, along with their own social participation after their child tried a powered wheelchair. The authors propose that the results support therapists to suggest mobility options to children with the appropriate profile.

Guerette et al (2013) conducted a cohort study of 23 children aged 18 months to 6 years who either had cerebral palsy or an orthopaedic disability severely limiting their locomotion. The study aimed to document objective and subjective evidence on the impact of providing early powered mobility (wheelchair) on children's social skills, verbal and mobility interactions and play. Data on social skills using the Adaptive Social Behaviour Inventory was collected pre and post-delivery of a wheelchair and follow-up data was collected six months later. The data collected also included behaviour scales, frequency of mobility play activities, quality of play and parents' perceptions of their child's social skills.

The results of the study indicated an increase in mobility activities in the children during free play and improvement in the quality of outdoor play ($p<0.04$). Parents of younger children perceived their child's social skills more positively after receiving a wheelchair and across younger and older children no negative changes to social skills were found. While no difference was indicated in the children's interaction with toys or objects, nor in changes in verbal interactions during indoor or outdoor free play ($p<0.26$, $p<0.89$, respectively), this study supports the potential positive impact of early powered mobility.

Sonday and Gretschel (2016) explored the way recently acquired powered mobility impacted on exploratory play of two children with significant motor impairments based on perspectives obtained from parent interviews. Results revealed two themes. The theme 'Opportunity to play' illustrated how powered mobility gave the child new opportunities to play, including less stationary play and more self-directed play than they had accessed previously. The theme 'My child was transformed' illustrated how the powered wheelchair enabled the child to become more autonomous and allowed different aspects of their personality to come through.

Evidence summary

The four studies demonstrate the importance of the physical environment (including wheelchair provision/access, play items and equipment), which provides new opportunities for children to play, and the social environment (other people), which may impact on children's participation in play. This recommendation is supported by one high-level randomised controlled trial, one high-level systematic review, one low-level qualitative study and one low-level cohort study.

5.3 Intervention recommendations

5.3.1 Introduction

In the process of translating research evidence into clinical practice, it is vital that occupational therapists consider the contextual differences between controlled research environments and real-world clinical contexts. The generation of many forms of empirical evidence depends on intervention delivery following structured protocols and process. The translation of this evidence during intervention is significantly informed by the complexity of the occupational therapist's role (Pentland et al 2018).

Occupational therapy aims to promote participation in meaningful occupations (RCOT 2021a) so evidence for interventions directed at supporting participation in play will be presented first, acknowledging play as the primary meaningful occupation of childhood (Kuhaneck and Spitzer 2022). However, the majority of the studies measured the outcomes of the play interventions in terms of changes in performance skills rather than improved participation in play as an occupation. Occupational therapists can also use play to cope with life situations (for example, the stress of being hospitalised). Finally, studies where play is used as the means to improve performance skills (for example, behaviour regulation) and body functions (for example, sensorimotor skills, executive function) will be presented.

Kuhaneck and Spitzer (2022) remind us that 'the meaning of the activities we engage in with our clients is the key to intervention effectiveness' (p18). This aligns closely with evidence-based practice (Satterfield et al 2009). It is the responsibility of the occupational therapist to use their professional expertise and therapeutic skills to ensure the appropriate delivery of evidence-based play interventions (Satterfield et al 2009).

Intervention recommendations	
Interventions to support participation in play	
Recommendation and supporting evidence	Strength
8. For children with **attention deficit hyperactivity disorder** (ADHD), it is recommended that occupational therapists consider structured interventions with peer-to-peer interactions to improve social play skills where social play is the goal of therapy. (Wilkes-Gillan et al 2016 [A])	1A
9. For children with **autism spectrum disorder (ASD)**, it is recommended that interventions using imitation and/or modelling interventions can benefit play. (Kuhaneck et al 2020 [A])	1A
Interventions that use play to cope with life situations	
10. For **hospitalised children**, it is recommended that occupational therapists promote play opportunities to reduce the stress of being in hospital. (Potasz et al 2013 [A]; Mohammadi et al 2021 [A])	1A
Interventions that use play to promote performance skills	
11. For children with **intellectual impairments**, **developmental delays and learning disabilities**, it is recommended that occupational therapists promote positive mental health outcomes through activity-based interventions, including play activities. (Arbesman et al 2013 [A])	1A
12. For children with a **specific learning difficulty**, it is recommended that occupational therapists consider group therapy-led peer play activities including practice play, symbolic play and games with rules to improve executive function skills and behaviour regulation. (Karamali Esmaili et al 2019 [A])	1A
13. For children and young people with, and at risk of, **poor mental health**, it is recommended that occupational therapists use play-based interventions, particularly to increase social participation. (Cahill et al 2020 [A])	1A

14. It is recommended that occupational therapists consider the use of gaming technology, which is recognised as a meaningful occupation for children and young people, across a range of settings to develop performance skills such as motor skills, perception of motor ability and sensorimotor functioning. (Wuang et al 2011 [A]; Salem et al 2012 [A]; Hammond et al 2014 [A]; Bonney et al 2017 [A]; Axford et al 2018 [C])	1A

5.3.2 Recommendation 8: ADHD and social play

Wilkes-Gillan et al (2016) conducted a randomised controlled trial in Sydney, Australia, of 29 children aged 5–11 years with ADHD. The study examined the effectiveness of a six-week play-based intervention for improving the social play skills of children with ADHD in their peer-to-peer interactions. Children participating in the study invited a typically developing playmate to the play sessions, and one parent of each child with ADHD also attended the clinic-based play sessions and completed home-based activities with their child.

Fifteen children with ADHD were randomised to the intervention-first group and 14 children with ADHD to the control-first group, which received the intervention after a 10-week wait period. The intervention included six clinic-based one-hour sessions, home play sessions facilitated by the child's parents in line with the home modules training programme and four parent-facilitated peer play dates. Pre, post and one month following the intervention the children were assessed using the Test of Playfulness and parents completed the Conners Comprehensive Behaviour Rating Scales. Results showed that the children's play skills in the intervention-first group improved significantly from pre to post-intervention. For both groups, all Test of Playfulness social items improved significantly from pre to post-intervention and improvement was maintained at one-month follow-up.

Evidence summary

The study demonstrates the value of structured intervention in peer-to-peer interactions to improve the social play skills of children with ADHD. This recommendation is supported by one high-level randomised controlled trial.

5.3.3 Recommendation 9: ASD and play

Kuhaneck et al (2020) systematically reviewed research on the efficacy of occupational therapy strategies to support the play of children and young people with ASD. Studies had to focus on children or young people aged 3–18 years with ASD, utilise strategies within the scope of occupational therapy and include an outcome measuring statistical change in engagement in play post-intervention. Levels and strength of evidence were rated based on the American Occupational Therapy Association's guidelines for systematic reviews.

Twenty studies were included, and their interventions included parent education, modified play materials or environment, imitation of children and young people, and modelling by an adult, peer or through a video. The review found strong to moderate evidence for imitation strategies and moderate to strong evidence for modelling strategies. The authors report moderate evidence for the modification of the environment, but the heterogeneity of these studies makes it difficult to determine the specific modification that works best. All other strategies had mixed or moderate evidence to support them.

Evidence summary

This recommendation is supported by one high-level systematic review that provides strong to moderate evidence for the use of imitation or modelling to support children with ASD to play. However, it is necessary for occupational therapists to match the therapy goals with the strategy used.

5.3.4 Recommendation 10: Hospitalised children and play to reduce stress

Potasz et al (2013) conducted a randomised clinical trial of 53 children of 4–14 years of age hospitalised for respiratory disease in Brazil. The study aimed to help children cope with the stress of hospitalisation, using unstructured play as an intervention. Children were divided into three subgroups according to their age and randomised into Playing Group and Non-Playing Group. The children in the Playing Group played in the hospital's toy library for the first five days of hospitalisation and the Non-Playing Group did not attend play activities but were taken out of their room each day.

Using a variety of outcome measures including urine cortisol levels (as an indicator of stress) pre and post-intervention, the results for the study showed the most significant decrease in cortisol levels in children from the 7–11 years Playing Group. The authors identify that further research regarding younger children may be required to understand more about useful play activities for hospitalised pre-school children as a tool in reducing the stress of hospitalisation.

Mohammadi et al (2021) conducted a randomised controlled trial of 25 children with cancer aged 7–12 years undergoing in-patient chemotherapy in Iran. The study investigated the effect of play-based occupational therapy on symptoms and participation in daily life activities of hospitalised children undergoing chemotherapy.

The children were randomised into two groups, intervention (12 children) and control (13 children), and both groups received traditional occupational therapy as requested by the paediatric oncologist. The intervention group also received eight one-hour sessions on four consecutive days over a two-week period that included 45 minutes of play-based occupational therapy and 15 minutes of free play. Sessions were designed based on each child's play preferences and parent-reported therapeutic goals.

Results showed that the intervention group's mean score of participation in daily life activities, in the diversity of activities, intensity of participation, enjoyment and parents' satisfaction were significantly higher post-intervention than the control groups. In both groups, children's symptoms, pain, anxiety and fatigue decreased over time, and this was significantly improved in the intervention group.

Evidence summary

Two studies demonstrate how play interventions, including free play during a hospital stay, can benefit children by helping to reduce their levels of stress and other symptoms such as pain, anxiety and fatigue. This recommendation is supported by two high-level randomised controlled trials.

5.3.5 Recommendation 11: Intellectual impairments, developmental delays and learning disabilities, and play to promote positive mental health outcomes

Arbesman et al (2013) conducted a systematic review to understand the effectiveness of activity-based interventions for mental health promotion, prevention and intervention with children and young people. The review included 124 articles that provided evidence within the scope of occupational therapy practice.

Strong evidence supported the benefit of social skills programming and play, leisure and recreational activities for children with intellectual impairments, developmental delays and learning disabilities.

Evidence summary
The study demonstrates evidence supporting the benefit of play, leisure, recreational activities and social skills programming for children with intellectual impairments, developmental delays and learning disabilities, requiring intervention at different levels. This recommendation is supported by one high-level systematic review.

5.3.6 Recommendation 12: Specific learning difficulty and play to improve executive function skills and behaviour regulation

Karamali Esmaili et al (2019) conducted a single blinded, randomised, controlled trial of 49 children in Iran, aged 7–11, who had a specific learning difficulty. The study investigated the effect of peer-play activities on the executive function skills of behaviour regulation and metacognition, perceived occupational values and competence in children with a specific learning difficulty.

Twenty-five children were randomly assigned to the intervention group and 24 to the control group. The intervention was conducted in small groups of three to five children and included two three-hour sessions each week for nine weeks. Sessions were led by an occupational therapist and included symbolic play, practice play and games with rules. During the intervention phase the control group did not receive any treatment, but afterwards the control group received five sessions of peer-play activities.

The Behaviour Rating Inventory of Executive Function and the Child Occupational Self-Assessment were administered to intervention and control group participants pre and post-intervention.

The findings showed that the intervention group's occupational values and competence did not change ($p>0.05$). However, their executive functioning significantly improved.

Evidence summary
The study demonstrates the value of group therapy-led peer-play activities on improving the executive function and behaviour regulation of children with a specific learning difficulty. This recommendation is supported by one high-level randomised controlled trial.

5.3.7 Recommendation 13: Poor mental health and play

Cahill et al (2020) conducted a systematic review of activity and occupation-based interventions to improve behaviour, social participation and mental health of children and young people. The review included 62 studies and aimed to identify evidence for occupational therapy interventions for children and young people with or at risk of mental

health concerns. The studies underwent methodological quality assessment and were categorised into type of activity or intervention for mental health, positive behaviour and social participation. This included categories for outdoor camps, video and computer games, animal-assisted interventions, creative arts, productive occupations and life skills, play, sports, yoga and meditation.

The review identified that the evidence for the use of yoga and sports was moderate to strong. For the use of play and creative arts the evidence was moderate, and for the other remaining categories listed here the evidence was of low quality. The authors report that there is substantial evidence to support the use of activity and occupation-based interventions for children and young people who have mental health, behavioural and social participation concerns.

