

- **Linking Orthodontics with Periodontal Health**  
Linking Orthodontics with Periodontal Health Coordinating with Oral Surgeons for Jaw Corrections Integrating Pediatric Dentistry for Early Intervention Combining Endodontic Care in Complex Cases Collaborative Planning with Prosthodontists Sharing Diagnostic Data Across Multiple Specialists Addressing Aesthetic and Functional Goals Together Communication Strategies Among Dental Teams Balancing Orthodontic Solutions and Restorative Needs Encouraging Holistic Treatment Approaches Managing Patients with Special Medical Conditions Efficient Referrals That Improve Patient Outcomes
- **AI Driven Aligners That Predict Movement**  
AI Driven Aligners That Predict Movement Cloud Based Case Tracking for Efficient Management Digital Impressions That Replace Traditional Molds Virtual Consultations for Remote Care 3D Printing Applications in Orthodontic Appliances Teledentistry and Its Impact on Patient Convenience Software Innovations for Treatment Simulations Aligning Treatment Goals with Technological Advances Advantages of Using Digital Models in Planning Modern Approaches to Virtual Monitoring Reducing Errors Through Computerized Analysis The Future of Orthodontics in a Digital Era
- **About Us**



Okay, let's talk about why getting braces for your kid used to be such a hassle, and then how teledentistry is making it easier.

For years, getting orthodontic treatment for children felt like a logistical puzzle. Think about it: you're already juggling school, extracurriculars, and just generally keeping your sanity. A child's bite can be improved with timely orthodontic intervention Youth orthodontic correction disease. Then you add in regular orthodontist appointments, often during school hours. That meant missed classes, rushed lunches, and the whole family scrambling. Travel was another big hurdle. Depending on where you lived, the nearest orthodontist specializing in children might be a significant drive away. Time off work, gas money, and the sheer exhaustion of the commute all added up.

And let's not forget about the kids themselves. Many children experience anxiety about dental or orthodontic procedures. The unfamiliar environment, the sounds of the equipment, the feeling of someone working in their mouth – it can all be quite overwhelming. This anxiety could make appointments difficult, and even impact the overall effectiveness of the treatment. Traditional orthodontic care, while essential for many kids, often presented a significant burden on families. The demands of scheduling, travel, and managing a child's anxiety created a real challenge to accessing necessary treatment.

## **\* Common periodontal issues in children undergoing orthodontic treatment. —**

- \* The interplay between orthodontic forces and periodontal tissues in young patients.
- \* Common periodontal issues in children undergoing orthodontic treatment.
- \* Preventive measures to maintain periodontal health during orthodontic treatment.
- \* The role of oral hygiene instructions for children and parental involvement.
- \* Early detection and management of periodontal problems during orthodontic care.
- \* Collaboration between orthodontists and periodontists for optimal outcomes.

Okay, let's talk about teledentistry and how it's making life easier for people wanting straighter teeth, specifically when it comes to orthodontic consultations and keeping an eye on progress.

Think about the traditional route. You suspect you need braces or aligners. First, you've got to find an orthodontist, which might involve asking friends, scouring the internet, and reading reviews. Then comes scheduling that initial consultation. Juggling work, school, family commitments, and then finding a time that works for both you and the orthodontist's office can feel like a logistical nightmare. Finally, you actually have to get to the appointment, which might mean battling traffic or taking time off work. And if you decide to move forward with treatment, get ready for regular follow-up appointments, often during business hours.

Now, here's where teledentistry steps in to make things smoother. Instead of that initial in-person consultation, many orthodontists now offer virtual ones. You might send in some photos of your teeth, answer a questionnaire online, or even have a live video call with the orthodontist. This saves you time and travel. You can do it from the comfort of your own home, during your lunch break, or whenever it fits into your schedule. It's particularly helpful for people in rural areas with limited access to specialists, or for those with busy lives who struggle to find time for appointments.

But it doesn't stop there. Teledentistry also makes monitoring your treatment progress easier. Instead of trekking to the office every few weeks, you might submit photos or videos of your teeth using a smartphone app. The orthodontist can then review these remotely and provide feedback and adjustments to your treatment plan. This reduces the frequency of in-person visits, saving you even more time and hassle. It also allows for quicker identification of any potential issues, meaning they can be addressed promptly, potentially preventing more serious problems down the line.

Essentially, teledentistry helps democratize access to orthodontic care and makes the whole process much more manageable for the patient. It's about leveraging technology to fit orthodontic treatment into your life, rather than the other way around.

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the 1990s, the number of people in the UK who are aged 65 and over has increased by 1.5 million (1990–2000) and is projected to increase by a further 1.5 million by 2020 (Office for National Statistics 2001). The number of people aged 65 and over in the UK is projected to increase from 10.5 million in 2000 to 13.5 million in 2020.

There is a growing awareness of the need to develop strategies to meet the needs of the ageing population. The Department of Health (2000) has identified the need to develop a 'new paradigm' for the care of the ageing population, one that is based on the principles of 'active ageing'.

The concept of 'active ageing' was first introduced by the World Health Organization (WHO) in 1990. It is defined as 'the process of maximizing the number of years of life spent in good health and free from disability' (WHO 1990). The WHO has identified three key components of active ageing: (1) the development of a positive attitude towards ageing, (2) the development of a healthy lifestyle, and (3) the development of a supportive environment.

The WHO has also identified a number of factors that are associated with active ageing. These include: (1) the level of education, (2) the level of income, (3) the level of social support, (4) the level of physical activity, and (5) the level of mental activity.

The WHO has also identified a number of strategies that can be used to promote active ageing. These include: (1) the development of a positive attitude towards ageing, (2) the development of a healthy lifestyle, and (3) the development of a supportive environment.

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# **\* Preventive measures to maintain periodontal health during orthodontic treatment.**

Teledentistry is changing the game when it comes to patient convenience, and a big part of that change is remote monitoring. Think about it: traditionally, you'd have to carve out time for regular office visits, even if it was just a quick check-up. But with teledentistry, that's not always necessary.

A major perk is the reduction in actual trips to the dentist's office. We're talking about saving time, gas money, and the hassle of rearranging your schedule. Instead of physically being there for every little adjustment or check-in, your dentist can monitor your progress remotely. This is especially beneficial for things like orthodontic treatment. Imagine getting your aligners adjusted virtually, based on photos and videos you send in, rather than having to rush to the office.

And it's not just about fewer appointments; it's about faster treatment adjustments too. If your dentist spots an issue during a remote check-up, they can often provide guidance or make necessary tweaks more quickly than if they had to wait for your next scheduled appointment. This can lead to more efficient treatment and potentially better outcomes in the long run. It all adds up to a more convenient and ultimately, a more patient-friendly experience.

# **\* The role of oral hygiene instructions for children and parental involvement.**

Okay, so teledentistry is making waves, right? Especially