Evidence summary

The study demonstrates that offering a range of activities and occupation-based interventions are important for improving the behaviour, social participation and mental health of children and young people. However, it is important to match the activity intervention with the desired therapy outcome. This recommendation is supported by one high-level systematic review.

5.3.8 Recommendation 14: Use of gaming technology to develop performance skills

Wuang et al (2011) conducted a quasi-experimental study of 155 children in Taiwan who were aged 7–12 years and had a diagnosis of Down's Syndrome. The study compared standard sensorimotor training with the effect of virtual reality technology on sensorimotor performance. Fifty children were randomised to the control group, where they received standard occupational therapy. One hundred and five children randomised into the intervention group received individual one-hour sessions with an experienced occupational therapist twice a week for 24 weeks. During the sessions they used virtual reality Wii gaming technology Wii Sports.

Observations were conducted pre and post-intervention using the Bruininks-Oseretsky Test of Motor Proficiency – 2nd ed, the Developmental Test of Visual Motor Integration and the Test of Sensory Integration Function.

The findings indicated that post-intervention the children in the virtual reality Wii group had the greatest pre to post- change on sensory integrative functioning, visual-integrative abilities and on motor proficiency. While the authors suggest that further follow-up studies are important to verify the functional outcomes of the virtual reality Wii group, the intervention could potentially be used alongside proven rehabilitative interventions.

Salem et al (2012) conducted a single blinded randomised controlled trial of 40 children aged 39–58 months with a developmental delay who attended a segregated or integrated pre-school in the USA. The study aimed to determine the feasibility, safety and preliminary effectiveness of using Nintendo Wii in the rehabilitation of children with developmental delay, with a focus on improving motor skills and balance and coordination.

The 20 children randomised into the experimental group took part in two individual weekly clinic sessions of 30 minutes for 10 weeks. This included balance, aerobic and strength training games using the Nintendo Wii Sports and Nintendo Wii Fit. The children in the control group received traditional physical and occupational therapy rehabilitation sessions.

The Timed Up and Go test, single-leg stance test, five times-sit-to-stand test, timed up and down stairs test, two-minute walk test, grip strength, gait speed and the Gross Motor Function Measure were measured one week pre and post-intervention.

The results indicated that the use of a commercially available gaming system can be beneficial and safe as a potentially effective tool to enhance the rehabilitation of young children with developmental delay. Further investigation is suggested by the authors for applicability across other settings such as home use and in rural settings.

Hammond et al (2014) conducted a randomised crossover-controlled trial of 18 primary school-aged children with movement difficulties or DCD, recruited from two primary schools in England. The children were already taking part in a Jump Ahead programme for children with movement difficulties.

The study aimed to evaluate if regular school-based movement experience sessions using a Nintendo Wii Fit would lead to benefits in motor and psychological domains in children with DCD.

The ten children randomised to the intervention group took part in three 10-minute sessions per week for one month, using Wii Fit during their lunch break. The comparison group continued with the Jump Ahead programme only. Following pre and post-intervention assessments of motor proficiency, self-perceived ability and satisfaction and parental assessment of emotional and behavioural problems, results showed that the intervention group had significant gains in motor proficiency, their perception of their motor ability and emotional well being.

Bonney et al (2017) conducted a randomised controlled trial of 111 children aged 6–10 years with DCD and their typically developing peers.

Using a Nintendo Wii™ programme, the study aimed to evaluate the effects of two types of practice on the transfer of motor skills in children with and without DCD. The interventions took place in a classroom in the children's school in South Africa, using Nintendo Wii Fit consoles and balance boards.

Following randomisation, 56 children were assigned to the variable practice group and 55 to the repetitive practice group. The interventions took place for 20 minutes twice a week over a period of five weeks and included repetition of the exergame ski slalom for the repetitive practice group and 10 different Wii games for the variable practice group. Intervention sessions were under the guided supervision of trained therapists. None of the children had previous experience of using or owned a commercially available console for active computer games.

Pre and post-intervention, children in both groups were assessed using the Movement Assessment Battery for Children-2, Bruininks Oseretsky Test of Motor Proficiency – 2nd ed for running, agility and balance measures, functional strength measurement and measurements of sprinting speed and agility.

The authors find that both typically developing children and children with DCD, irrespective of the type of practice group they were assigned to, showed the same rate of transfer of skills acquired in an exergame to real-life skills.

Axford et al (2018) conducted a non-randomised controlled trial that included 53 children aged 5–6 years from two pre-primary classes in Australia. The study examined the impact of tablet applications on performance of motor skills over a nine-week school term. In the experimental group, tablet activity for 30 minutes each school day was built into the curriculum. The teacher selected one of three apps from each curriculum area daily, covering a range of motor skills. The observations included the Beery-Buktenica Test of Visual Motor Integration, the Hawaii Early Learning Profile and the Shore Handwriting Screen.

Results showed that the children in the experimental group had a statistically and clinically significant improvement in their motor coordination standard scores ($p<0.001$) and improvement in their occupational performance in daily tasks.

Evidence summary

Five studies explored and evaluated the effects of gaming technology as an intervention to support the development of children's motor skills, perception of motor ability and sensorimotor functioning. The results demonstrate improvements across these domains, and the application of gaming technology as an intervention in a range of settings such as schools, home and clinic settings. This recommendation is supported by two high-level randomised controlled trials, one high-level randomised cross-over study, one high-level quasi-experimental study and one low-level non-randomised controlled trial.

5.4 Best practice suggestion

Where the evidence is still emerging and so the risks and benefits are more closely balanced, or there is uncertainty in the values and preferences of people who are likely to access services, a best practice suggestion rather than a recommendation for practice can be developed.

The suggestion here has moderate levels of evidence and should still inform best practice, with occupational therapists supporting people who access services to arrive at a decision that is consistent with the benefits and their values and preferences.

Best practice suggestion	
Suggestion and supporting evidence	**Strength**
1. To enable play for children with a **motor impairment**, it is suggested that potentially modifiable factors across body function/structure, activity, environmental and personal factors are observed during assessment. (Kolehmainen et al 2015 [B]; Stanton-Chapman et al 2018 [C])	2B

5.4.1 Suggestion 1: Modifiable factors observed during assessment

Summarised previously, **Kolehmainen et al (2015)** examined potentially modifiable, specific factors across body function and structure, activity, environmental and personal factors related to participation in physical play and leisure in children with motor impairments. Play-related outcomes were measured using the Children's Assessment of Participation and Enjoyment. Results indicated that children's participation in physical play/leisure was mainly

recreational (such as pretend play, playing with pets) rather than active physical (such as riding a bike or scooter).

Stanton-Chapman et al 2018 conducted an observational study of all children aged 5–12 years who attended two nearby American playgrounds. Data was collected over 13 days to explore the similarities and differences in activity levels for boys and girls. Using the System for Observing Play Activities in Youth, observational coders recorded children's physical activity types, locations and activity. The study findings showed that there was no statistical significance between girls' and boys' activity intensities in either playground. However, playground context (such as location and other competing play areas) plus type of playground equipment available and amount of free space may influence active play choices and social interaction for children. The findings support the influence of physical environment structures on play.

Evidence overview

Two studies demonstrate the importance of outside factors on play participation. This recommendation is supported by one moderate-level cohort study and one low-level qualitative study.

5.5 Potential impact of the recommendations

The RCOT *Occupational therapy and play* practice guideline represents a change in approach for practice and education. This is the first occupation-focused guideline produced by RCOT under its new process. As such there is a fresh emphasis on the potential impact of the delivery of occupational therapy for children and young people. It is expected that this guideline will be a catalyst for change within the profession.

5.5.1 Intended outcomes

The following intended outcomes have been identified:

- Occupational therapists are aware of the importance of play as a primary childhood occupation.
- Occupational therapists use occupation-focused assessment and intervention to support children, young people and their families.
- Occupational therapists enable children and young people to participate in play.
- Occupational therapists confidently engage with stakeholders in conversations about play and drive service change.
- Children, young people and their families have choice and control, and can recognise the potential for play to have a positive outcome in terms of health and wellbeing.

5.5.2 Generalisability

Owing to the broad scope of the guideline objective, the studies included in the evidence review were heterogeneous, with variations in sample populations, in the type, amount and frequency of specific interventions, and in the availability of occupational therapy services within the service model.

The evidence supporting the recommendations originates from a variety of countries, but mostly those from the Global North. Geographical variations in the core domains of occupational therapy practice have been considered in the development of the recommendations, to ensure that findings are pertinent to the UK context. Additionally, variation in intervention approaches and evidence outcomes have been reviewed in detail when judging the generalisability to the culturally varied UK population. Despite the core evidence being drawn from diverse contexts, the children and young people within the individual studies were within the guideline scope.

Very little evidence was found on children and young people aged 11 and older, and the articles that were found also included younger children. As such, no recommendations could be developed specifically for this age group.

5.5.3 Social determinants of health

A family-centred approach to play is more likely to recognise social inequities and support families to access play (Almasri et al 2018, McCarthy and Guerin 2022). Occupational therapists should challenge the traditional Global North conceptualisation of play to improve inclusivity and diversity. For example, occupational therapists can assure parents that the quantity of toys is not a barrier to play, and that play without toys is possible. Information and resources on play should be available in a range of formats to empower families.

6 Parent perspectives

The target audience of the full guideline document is primarily occupational therapists working with children and young people. While of potential interest to parents and children, the Guideline Development Group acknowledges that it was not written specifically for members of the public.

However, parents' and children's perspectives are integral to the guideline development process and involvement took place through consultation on the draft scope and draft guideline (see Section 9.4).

When consulting on the draft guideline, the Guideline Development Group sought parents' perspectives via an online survey. The group developed an online questionnaire that was approved through the RCOT governance process. The survey was facilitated by JISC Online Surveys, a GDPR-compliant online survey platform, and was open from 10 October to 7 November 2022. The survey was disseminated by stakeholder organisations through their networks, and by the Guideline Development Group members' networks where appropriate.

The survey enabled participants to read the recommendations and feedback their thoughts on the clarity and language used. They were also presented with the list of future research recommendations and asked if they thought anything was missing from the list. A copy of the questionnaire can be found in Appendix 10.

The term 'parent', as used in the guideline, should be considered inclusive of guardians or carers.

6.1 Respondent profile

Three parents responded to the survey. Two described themselves as 'White (English/Welsh/Scottish/Northern Irish/British/Irish/Gypsy or Irish Traveller/Any other White background)' and one preferred not to say. The Guideline Development Group was disappointed with the number and diversity of the responses.

6.2 Results

The survey presented the recommendations in three blocks: assessment recommendations, intervention recommendations and outcome recommendations. Parents were asked if there were any words or phrases they did not know, but all three responded there were none.

Next, parents were shown the future research recommendations. They then had the chance to suggest further recommendations to add to the list. One parent suggested the recommendation on how play interventions could help children and young people's mental health could be broadened to include the effects of play on hospitalised children and the mental health of their families. Another contributed that more research is needed on the effectiveness of play for challenges such as language difficulties and behaviour needs. Finally, a third parent was eager to ensure that research was implemented by state services in the child's best interest.

The Guideline Development Group valued the opinions of parents who responded to the survey and considered where the future research recommendations could be amended.

7 Implementation of the guideline

This practice guideline aims to support occupational therapists by providing specific recommendations to support the use of play in occupational therapy with children and young people aged 0–18 years.

Familiarity with the guideline document will be an important first step for both individual practitioners and their managers. It is therefore imperative that occupational therapists and managers working in this area take responsibility for reviewing the guideline recommendations within the context of their practice.

Bringing the guideline to the attention of colleagues within the multidisciplinary team and service commissioners should also be a priority.

A further action to facilitate implementation must be for lead therapists to consider the levers and barriers within their local organisation and culture that may have an impact on any changes that may be necessary to practice. Section 7.1 identifies some potential barriers that may be applicable, while Section 7.2 provides details of resources to facilitate implementation.

7.1 Barriers to implementation

The recommendations stated within this guideline are intended to help occupational therapists to deliver occupation-focused practice. It is recognised, however, that there will be potential barriers, including cultural, organisational and financial, which may influence application of the recommendations. It is important that occupational therapists take these into account alongside their professional reasoning when implementing this guideline. The barriers most likely to be encountered are described here.

- **Accessibility of guideline information**: As a first step, the guideline needs to be accessible to occupational therapists for the recommendations to be implemented. New evidence takes time to embed into practice, and evidence that is accessible is critical for closing this time gap.

- **Pressure on time and resources**: The time and resources available to occupational therapists may present a barrier to implementing the recommendations. Services may not have the financial resources to provide access to further training, tools and potentially licences, or the specialist equipment needed to facilitate play. Additionally, time may place a constraint on implementation. Under-resourced occupational therapy services may find it difficult to reflect on their practice and how it may need to be adapted. It is anticipated that the implementation of the recommendations will be planned and delivered in a local, specific context, based on service need, funding resources and the overall contributions of occupational therapists within their setting.

- **Service limitations**: Some services may have an impairment focus or one that prioritises self-care or physical access to education. It may be difficult to direct limited resources to the fundamental need for children to have access to and support for play. Additionally, some occupational therapists may find themselves constrained by what is written on a referral and therefore be hampered in their efforts to promote play.

- **Organisational culture:** The culture of organisations occupational therapists work within may also impede implementation, particularly if hierarchical work structures prevent modifications to services or do not encourage suggestions for change.

- **Cultural humility:** In multicultural Britain, occupational therapists engage with families from a range of backgrounds. Therapists will maintain a therapeutic focus that prioritises the cultural world-view of the child and their family. Understanding the family's cultural perspective is essential to achieving the best outcomes for children and young people. A lack of understanding may impede the implementation of the recommendations.

- **Social inequities:** Finally, occupational therapists will need to consider the resources of the families they are working with. Some may not have the toys, access to play facilities or time to fully participate in occupational therapists' recommendations.

7.2 Implementation resources

Three core implementation resources are available to support this practice guideline.

7.2.1 Quick reference and implementation guide

The quick reference and implementation guide is intended to be used by practitioners as an easily accessible reminder of the recommendations and suggestions for implementing them. It should ideally be used once the practitioner has read the guideline in full to ensure an understanding of the context and development of the recommendations.

7.2.2 Audit form

It is recommended that occupational therapists use the RCOT audit form that supports this guideline.

The audit form provides a template for individual occupational therapists or services to audit and review their current service provision against the recommendations. The aim is to encourage reflection on current practice and to consider, where this does not follow the recommendations, the professional reasoning in place to support decisions.

A baseline assessment conducted using the audit tool can be repeated to enable review of progress on actions identified from the audit. It can be useful to undertake a routine audit every one or two years to monitor ongoing change. The audit form, while initially providing a tool for use within an individual/service context, offers the potential for future benchmarking and wider comparative analysis.

Recommendations for which there is a transdisciplinary component may be usefully audited jointly with other members of the multidisciplinary team.

7.2.3 Continuing professional development/knowledge transfer resource

The continuing professional development resource is interactive and can be tailored for local use. The session can be used for group or self-directed learning, or for raising awareness of the guideline at multidisciplinary meetings, study days or events.

Accessing the implementation resources

The quick reference guide, audit form and continuing professional development session resources are available as separate documents.

These can be downloaded, together with the full guideline document, from the Royal College of Occupational Therapists' website: *https://www.rcot.co.uk*

8 Recommendations for future research

During the process of drafting the recommendations, Guideline Development Group members identified areas where further research is needed. It is important to note that the guideline's scope meant research on leisure was excluded, and this will have affected the research reviewed.

These recommendations should be considered in context with other occupational therapy research priorities, such as the top ten research priorities for occupational therapy in the UK (RCOT 2021b) and child-centred research priorities (Morris et al 2015, McPin Foundation 2018). The main gaps in research were found in the areas of play as an occupation, participation in play, the cultural context of play and interventions to enable play.

Underpinning these recommendations is the belief that children and young people must be part of the research process. Incorporating the voices of children and young people into research questions, methods and outcomes of play and occupational therapy research is essential for good quality, relevant research.

Play as an occupation

- **What does play as an occupation mean for all children and young people, regardless of physical, learning or mental health needs?** Occupational therapists working with children and young people need to understand their perspectives on what play is and what aspects of play are important to them. They can then ensure person-focused care with interventions and outcomes that are meaningful to the child or young person.

- **Are occupational therapists addressing play as an important occupation?** Further understanding of how occupational therapists are incorporating play into their practice is needed to be able to address any challenges to play being recognised as a primary occupation for children and young people.

Participation in play

- **What do occupational therapists, parents, teachers and other adults assume about play and how does this impact participation for children with additional needs?** Research by Kolehmainen et al (2015) found that children felt their play participation is regulated by adults. More research exploring the attitudes and ideas about play of parents and adults working with children and young adults with additional needs can help to understand if these present barriers to participation in play.

- **What is the occupational therapy role in universal play interventions and playground or toy design, and how does that impact upon children's participation?** While much research exists on powered mobility (Guerette et al 2013, Rousseau-Harrison and Rochette 2013, Sonday and Gretschel 2016), there are other environmental factors that can affect participation in play, such as the design of community playgrounds to ensure universal accessibility. Occupational therapists can use their experience and expertise to create universal access to play, but they need to have the evidence to influence this area.

- **What is the impact of occupational deprivation on play participation?** Occupational deprivation can have many causes, from the COVID pandemic to socio-economics, geography to government policy. Understanding the impact these have on participation in play can help occupational therapists find ways to overcome these challenges.

Cultural context of play

- **How can occupational therapists better understand the cultural context of play for individual children and apply this to their assessment, intervention and goal-setting of therapy?** In a diverse UK, occupational therapists will encounter children from different backgrounds and potentially with different cultural needs, including language. Understanding their cultural context is necessary to ensure occupational therapy services are accessible and meet the needs of children and young people and their families.

- **How does the decolonisation of childhood, child development and play impact the measurement of play constructs?** As occupational therapists continue to work in increasingly diverse communities, there's an urgent need to understand the Global North perspective on play in the evidence and how that might influence occupational therapists' approach to practice.

- **How can occupational therapists enable play for young people?** Much of the appraised literature focused on play for children, with little research exclusively focusing on young people aged 11–18 years. It is important to understand how young people aged 11 and over conceptualise play and its meaning to them, so that occupational therapists can enable play that is meaningful to people in this age group.

Interventions to enable play

- **What play-based interventions are occupational therapists using and how do they impact on children and young people and their families?** There are limited high-level evidence studies around play-based intervention across populations and occupational therapy settings, but particularly in a mental health setting. Interventions need to be considered within family-centred practice and their impact on the whole family.

- **What impact do occupational therapy interventions focused on changing the social environment and attitude of parents or peers have on children or young people's play participation?** Changes in the social environment can have an impact on play participation. Psychological research around attachment theory demonstrates the impact of social environment and interaction on children's development (Bretherton 1992, Porges 2009), but this research often lacks an occupational therapy focus and is not widely referenced within the profession. Evaluating occupational therapy interventions that focus on changing the social environment, attitude of parents or peers and the impact of this on children's play participation is needed. These types of interventions might include directly influencing parents to enable the child's participation in play (such as Brussoni et al 2021).

9 Guideline development process

Information on the following steps in the guideline development process can be found in the *Practice guideline development manual* 4th ed (RCOT 2020).

9.1 Guideline Development Group

The core Guideline Development Group comprised eight occupational therapists with expertise in play, one of whom took on the additional role of equality and diversity representative, a public contributor, a play therapist and a representative from the Royal College of Paediatrics and Child Health (Appendix 4), along with supporting RCOT officers.

The occupational therapist group members were all practising therapists, educators or researchers. All group members undertook guideline development work in their own time, with some support from employers (for example, to attend meetings).

Twenty-seven individuals who were involved in paediatric research and practice or RCOT employees were co-opted as additional evidence appraisers.

9.2 Consultation responses from stakeholders, parents, children and young people and occupational therapists

All comments received from stakeholders, parents, children and young people and occupational therapists on the draft scope and draft guideline document were reviewed by the Guideline Development Group. Where appropriate, revisions were incorporated into the scope form or guideline document. Conflict of interest declarations were noted and reviewed for any necessary action.

Details of the comments submitted as part of the consultation activities are available on request from RCOT.

9.3 Stakeholder involvement

Stakeholders expected to have an interest in the guideline topic were identified by the Guideline Development Group members at the first guideline meeting. Specific attention was paid to identifying professional bodies that represent those working with children, young people and their parents, and national charitable or voluntary organisations that may represent people who access services.

9.3.1 Scope consultation with stakeholders

The following stakeholders were invited to comment on a draft of the scope document:

- professional bodies: Royal College of Paediatrics and Child Health, Health Play Specialists Education Trust, British Psychological Society – Division of Educational and Child Psychology
- academic centres: Peninsula Childhood Disability Research Unit, University of Exeter

- charities: Girlguiding UK, The Scout Association, Embracing Complexity Coalition, Disabled Children's Partnership, International Play Association, Play England, Play Wales, Play Scotland

- Children's Commissioner for England, Children's and Young People's Commissioner Scotland, the Children's Commissioner for Wales, the Commissioner for Children and Young People in Northern Ireland.

9.3.2 Draft guideline consultation with stakeholders

The draft guideline was sent to each of the stakeholders who had been contacted as part of the scope consultation (Section 9.3.1), along with the NSPCC and the Association of the Directors for Children's Services, for their review and comment. The consultation took place from 10 October to 7 November 2022.

9.4 Involvement with people who access services

9.4.1 Scope consultation with children, young people and parents

A children and young person's comment form was developed to gather their opinions on the scope. Question topics included the following:

- the guideline title

- whether play is important

- whether it is important for occupational therapists to help children play

- barriers to play

- who will be interested in the guideline.

The form was distributed through the Guideline Development Group's networks, which included charities they volunteered or worked with, and via the Nasirat Ahmadiyya, which is made up of Muslim girls aged 7–14.

Parents were also asked for their comments on the guideline scope via a parent's comment form. These, along with the scope, were distributed through the Guideline Development Group's networks.

As a result of the comments from children, young people and parents, teachers were added to the list of those who would be interested in the guideline.

9.4.2 Draft guideline consultation with parents

An online survey was developed to consult with parents about the clarity of the recommendation wording and the future research recommendations. The survey was open 10 October to 7 November 2022 and was distributed via stakeholder organisations and the Guideline Development Group's networks. Further details can be found in Section 6.

9.5 Consultation with occupational therapists

9.5.1 Scope consultation with occupational therapists

Members of RCOT were invited to participate in the scope consultation via advertisement on RCOT's website, social media channels and Highlight. A copy of the scope was provided with a feedback and conflicts of interest form.

9.5.2 Draft guideline consultation with occupational therapists

As with the scope consultation, RCOT members were invited to comment on the draft guideline via an online form from 10 October to 7 November 2022. The consultation was advertised on RCOT's website, social media channels, OTnews, Highlight and the RCOT Specialist Section – Children, Young People and Families' newsletter.

9.6 External peer review

Two independent peer reviewers were invited by the Guideline Development Group to critically appraise a draft of the full guideline. Reviewers were selected for their known clinical and research expertise in the field. The peer reviewer form asked for comment on both the presentation and content of the draft guideline, taking into account factors such as its purpose, robustness and unbiased nature.

9.7 Conflicts of interest

All Guideline Development Group members, co-opted appraisers, stakeholders and occupational therapist respondents to the consultations and peer reviewers were required to declare any pecuniary or non-pecuniary conflicts of interest, in line with the guideline development procedures (RCOT 2020).

The nature of the potential or actual conflicts made in the declarations (Appendix 5) was not determined as being a risk to the transparency or impartiality of the guideline development.

9.8 Declaration of funding for the guideline development

As a membership organisation, the major source of funding for RCOT is through membership fees. Other sources of income are primarily advertising and events.

The development and publication of this practice guideline were funded by RCOT. RCOT provided specific resources to cover the meeting software, literature search and editorial, publication and promotional support.

There were no external sources of funding.

The editorial lead for the guideline was an RCOT officer, who attended guideline meetings as an 'officer in attendance'. The recommendations and guideline content were developed and finalised by the Guideline Development Group with the involvement of stakeholders, parents, occupational therapists and external peer review. The views of RCOT have not, therefore, unduly influenced the final recommendations in this guideline.

9.9 Appraisal and ratification process

The guideline scope and final document were reviewed and subsequently ratified by the RCOT Practice Publications Group, in line with the requirements of the *Practice guideline development manual* 4th ed (RCOT 2020).

The scope was approved by the RCOT Publications Group in August 2020 and the final version of the guideline was approved by the RCOT Publications Group in March 2023.

10 Guideline methodology

10.1 Guideline question

What is the evidence for the use of play in occupational therapy during assessment, intervention and as an outcome with 0–18 year olds?

The PICO framework (Richardson et al 1995, Huang et al 2006) was used to assist in developing the specific practice question further (Table 10.1). PICO describes the specific care group or condition being studied and the nature of the intervention to be investigated. A comparative treatment can be specified where applicable, together with the anticipated outcomes (the desired/undesired or expected results of the intervention). This level of specificity is important in developing the question so that it addresses the requirements of the scope (RCOT 2020).

Table 10.1: PICO framework

Patient (person who accessed services), **P**opulation or **P**roblem/circumstance	Children and young people aged 0–18 years
Intervention under investigation or action	Scope of occupational therapy
Comparison, which is an alternative intervention or action	None
Outcome desired	• Occupational therapists are aware of the importance of play as a primary childhood occupation. • Occupational therapists utilise occupation-focused assessment and intervention to support children, young people and their families. • Occupational therapists enable children and young people to participate in play. • Occupational therapists confidently engage with stakeholders in conversations about play and drive service change. • Children, young people and their families have choice and control, and can recognise the potential for play to have a positive outcome in terms of health and wellbeing.

10.2 Literature search strategy and outcomes

The literature search was carried out by RCOT's librarians, using a search strategy defined following discussion and agreement with the Guideline Development Group. Two searches were carried out, one conducted in September 2020 (the original search) and one conducted in January 2022 (the top-up search).

The top-up search was an addition to the guideline development process. Owing to the COVID pandemic and the resulting impact on RCOT's priorities and the availability of the Guideline Development Group members, more time elapsed than planned between the original literature search and anticipated publication date. To mitigate the chance that any high-level significant research had been published, and decrease the time between a literature search and the publication date, a top-up search was conducted.

10.2.1 Key terms

The overall search strategy involved combining concept groups of key words. Six key categories or concepts and their related terms were identified: intervention/assessment/outcome terms, play-related terms, population, occupational therapy terms, occupation terms and cost effectiveness terms (Appendix 6, Tables A6.1 and A6.2). The combination of strings searched aimed to identify the most relevant results to meet the requirements of the guideline scope.

Further search terms were employed for the top-up search, which was only concerned with finding recent high-level evidence, such as randomised controlled trials and systematic reviews that had been published after the cut-off date for the original literature search.

The databases searched reflected the most likely sources of published peer-reviewed occupational therapy and play evidence. For the original search, 12 core databases were searched from 1 January 2011 to the dates the individual searches were carried out as detailed in Table 10.2.

For the top-up search, OTDBASE and OTsearch were not searched because of the high level of overlap with other databases. OTSeeker was not searched because it was no longer being maintained by the publisher. Search dates were from September 2020 to the date of the search.

Table 10.2: Database searches

Core databases	2020 search	2022 top-up search
Cumulative Index to Nursing and Health Literature (CINAHL)	21/09/20	04/01/22
MEDLINE		
Allied and Complementary Medicine (AMED)	21/09/20	04/01/22
Social Policy and Practice		
Health Management Information Consortium (HMIC)		
PsycINFO		
Cochrane Library	22/09/20	04/01/22
ERIC	25/09/20	05/01/22
OTDBASE	21/09/20	No search undertaken
OTSearch	28/09/20	No search undertaken
OTSeeker	24/09/20	No search undertaken

Hand-searching was not systematically employed.

Searches included title, abstract or descriptor fields. The date of each search, search fields and search result numbers are detailed in Appendix 6 (Tables A6.3–6.6). Full search histories are available on request from RCOT.

10.2.2 Original and top-up search results and screening

The original search identified a total of 3,796 results. These were scrutinised for duplicates, both within-database searches and cross-database search returns, by RCOT's Research and Development Officer. A total of 2,298 duplicates were removed.

The Guideline Development Group then screened the resulting 1,498. Of these, 10% of the results (n=150) were double screened independently by two members of the guideline review group. The rest (n=1,348) were screened by one member.

The top-up search identified 629 articles. After removing duplicates and out-of-scope results (for instance, conference proceedings), 168 articles were available for screening. Screening was conducted by RCOT employees, with 10% of articles double screened independently (n=17) and 151 screened by one person.

10.2.3 Criteria for inclusion and exclusion of evidence

The Guideline Development Group screened articles against the following inclusion and exclusion criteria:

- Inclusion criteria:
  - research conducted with children or young people aged 18 or younger
  - research on play as an intervention, outcome or assessment
  - research related to occupational therapy
  - (top-up search only) research that used a systematic review or randomised controlled trial methodology.
- Exclusion criteria:
  - play not in conjunction with occupational therapy
  - research conducted exclusively among participants over 18 years of age
  - research conducted exclusively on leisure
  - research published before 2011
  - research not published in English
  - grey literature.

The allocation process ensured that articles were not screened for inclusion by authors or co-authors. Where the screeners had a variation in opinion as to whether an abstract should be included or excluded for appraisal, the abstract was further reviewed against the eligibility criteria by the reviewers to come to a consensus decision.

Through this process, articles were identified as potentially relevant to the guideline and to include for critical appraisal.

10.2.4 Critical appraisal of original literature results

Following screening of the original literature search results, 1,091 articles were further excluded, resulting in a total of 407 items identified for full paper review and critical appraisal.

During the critical appraisal process, 168 articles were identified as out of scope, resulting in 237 articles that were fully critically appraised. Thirty-two items of evidence were subsequently used in developing the recommendations.

An overview of the original literature search outcomes is provided in Figure 10.1.

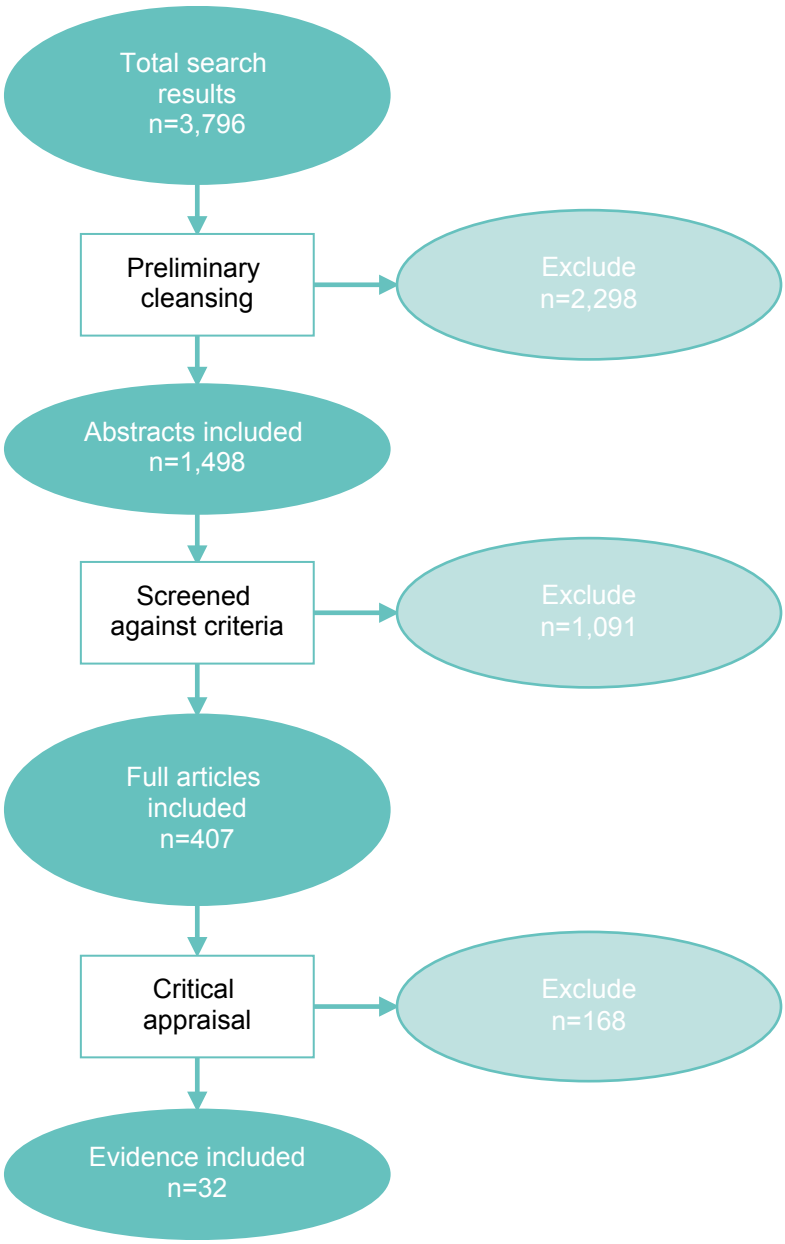

Figure 10.1 Original literature search outcomes

10.2.5 Critical appraisal of top-up search literature results

Screening of the top-up search literature resulted in 149 articles screened out, leaving 19 articles for critical appraisal. A further six articles were found to be out of scope or unavailable for review during the critical appraisal process. Thirteen articles were fully appraised and two used for recommendation evidence.

An overview of the top-up literature search outcomes is provided in Figure 10.2.

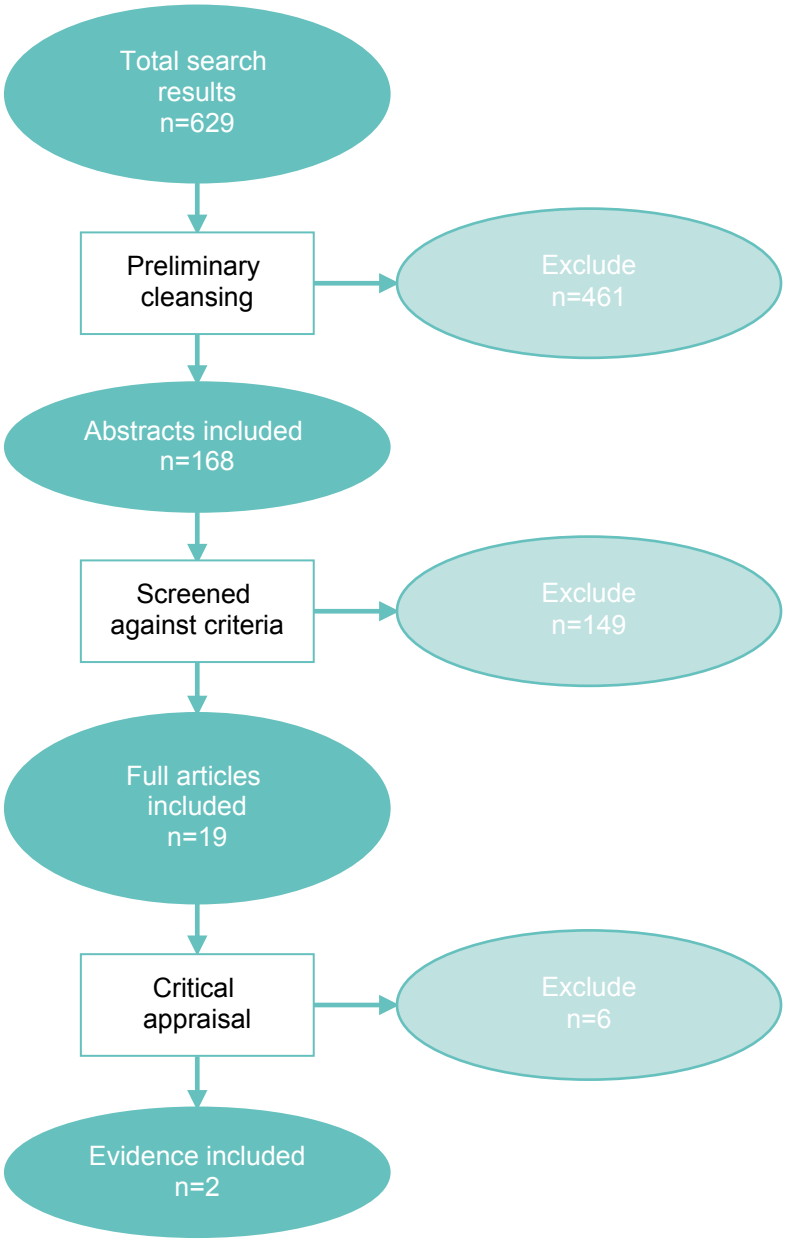

Figure 10.2 Top-up literature search outcomes

10.3 Strengths and limitations of body of evidence

Nearly 25% (n=101) of the articles identified in the original and top-up searches as potential evidence were critically appraised by two independent reviewers, while the rest (n=325) were appraised by one reviewer. Appraisals were undertaken by all members of the Guideline Development Group, with additional support provided by co-opted appraisers. The allocation process ensured that reviewers did not appraise any evidence that they had authored or co-authored. Any discrepancy in grading was discussed and the final grading agreed and confirmed via consensus or by a third reviewer.

The quality of the evidence was initially assessed and recorded using forms based on the Critical Appraisal Skills Programme (CASP) checklists (CASP 2013). Appraisal considered factors such as the appropriateness of the study design and recruitment strategy, procedural rigour in data collection and analysis, confounding factors and potential biases, transferability, precision of results and the value of the findings.

A quality of evidence grade was assigned to each individual article using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach, as defined within the *Practice guideline development manual* 4th ed (RCOT 2020). The grading reflects the research design and the confidence in the research findings.

The initial grading was allocated as follows:

- randomised controlled trial/systematic review = High
- observational study = Low
- any other evidence = Very Low.

Limitations in the design of a study or its implementation may, however, bias the estimates of the treatment effect. If there were serious limitations, then downgrading of the quality of the evidence was considered, as in Table 10.3.

Table 10.3: Grading evidence up or down (after GRADE Working Group 2004)

Decrease grade if:	• serious or very serious limitation to study quality • important inconsistencies in results • some or major uncertainty about directness of the evidence • imprecise or sparse data (relatively few participants and/or events) • high probability of reporting bias. **Each quality criterion can reduce the quality by one or, if very serious, by two levels.**
Increase grade if:	• magnitude of the treatment effect is very large and consistent • evidence of a large dose–response relation • all plausible confounders/biases would have decreased the magnitude of an apparent treatment effect. **Only studies with no major threats to validity should be upgraded.**

A decision to increase or decrease the initial grade of the evidence was recorded and justified on the critical appraisal forms. A moderate category became relevant only if there was a suggested change in the initial grading of an article owing to upgrading or downgrading. Evidence was ultimately graded in one of four categories as detailed in Table 10.4.

If there was no reason to upgrade or downgrade the evidence, then the original grading remained.

Table 10.4: GRADE quality of evidence grading (after GRADE Working Group 2004)

Quality of evidence	Grading	Characteristics	Confidence
High	A	Based on consistent results from well-performed randomised controlled trials or overwhelming evidence of an alternative source – for example, well-executed observational studies with strong effects.	True effect lies close to that of the estimate of the effect. Further research is very unlikely to change confidence in the estimate of the effect.
Moderate	B	Based on randomised controlled trials where there are serious flaws in conduct, inconsistency, indirectness, imprecise estimates, reporting bias or some other combination of these limitations, or from other study designs with special strengths.	True effect likely to be close to the estimate of the effect but there is the possibility that there could be a substantial difference. Further research is likely to have an important impact on confidence in the estimate of effect and may change the estimate.
Low	C	Based on observational evidence or controlled trials with several very serious limitations.	True effect may be substantially different from the estimate of the effect. Further research is very likely to have an important impact on confidence in the estimate of the effect and is likely to change the estimate.
Very Low	D	Based on case studies or expert opinion.	Any estimate of effect is very uncertain and may be far from the true effect.

Studies of high or moderate quality made up 76% of the evidence:

Grade A = 47% (n=16)
Grade B = 29% (n=10)
Grade C = 24% (n=8)

The Guideline Development Group downgraded seven of the studies, initially graded A, owing to limitations identified from the appraisal and a resultant lack of confidence in the estimate of the research effect. Three studies were upgraded from a C to a B because of the quality of the research. These decisions and comments on individual studies are noted in the evidence tables (see Appendix 2).

Even where studies were not downgraded, limitations were identified in some research. These included small sample sizes, a lack of blinding, a high risk of bias among studies included in systematic reviews and evidence reviews that did not meet the rigour of systematic reviews.

The evidence used to develop the recommendations is provided in Table 10.5. A summary of each piece of evidence can be found in Appendix 2.

Table 10.5: Summary of evidence used to develop the recommendations and best practice suggestion

Topic area	Author	Year	Evidence quality
Goals and outcomes	Engelen et al	2013	A
	Kent et al	2021	A
	Kuhaneck et al	2020	A
	Rousseau-Harrison and Rochette	2013	A
	Schaaf et al	2018	A
	Wilkes-Gillan et al	2016	A
	Coussens et al	2020	B
	Crawford et al	2014	B
	Jasem et al	2020	B
	Jasem and Delport	2019	B
	Moore and Lynch	2015	B
	Ramugondo et al	2018	B
	Sterman et al	2019	B
	Sterman et al	2016	B
	Graham et al	2015	C
	Moore and Lynch	2018	C
	Román-Oyola	2018	C
	Stagnitti et al	2012	C

Topic area	Author	Year	Evidence quality
Assessment	Engelen et al	2013	A
	Romli and Wan Yunus	2020	A
	Rousseau-Harrison and Rochette	2013	A
	Mobbs et al	2021	B
	Guerette et al	2013	C
	Sonday and Gretschel	2016	C
Intervention	Arbesman et al	2013	A
	Bonney et al	2017	A
	Cahill et al	2020	A
	Hammond et al	2014	A
	Kuhaneck et al	2020	A
	Karamali Esmaili et al	2019	A
	Mohammadi et al	2021	A
	Potasz et al	2013	A
	Salem et al	2012	A
	Wilkes-Gillan et al	2016	A
	Wuang et al	2011	A
	Axford et al	2018	C
Best practice suggestion	Kolehmainen et al	2015	B
	Stanton-Chapman et al	2018	C

10.4 Method used to arrive at recommendations

Evidence tables summarising the appraised articles were developed, and each article was categorised according to the age of the children or young people studied, and whether the article included play as an assessment, intervention, outcome or none of these. The Guideline Development Group agreed that they would not consider any evidence graded as a D when developing recommendations because this was the lowest level of evidence.

Once the categorisation and exclusion of articles graded D had been agreed, evidence syntheses were conducted for the following categories:

- assessment aged 0–5
- assessment aged 5–11
- intervention aged 0–5
- intervention aged 5–11
- outcome aged 0–5
- outcome aged 5–11.

Very little evidence was found on children and young people aged 11 and older, and the articles that were found also included younger children. As such, no syntheses or recommendations could be developed specifically for this age group.

The evidence tables and syntheses were used to judge the potential contribution of each piece of evidence and as the basis for developing the recommendations. Once a recommendation had been developed, an overall quality of evidence rating was determined. This overall rating was established as follows:

- Where the evidence outcomes pointed in different directions towards benefit and towards harm, the lowest quality of evidence determined the overall quality grade of evidence.
- Where the outcomes pointed in the same direction towards either benefit or harm, the highest quality of evidence was appropriate to recommend an intervention and determined the overall quality of evidence.
- In circumstances where the balance of benefits and harm was uncertain, the lowest grade of quality of evidence was assigned.

Strength of recommendation was the second element of the GRADE system applied, using the categories ‘strong’ or ‘conditional’ to reflect the certainty of benefits to the target group found in the research (Table 10.6).

Table 10.6: Strength of grade (after Guyatt et al 2008)

Strength	Grade	Benefits and risks	Implications
Strong	**1** **'It is recommended...'**	Benefits appear to outweigh the risks for the majority of the target group.	Most people who access services would want or should receive this course of intervention or action.
Conditional	**2** **'It is suggested...'**	Risks and benefits are more closely balanced, or there is more uncertainty in the likely values and preferences of people who access services.	The majority of people who access services would want this intervention but not all, and therefore they should be supported to arrive at a decision for intervention consistent with the benefits and their values and preferences.

The development of the recommendations, including assignment of the overall quality and strength grading, was a consensus decision obtained at a Guideline Development Group meeting and by subsequent email correspondence as required. There were no recommendations that were not agreed by all members, so no formal voting system was required.

A recommendation judged to be 'conditional' was subsequently not included as recommendation but instead separately categorised as a 'best practice suggestion'. The Guideline Development Group reasoned that as this statement had only moderate levels of evidence, it should not form part of the recommendations.

Thirty-two items of evidence were used to develop the recommendations, and two pieces of evidence were used to form the best practice suggestion.

A recommendation decision form was completed for each recommendation. This recorded information about the evidence used to form the basis of that recommendation, the overall allocation of the quality of evidence and strength of the recommendation. Any judgement by the Guideline Development Group was documented as part of this decision-making process (the forms are available on request from RCOT).

10.5 Limitations and any potential bias of the guideline

Evidence included in the development of the guideline recommendations and suggestion for best practice was sourced from published peer-reviewed journal articles written in English. It is acknowledged that the evidence mostly comes from countries in the Global North, and particularly countries where English is a common language.

RCOT developed, authored and funded this guideline (see Section 9.8). The potential for any bias in development and authoring was, however, minimised through the rigorous nature of the guideline development process. This was achieved through the systematic methodology adopted, the contributions of stakeholders and people who access services, the opinions of the external peer reviewers and occupational therapists and the judicious management of any potential or actual conflicts of interest.

11 Updating the guideline

RCOT is responsible for the review of this guideline, scheduled to be completed in 2028. The review may happen earlier, however, if there is significant new evidence that impacts on practice or the recommendations. Monitoring significant new evidence is conducted via yearly literature searches that are subsequently screened by RCOT members with knowledge of the guideline and the clinical area.

Appendix 1: Glossary and abbreviations

Attention deficit hyperactivity disorder (ADHD)	'Attention deficit hyperactivity disorder (ADHD) is a condition that affects people's behaviour. People with ADHD can seem restless, may have trouble concentrating and may act on impulse.' *https://www.nhs.uk/conditions/attention-deficit-hyperactivity-disorder-adhd/*
Attendance	'"Being there" and measured as frequency of attending, and/or the range or diversity of activities in which an individual takes part.' Imms et al 2017, p20
Assessment	'The occupational therapy process is based on initial and repeated assessments. The occupational therapist together with the person they are working with focus on individual and environmental abilities and problems related to activities in the person's daily life. Assessment includes the use of standardised procedures, interviews, observations in a variety of settings and consultation with significant people in the person's life.' *https://wfot.org/about/about-occupational-therapy*
Autistic spectrum disorder (ASD)/autism	'Autism is a lifelong developmental disability that affects how people perceive the world and interact with others. Autism is a spectrum condition.' *http://www.autism.org.uk/autism*
BAOT	**British Association of Occupational Therapists** BAOT is the professional body for all occupational therapy staff in the UK. *https://www.rcot.co.uk/about-us/governance/how-we-are-run*
CASP	**Critical Appraisal Skills Programme** The Critical Appraisal Skills Programme supports the development of skills in the critical appraisal of scientific research and provides a number of critical appraisal tools to support this activity. *http://www.casp-uk.net*
Cerebral palsy	'Cerebral palsy is a condition that affects muscle control and movement caused by an injury to the brain before, during or after birth. Children with a diagnosis of cerebral palsy may have difficulties in controlling muscles and movements as they grow and develop.' *http://www.scope.org.uk/support/families/diagnosis/cerebral-palsy*

CI	**Confidence interval** 'A way of expressing how certain we are about the findings from a study, using statistics. It gives a range of results that is likely to include the "true" value for the population. A wide confidence interval (CI) indicates a lack of certainty about the true effect of the test or treatment – often because a small group of patients has been studied. A narrow CI indicates a more precise estimate (for example, if a large number of patients have been studied). The CI is usually stated as "95% CI", which means that the range of values has a 95 in a 100 chance of including the "true" value. For example, a study may state that "based on our sample findings, we are 95% certain that the 'true' population blood pressure is not higher than 150 and not lower than 110". In such a case the 95% CI would be 110 to 150.' *http://www.nice.org.uk/website/glossary/glossary.jsp*
Co-occupation	Co-occupations are caregiving activities in which parents and their children actively engage that address children's needs but also support the developing parent–child relationship.
Developmental coordination disorder (DCD)	'Developmental co-ordination disorder (DCD), also known as dyspraxia, is a condition affecting physical co-ordination. It causes a child to perform less well than expected in daily activities for their age, and appear to move clumsily.' *https://www.nhs.uk/conditions/developmental-coordination-disorder-dyspraxia/*
Developmental delay	'The term "developmental delay" or "global development delay" is used when a child takes longer to reach certain development milestones than other children their age. This might include learning to walk or talk, movement skills, learning new things and interacting with others socially and emotionally.' *https://www.mencap.org.uk/learning-disability-explained/conditions/global-development-delay#:~:text=The%20term%20'developmental%20delay'%20or,with%20others%20socially%20and%20emotionally.*
Down's or Down Syndrome	'A genetic condition caused by having an extra chromosome 21 in some or all of the body's cells. Down syndrome is marked by growth, developmental, and learning delays that vary from mild to severe.' *https://www.cancer.gov/publications/dictionaries/cancer-terms/def/down-syndrome*
Dyspraxia	See **Development coordination disorder**.
GRADE	**Grading of Recommendations Assessment, Development and Evaluation** GRADE is a systematic and explicit methodology to assist in the judgement of the quality and strength of guideline recommendations. *http://www.gradeworkinggroup.org*

Involvement	'The experience of participation while attending that may include elements of engagement, motivation, persistence, social connection and affect.' Imms et al 2017, p20
Intervention	'Intervention focuses on programs that are person oriented and environmental. These are designed to facilitate the performance of everyday tasks and adaptation of settings in which the person works, lives and socialises. Examples include teaching new techniques and providing equipment which facilitate independence in personal care, reducing environmental barriers and providing resources to lessen stress.' *https://wfot.org/about/about-occupational-therapy*
Intellectual disability, intellectual impairment or learning disability	'Intellectual disability is a term used when there are limits to a person's ability to learn at an expected level and function in daily life.' *https://www.cdc.gov/ncbddd/developmentaldisabilities/facts-about-intellectual-disability.html#:~:text=Intellectual%20disability%20is%20a%20term,disability%20vary%20greatly%20in%20children.*
Learning difficulty (see also 'Specific learning difficulties')	'A person with a learning difficulty may be described as having specific problems processing certain forms of information.' *https://www.learningdisabilities.org.uk/learning-disabilities/a-to-z/l/learning-difficulties*
Learning disability	See **Intellectual disability**.
Motor impairment	'Motor impairment is the partial or total loss of function of a body part, usually a limb or limbs. This may result in muscle weakness, poor stamina, lack of muscle control, or total paralysis.' *https://www.neuromodulation.com/motor-impairment#:~:text=Motor%20impairment%20is%20the%20partial,muscle%20control%2C%20or%20total%20paralysis.*
NHS	**National Health Service** The NHS refers to the publicly funded healthcare systems in the UK.
NICE	**National Institute for Health and Care Excellence** NICE (formerly the National Institute for Health and Clinical Excellence) provides national guidance and advice to improve health and social care. *http://www.nice.org.uk*
Occupation	'Everyday tasks or activities.' *https://www.rcot.co.uk/about-occupational-therapy/what-is-occupational-therapy*
Occupational therapist	'An occupational therapist helps people of all ages overcome challenges completing everyday tasks or activities.' *https://www.rcot.co.uk/about-occupational-therapy/what-is-occupational-therapy*

Outcome	Outcomes are the end result of intervention or action, or lack of it, on an individual or on a population group.
p value	**Probability** 'The p value is a statistical measure that indicates whether or not an effect is statistically significant. For example, if a study comparing 2 treatments found that 1 seems to be more effective than the other, the p value is the probability of obtaining these results by chance. By convention, if the p value is below 0.05 (that is, there is less than a 5% probability that the results occurred by chance), it is considered that there probably is a real difference between treatments. If the p value is 0.001 or less (less than a 0.1% probability that the results occurred by chance), the result is seen as highly significant. However, a statistically significant difference is not necessarily clinically significant. For example, drug A might relieve pain and stiffness statistically significantly more than drug B. But, if the difference in average time taken is only a few minutes, it may not be clinically significant. If the p value shows that there is likely to be a difference between treatments, the confidence interval describes how big the difference in effect might be.' *http://www.nice.org.uk/website/glossary/glossary.jsp*
Parent	Parent refers to the primary carers for the child or young person rather than the biological mother and father. For brevity in the document the word parent is used.
Participation	Participation is defined by the World Health Organization's International Classification of Functioning, Disability and Health for Children and Youth as 'involvement in a life situation'. WHO 2007, p9
Randomised controlled trial	'A study in which a number of similar people are randomly assigned to 2 (or more) groups to test a specific drug, treatment or other intervention. One group (the experimental group) has the intervention being tested, the other (the comparison or control group) has an alternative intervention, a dummy intervention (placebo) or no intervention at all. The groups are followed up to see how effective the experimental intervention was. Outcomes are measured at specific times and any difference in response between the groups is assessed statistically. This method is also used to reduce bias.' *http://www.nice.org.uk/website/glossary/glossary.jsp*
Royal College of Occupational Therapists (RCOT)	We're RCOT, the Royal College of Occupational Therapists. We've championed the profession and the people behind it for over 80 years, and today, we are thriving with over 36,000 members. Then and now, we're here to help achieve life-changing breakthroughs – for our members, for the people they support and for society as a whole. *https://www.rcot.co.uk/about-rcot*

Specific learning difficulties (see also 'Learning difficulties')	'Specific Learning Difficulties affect the way information is learned and processed. They are neurological (rather than psychological), usually run in families and occur independently of intelligence. They can have significant impact on education and learning and on the acquisition of literacy skills. 'SpLD is an umbrella term used to cover a range of frequently co-occurring difficulties, most commonly known as: • Dyslexia • Dyspraxia or Developmental Coordination Disorder (DCD) • Dyscalculia • Dysgraphia • Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder' *https://www.dyslexia.uk.net/specific-learning-difficulties/*
Systematic review	'A review that summarises the evidence on a clearly formulated review question according to a predefined protocol, using systematic and explicit methods to identify, select and appraise relevant studies, and to extract, analyse, collate and report their findings. It may or may not use statistical techniques, such as meta-analysis.' *http://www.nice.org.uk/website/glossary/glossary.jsp*

All websites in the glossary were accessed on 05/01/2023.

Appendix 2: Evidence tables

Each item of evidence used to support the recommendations has an associated evidence table.

The evidence tables are detailed in a separate document, *Practice guideline supplement: Evidence tables*, which can be downloaded from the RCOT website at: *https://www.rcot.co.uk/practice-resources/rcot-practice-guidelines*

Appendix 3: Assessment list

Table A3.1 presents standardised assessments focused on play that were utilised in the evidence underpinning the recommendations. These assessments are not endorsed by the Guideline Development Group or RCOT, and should be used as part of occupation-focused practice.

Table A3.1: Standardised assessments from the recommendation evidence

Child Engagement in Daily Life measure
Child-Initiated Pretend Play Assessment
Children's Assessment of Participation and Enjoyment
Daily Activities of Infants Scale
Iranian Children Participation Assessment Scale
McDonald Play Inventory
My Child's Play
Penn Interactive Peer Play Scale
Play Assessment for Group Setting
Play History Interview
Revised Knox Preschool Play Scale
Takata Play History Questionnaire
Test of Playfulness
Young Children's Participation and Environment measure

Appendix 4: Guideline Development Group

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The Guideline Development Group was supported by RCOT officers.

Appendix 5: Conflicts of interest declarations

Declarations were made in line with the conflicts of interest procedures (RCOT 2020, Section 3.2) as follows:

- Guideline group members, co-opted critical appraisers, peer reviewers and occupational therapists involved in the consultation activity identified their membership of one or more professional organisations or specialist forums, which included the RCOT Specialist Section – Children, Young People and Families, RCPCH, Sensory Integration Network UK and Ireland, National Handwriting Association, European Academy for Childhood Disability, National Association of Health Play Specialists and the Elizabeth Casson Trust.
- One member of the guideline sat on a NICE guideline development panel.
- The editorial lead was an RCOT employee.
- Stakeholder and peer reviewer declarations included interests related to paediatric organisations, services and research/publications.

The nature of declarations made by all those involved in the guideline development was related to professional interests and expertise in clinical practice, education or research. Where research included in the guideline literature search was authored by a guideline group member, it was not screened or appraised by the author.

No commercial or financial interests were declared.

The adherence to the RCOT conflicts of interest policy, the nature and management of the above declarations, together with the robust guideline development methodology, mean that the potential for any bias has been considered and mitigated.

Appendix 6: Literature search strategy

Table A6.1: Original search terms and strings

String 1 Intervention/ assessment/ outcome terms	String 2 Related play terms	String 3 Population	String 4 Occupational therapy terms	String 5 Occupation terms	String 6 Cost effectiveness terms
1a Title, subject, abstract: Play* **1b** Full text/all searchable fields: Play*	Game OR Games OR Gaming OR Sport* OR Recreation*	(birth n2 year*) OR infant* OR infancy OR neonat* OR new born* OR newborn* OR new-born* OR baby OR babies OR toddler* OR pre-school* OR preschool* OR Child* OR young people OR young person* OR Juvenile* OR Youngster* OR teen* OR youth* OR adolescen* OR paediatric* OR pediatric*	**4a** Title, subject, abstract: Occupational therap* **4b** Full text/all searchable fields: Occupational therap* (for broader search)	**5a** Title, subject, abstract: Occupation OR Occupations **5b** Full text/all searchable fields: Occupation OR Occupations	Econom* OR Cost* OR Financ* OR Money OR Monies OR Saving* OR Price OR Prices OR Pricing OR Priced OR Expenditure* OR Fund OR Funds OR Funding OR Funded OR (Value N2 money) OR Budget* OR Afford OR Affordable OR Payment*

Table A6.2: Top-up search terms and strings

String 1 Intervention/ assessment/ outcome terms	String 2 Related play terms	String 3 Population	String 4 Occupational therapy terms	String 5 Occupation terms	String 6 Cost effectiveness terms	String 7 High-level evidence terms
1a Title subject, abstract: Play* **1b** Full text/ all searchable fields: Play*	Game OR Games OR Gaming OR Sport* OR Recreation*	Birth n2 year* OR infant* OR Infancy OR Neonat* OR New born* OR Newborn* OR New-born* OR Baby OR Babies OR Toddler* OR Pre-school* OR Preschool* OR Child* OR Young people OR Young person* OR Juvenile* OR Youngster* OR Teen* OR Youth* OR Adolescen* OR Paediatric* OR Pediatric*	**4a** Title, subject, abstract: Occupational therap* **4b** Full text/ all searchable fields: Occupational therap* (for broader search)	**5a** Title, subject, abstract: Occupation OR Occupations **5b** Full text/all searchable fields: Occupation OR Occupations	Econom* OR Cost* OR Financ* OR Money OR Monies OR Saving* OR Price OR Prices OR Pricing OR Priced OR Expenditure* OR Fund OR Funds OR Funding OR Funded OR (Value N2 money) OR Budget* OR Afford OR Affordable OR Payment*	RCT OR Randomised control* trial* OR Randomized control* trial* OR Control* clinical trial* OR Systematic review* OR meta-analys* OR meta analys* OR metaanalys*

Core databases or platforms

The tables below show the literature search results by string combinations searched.

Table A6.3: Core databases or platforms: original search

Database or platform and search date	EBSCO	Ovid	Cochrane
	21.09.2020	21.09.2020	22.09.2020
Search term strings (below) and fields searched (right)	Title, abstract, subject; and full text for 1b, 4b and 5b	Title, abstract, descriptor, subject word heading, article identifier, MeSH subject headings; and all subject fields for 1b, 4b and 5b	Title, abstract and key word
Strings: 1a AND 3 AND 4a	593	186	93
Strings: 1a AND 3 AND 4b	1,349	805	110
Strings: 1a AND 3 AND 5a	448	166	131
Strings: 1a AND 3 AND 5b	483	500	35
Strings: 1b AND 2 AND 3 AND 4a	44	27	21
Strings: 1b AND 2 AND 3 AND 4b	223	224	25
Strings: 1b AND 2 AND 3 AND 5a	42	26	34
Strings: 1b AND 2 AND 3 AND 5b	45	107	9
Strings: 1a AND 4b AND 6	501	144	55
Strings: 1a AND 5b AND 6	303	296	20
Strings: 1b AND 2 AND 4b AND 6	79	38	15
Strings: 1b AND 2 AND 5b AND 6	19	43	9
Total results	4,129	2,562	557
Removed via platform de-duping and/or filter options (date/ language)	2,997	989	0
Total for cleansing	1,132	1,573	557

MEDLINE, CINAHL – accessed via EBSCOHOST platform

AMED, HMIC, APA PsycINFO, Social Policy and Practice – accessed via Ovid platform

Table A6.4: Core databases or platforms: top-up search

Database or platform and search date	EBSCO	Ovid	Cochrane
	04.01.2022	04.01.2022	04.01.2022
Search term strings (below) and fields searched (right)	Title, abstract, subject; and full text for 1b, 4b and 5b	Title, abstract, descriptor, subject word heading, article identifier, MeSH subject headings; and all subject fields for 1b, 4b and 5b	Title, abstract, key word
Strings: 1a AND 3 AND 4a AND 7	31	15	0
Strings: 1a AND 3 AND 4b AND 7	71	31	3
Strings: 1a AND 3 AND 5a AND 7	26	11	0
Strings: 1a AND 3 AND 5b AND 7	29	18	0
Strings: 1b AND 2 AND 3 AND 4a AND 7	4	2	1
Strings: 1b AND 2 AND 3 AND 4b AND 7	15	7	3
Strings: 1b AND 2 AND 3 AND 5a AND 7	7	1	2
Strings: 1b AND 2 AND 3 AND 5b AND 7	8	4	1
Strings: 1a AND 4b AND 6 AND 7	18	2	1
Strings: 1a AND 4b AND 6	100	25	2
Strings: 1a AND 5b AND 6 AND 7	13	3	0
Strings: 1a AND 5b AND 6	96	62	0
Strings: 1b AND 2 AND 4b AND 6 AND 7	0	2	3
Strings: 1b AND 2 AND 4b AND 6	20	6	3
Strings: 1b AND 2 AND 5b AND 6 AND 7	2	0	1
Strings: 1b AND 2 AND 5b AND 6	2	9	1
Total results	442	198	21
Removed via platform de-duping and/or filter options (date/language)	216	67	0
Total for cleansing	226	131	21

Table 6.5: Specialist databases or platforms: original search

Database or platform	Fields	Terms	Number retrieved	Date of search
OT Search	Title	Play OR Game OR recreation OR sport OR subject Play OR Game OR recreation OR sport	**196**	28.09.20
OTSeeker	Title and abstract	String 1a Strings 1b AND 2 AND 3 Strings 1b AND 6 Strings 2 AND 3 AND 6 [Age Group] like 'Paediatric/ adolescent' AND string 1a [Age Group] like 'Paediatric/ adolescent' AND strings 1b AND 2 Total	15 5 2 1 12 4 **39**	24.09.20
OTDBASE	Topic and title	[Topic] Paeds [subtopic] Leisure [Topic] Paeds [subtopic] Play [Topic] Paeds [subtopic] Sport [Title] Leisure [Title] Play/Playing/Play [Title] Sport Total	3 105 2 1 3 2 **116**	21.09.20
Eric		('occupational therapy' OR 'occupational therapist' OR 'occupational therapists') AND (play OR played OR plays OR playing OR playful OR playfulness OR game OR games OR gaming OR sport OR sports OR recreation OR recreational) – Limited by either 'children' or 'young children' 'occupational' AND (play OR played OR plays OR playing OR playful OR playfulness OR game OR games OR gaming OR sport OR sports OR recreation OR recreational) – Limited by 'occupational therapy' Thesaurus search: 'occupational therapy' – Limited by 'children' 'Play' (title) and 'occupational therapy' Play occupational – Limited by 'occupational therapy' Total:	48 42 55 12 26 **183**	28.09.20

Table A6.6: Specialist databases or platforms: top-up search

Database or platform	Fields	Terms	Number retrieved	Date of search
ERIC		('occupational therapy' OR 'occupational therapist' OR 'occupational therapists' OR 'occupational') AND (play OR played OR plays OR playing OR playful OR playfulness OR game OR games OR gaming OR sport OR sports OR recreation OR recreational) – Limited by either 'children' or 'young children'	16	05.01.22
		'occupational' AND (play OR played OR plays OR playing OR playful OR playfulness OR game OR games OR gaming OR sport OR sports OR recreation OR recreational) – Limited by 'occupational therapy'	13	
		Thesaurus search: 'occupational therapy', 'play', 'playground activities', 'playgrounds' – Limited by either 'children' or 'young children'	208	
		'Play' (title) and 'occupational therapy'	4	
		Play occupational – Limited by 'occupational therapy'	10	
		Total	**251**	

Appendix 7: Acknowledgements

The Guideline Development Group would like to thank all those who have contributed to the development of this practice guideline.

A7.1 Parent and children consultees

We are grateful to the three children who participated in the scope consultation, the two parents who commented on the scope and the three parents who participated in the consultation on the draft guideline.

One parent who commented on the scope consented to be acknowledged in the guideline:

- Kavita Rudge.

A7.2 Stakeholders

The following organisations commented on the guideline scope and wished to be acknowledged:

- Royal College of Paediatrics and Child Health
- Play Wales
- Cath Hubbuck, Senior Play Specialist, Great Ormond Street Hospital for Children.

Three organisations or individuals commented on the draft guideline consultation. The following two wished to be acknowledged in the guideline:

- Royal College of Paediatrics and Child Health
- Play Wales.

A7.3 Occupational therapists

Twenty-four occupational therapists commented on the draft guideline scope. The following wished to be acknowledged:

- Rachel Barnes, Paediatric Occupational Therapist, NHS
- Dr Sidney Chu, retired occupational therapist
- Anne Clark, Paediatric Occupational Therapy Team Manager, Derbyshire County Council
- Marguerite Durham, Specialist Paediatric Occupational Therapist, Knowl Hill School
- Jane Freeman, Paediatric Occupational Therapist, Country Durham and Darlington NHS Foundation Trust
- Tabitha Garnett, Occupational Therapist, Papillon House School

- Sue Gudgeon, Clinical Lead Children's Occupational Therapist, North Cumbria Integrated Care NHS Foundation Trust
- Lindsay Hardy, Director of Clinical Services, The Pace Centre
- Lydia Helyer, Senior Occupational Therapist, Devon Partnership NHS Trust
- Rachel Heslip, Occupational Therapist, Percy Hedley Foundation
- Chia Swee Hong, Specialist Mentor, Occupational Therapist, Independent Practitioner
- Jo Hunt, Senior Occupational Therapist, Percy Hedley Foundation
- Sarah Hyde, School Occupational Therapist Lead, The Pace Centre
- Megan Kirsten, Paediatric Occupational Therapist, Central Surrey Health
- Sharon Lewis, Occupational Therapist, Papillon House School
- Gina McMahon, Paediatric Occupational Therapist, NHS Orkney, and Primary School Teacher, Orkney Islands Council
- Claire Messom, Occupational Therapist, Papillon House School
- Rachel Murrill, Specialist Occupational Therapist, The Pace Centre
- Sophie Jane Nesbitt, Paediatric Occupational Therapist Band 6, Percy Hedley Foundation
- Faith Newton, Children's Occupational Therapist, Schools and the Owl Centre
- Jackie Parsonage, Occupational Therapist and PhD student, Oxford Brookes University
- Sharon Robey on behalf of the Occupational Therapy Team, Children and Adolescent Mental Health Services, Leicestershire Partnership Trust
- Sharon Symonds, Head of Children and Young People's Occupational Therapy Services, Aneurin Bevin Health Board.

Fourteen occupational therapists responded to the draft guideline consultation and the following wished to be acknowledged in the guideline:

- Dr Helga Abernethy, Independent Occupational Therapist
- Susan Allen, Senior Lecturer Occupational Therapy, Oxford Brookes University
- Shana Boltin, Clinical Lead Occupational Therapist for Mainstream Schools in Camden, Royal Free London NHS Foundation Trust
- Elaine Cook-Tippins, Clinical Services Manager Children and Adolescent Mental Health Services, Herefordshire
- Catherine Ellery, student occupational therapist

- Kim Griffin, Occupational Therapist Independent Practitioner
- Sarah Grimshaw, retired paediatric occupational therapist
- Chia Swee Hong, Specialist Mentor, Occupational Therapist, Independent Practitioner
- Dr Helen Lynch, Senior Lecturer, University College Cork P4Play, Ireland
- Louise Unwin, Senior Specialist Children's Occupational Therapist, Evelina London Children's Hospital
- Sabine Vincon, Research Fellow, Queen Margaret University, Edinburgh and PhD student, University College Cork, Ireland
- Ines Wenger, PhD student, Luleå University of Technology, Sweden.

A7.4 External peer reviewers

Two independent reviewers appraised the draft guideline:

- Dr Rob Brooks, Associate Professor Occupational Therapy, University of Bradford
- Dr Benita Powrie, Head of Division of Health and Rehabilitation, University of Huddersfield.

A7.5 Members of the public

One member of the public commented on the draft guideline:

- Thomas Morgenthaler, PhD student, Zurich University of Applied Sciences, Switzerland; University College Cork, Ireland; and Queen Margaret University, Edinburgh.

A7.6 Co-opted critical appraisers

RCOT and the Guideline Development Group are grateful to the following who generously assisted with the critical appraisal of the guideline literature:

- Dr Helga Abernethy, Member RCOT Specialist Section – Children, Young People and Families
- Lelanie Brewer, Member RCOT Specialist Section – Children, Young People and Families
- Dr Rob Brooks, Member RCOT Specialist Section – Children, Young People and Families
- Charlotte Done, Member RCOT Specialist Section – Children, Young People and Families
- Rebecca Fortescue, Member RCOT Specialist Section – Children, Young People and Families
- Kim Griffin, Member RCOT Specialist Section – Children, Young People and Families and Specialist Section – Independent Practice

- Carolyn Hay, RCOT Pre-registration Education Manager
- Sherri Kapadia, RCOT Research and Development Intern 2021
- Alison Keir, RCOT Professional Practice Lead, Scotland
- Dr Debbie Kramer-Roy, Member RCOT Specialist Section – Children, Young People and Families
- Rachel Kruger, Member RCOT Specialist Section – Children, Young People and Families
- Sarah Lacey, Former member RCOT Specialist Section – Children, Young People and Families
- Cara Maddison, Member RCOT Specialist Section – Children, Young People and Families
- Pauline McDonald, formerly RCOT Research and Development Officer
- Dr Vicky McQuillan, Member RCOT Specialist Section – Children, Young People and Families
- Rebecca Micklethwaite, Member RCOT Specialist Section – Children, Young People and Families, Specialist Section – Independent Practice, and Specialist Section – Neurological Practice
- Karin Orman, RCOT Director of Practice and Innovation
- Dr Jackie Parsonage, Member RCOT Specialist Section – Children, Young People and Families
- Dr Sally Payne, RCOT Professional Advisor – Children, Young People and Families
- Joanne Pennell, Member RCOT Specialist Section – Children, Young People and Families
- Dr Fernanda Perez, formerly RCOT Professional Development Administrator
- Kirsten Prest, Member RCOT Specialist Section – Children, Young People and Families
- Julia Roscoe, RCOT Research and Development Assistant
- Dr Stephanie Tempest, formerly RCOT Professional Development Manager
- Ruth Wallis, Member RCOT Specialist Section – Children, Young People and Families
- Dr Gillian Ward, RCOT Research and Development Manager
- Dr Catherine Willson, Member RCOT Specialist Section – Children, Young People and Families.

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- Dr Sally Payne, RCOT Professional Advisor – Children, Young People and Families
- RCOT Library Service
- RCOT Publications Group and supporting officers Julia Roberts, Quality Programme Lead; Dr Gillian Ward, Research and Development Manager; and Julia Roscoe, Research Assistant.

Appendix 8: Parent consultation questionnaire

Supporting occupational therapists to use play to help children and young people

Introduction

We, the Royal College of Occupational Therapists Guideline Development Group, are writing a new practice guideline *Occupational Therapy and Play*.

An occupational therapist helps people of all ages overcome challenges completing everyday tasks or activities – what we call 'occupations.' We represent occupational therapists in the UK, helping them to do their job and champion occupational therapy. The guideline is based on research evidence and tells occupational therapists the best way to use play to help children and young people to do the things they need or want to do.

We have reviewed the most recent research evidence on occupational therapy and play and how it is used in occupational therapy practice for 0–18-year-olds. We have written some recommendations, based on high-quality research evidence, to support occupational therapists in roles where they work with children and young people.

The guideline will be used by occupational therapists working with children and young people.

We value your opinion

As a parent or guardian of someone who could benefit from these guidelines, we'd like your help in making sure the guideline's recommendations are clear and make sense. We really value your opinion and would like to hear your thoughts on the recommendations and future research suggestions by taking part in this online consultative survey.

You or your child do not need to have received occupational therapy support to be able to take part.

Points to note

The recommendations cover occupational therapy services for 0–18 year olds.

The consultation survey has thirteen questions and should take approximately 10–15 minutes to complete.

We will use your answers along with occupational therapists and other relevant organisations to help amend the guideline.

Your responses are completely anonymous.

Because the survey is anonymous, once you submit your response, it is not possible to withdraw your answers because we will not know which response is yours.

If you feel upset by any of the questions and would like to talk to someone, you could contact PARENTS Online for advice and information. PARENTS Online provides parents and carers with free online peer support: https://parentsonline.co.uk/contact-us/

If you have any questions, please contact Angie Thompson, RCOT Research and Development Officer: angie.thompson@rcot.co.uk or 0203 141 4615.

The guideline will be available in 2023 on this website: https://www.rcot.co.uk/practice-resources/rcot-practice-guidelines

This survey is run through the Online Surveys JISCMail service https://www.onlinesurveys.ac.uk/. JISC is responsible for maintaining the security of the operating system used to provide online surveys and the JISC Online Security Policy applies (available at https://www.onlinesurveys.ac.uk/help-support/online-surveys-security/). RCOT is the data controller for the information you provide in the context of this survey.

The survey has been reviewed and given approval through the RCOT project approval process.

Full details of the Royal College of Occupational Therapists' guideline development process, which has been accredited by the National Institute for Health and Care Excellence (NICE), are available in the *Practice guideline development manual* at: https://www.rcot.co.uk/node/293

You have the right to decide whether to participate in this survey. All information collected about you will be kept strictly confidential. Respondents will be anonymous in the survey; contact details if specifically requested and provided are downloaded and stored separately to the survey data itself at RCOT on a password protected file and a code is used as a participant identifier. However, by logging into the JISC platform personal data in the context of GDPR will be processed by JISC to log users onto the site, session cookies and a unique identifier (UID) will be processed to manage the experience. All respondents will be anonymous in the analysis and published results.

Your data will only be viewed by the project team. The data will be processed through the JISC survey software and may be securely exported and analysed by RCOT or a specialist section or regional group acting on RCOT's behalf. Survey data will be stored for a maximum of 3 years after the survey conclusion and will be destroyed in accordance with the Royal College of Occupational Therapists Research Data Retention and Destruction Policy.

1. **I have read the information, have had the opportunity to ask questions and agree to take part in the consultation**
    a. Agree: I wish to take part in the consultation. (Proceed to first page of survey)
    b. Disagree: I do not wish to take part in the consultation

    IF DISAGREE TO TAKE PART:

    Thank you

Thank you for considering taking part in the survey. You may now close your browser.

IF AGREE TO TAKE PART:

ROUTE TO SURVEY QUESTIONS

Questions about the Recommendations in the Guideline

The next sections focus on the recommendations for different areas of play and occupational therapy practice. They are divided into three main areas of occupational therapy assessment, intervention, and outcomes.

Assessment

Occupational therapy assessment for play is important for agreeing individual children's goals and supporting families with interventions (actions) to help the child or young person do the things they need or want to do.

Please read the suggested recommendations and answer the following questions.

Assessment recommendations
1. If using a standardised assessment of play, it is recommended that occupational therapists consider the psychometric properties of the measure and their suitability to the clinical and cultural context of the child.
2. When assessing play of 0–5 year olds, it is recommended that occupational therapists consider both the child's attendance (i.e. 'being there') as well as the child's involvement in play (i.e. externally observed behaviour suggestive of the child's lived experience of play).
3. It is recommended that occupational therapists consider the impact of the physical environment (wheelchair use, play items and equipment) and the social environment (other people) on participation in play.

1. Are there any words or phrases in the recommendations that you don't know what they mean? Yes/No

2. IF YES TO Q1:

   Please could you tell us what they are in the box below? OPEN RESPONSE

Intervention

Occupational therapy recommended interventions (actions) can be applied to a range of conditions and wherever occupational therapists work.

Please read the suggested recommendations on intervention and answer the following questions.

Intervention recommendations
4. For children and young people with, and at risk of, **mental health concerns**, it is recommended that occupational therapists match the desired therapy outcome with appropriate play-based and occupation-based interventions.
5. For children with **intellectual impairments, developmental delays, and learning disabilities**, it is recommended that occupational therapists promote positive mental health outcomes through activity-based interventions including social skills programming and play, leisure, and recreational activities.
6. For children with **specific learning difficulty**, it is recommended that occupational therapists consider group therapy-led peer play activities including practice play, symbolic play, and games with rules to improve executive function skills and behaviour regulation.
7. For children with **attention deficit hyperactivity disorder** (ADHD), it is recommended that occupational therapists consider a structured intervention in peer-to-peer interactions to improve social play skills.
8. For **hospitalised children**, it is recommended that occupational therapists promote play opportunities to reduce the stress of being in hospital.
9. It is recommended that occupational therapists consider the use of gaming technology across a range of settings to support the development of children's motor skills, perception of motor ability and sensorimotor functioning.

3. Are there any words or phrases in the recommendations that you don't know what they mean? Yes/No

4. IF YES TO Q3:

   Please could you tell us what they are in the box below? OPEN RESPONSE

Outcome

Measuring the outcomes or results of occupational therapy practice or recommendations can be complex.

Please read the suggested recommendations on outcomes and answer the following questions.

Outcome recommendations
10. It is recommended that occupational therapists evaluate children and young people's participation in play as a therapy outcome.
11. It is recommended that occupational therapists evaluate changes in the social context of play and their impact on children and young people's play participation alongside measures of play performance (if these are used), when assessing therapy outcomes.
12. It is recommended that occupational therapists consider adults' perspectives regarding children and young people's play participation when evaluating therapy outcomes, alongside objective measures of play performance if these are used.
13. It is recommended that occupational therapists elicit the child and young person's perspective on play participation when evaluating therapy outcomes, alongside objective measures of play performance if these are used.

5. Are there any words or phrases in the recommendations that you don't know what they mean? Yes/No

6. IF YES TO Q5:

   Please could you tell us what they are in the box below? OPEN RESPONSE

Best practice suggestion

Below is a suggestion where the research evidence is still emerging and there is still some uncertainty about what to recommend.

Please read the best practice suggestion and answer the following questions.

Best practice suggestion
14. It is suggested that when assessing children with a **motor impairment**, potentially modifiable factors (across body function/structure, activity, environmental and personal factors) are observed.

7. Are there any words or phrases in the best practice suggestion that you aren't sure what they mean? Yes/No

8. If yes to Q7:

   Please could you tell us what they are in the box below? OPEN RESPONSE

Future research recommendations

The Guideline Development Group has identified areas where further research into occupational therapy and play is needed so that recommendations might be made in the future. These are the following:

- Finding out what play means for all children and young people, so we can understand more about their perspectives on play.
- Research into developing new ways of measuring the results of play from the perspective of a child, young person, or members of their family.
- Gathering more information on how occupational therapists are using play in their everyday work.
- Finding out what parents, teachers, occupational therapists, and other adults think about play and how their views may affect children with additional needs.
- How the actions occupational therapists recommend to change the social environments children play in, affects the way children take part in play.
- Finding out more about how occupational therapists can help with designing toys and playgrounds to help all children take part in play.
- Looking further into how occupational therapists can understand play for children from different background and cultures, to make sure occupational therapists can meet their needs.
- Doing more research on how play interventions (actions) recommended by occupational therapists help children and young people, particularly with their mental health.
- Finding out how restrictions in taking part in play over a long period, for example during the COVID-19 pandemic, can affect children.
- More research into occupational therapy and play is needed in the age group 11–18 years old.

9. Do you think anything is missing from the areas for future research into occupational therapy and play?

   Yes/No

10. If yes to Q9

    Please could you tell us what you think is missing in the box below? OPEN RESPONSE

11. If you have any other comments you'd like to add about the draft guideline, please enter these in the box below.

Information about you

We would like to understand the diversity of people responding. You do not have to answer these questions if you don't want to.

12. Where do you live? Please choose one option from the list below

    England
    Wales
    Scotland
    Northern Ireland
    Isle of Man
    Channel Islands
    Elsewhere
    Prefer not to say

13. What is your ethnic group?

    Please choose one option that best describes your ethnic group or background:

    a. White (English / Welsh / Scottish / Northern Irish / British / Irish / Gypsy or Irish Traveller / Any other White background)
    b. Mixed / Multiple ethnic groups (White and Black Caribbean / White and Black African / White and Asian / Any other Mixed / Multiple ethnic background)
    c. Asian / Asian British (Indian / Pakistani / Bangladeshi / Chinese / Any other Asian background)
    d. Black / African / Caribbean / Black British (African / Caribbean / Any other Black / African / Caribbean background)
    e. Other ethnic group (Arab / Any other ethnic group)
    f. Prefer not to say

Please press submit to send your final responses. As this survey is anonymous, once submitted your responses cannot be withdrawn.

Final page

Thank you very much for taking time to respond to this consultation. We really appreciate your help!

If you feel upset by any of the questions and would like to talk to someone, you could contact PARENTS Online for advice and information. PARENTS Online provides parents and carers with free online peer support: https://parentsonline.co.uk/contact-us/

If you have any further questions, please contact Angie Thompson, RCOT Research and Development Officer: angie.thompson@rcot.co.uk or 0203 141 4615.

Please press submit to send your final responses. As this survey is anonymous, once submitted your responses cannot be withdrawn.

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Occupational therapy and play

Practice guideline

The purpose of this guideline is to provide evidence-based recommendations for occupational therapists working with children aged 0-18 years old. These recommendations support occupational therapists in the way they recognise and encourage play as an occupation and use play as a tool within their practice, through all stages of the occupational therapy process.

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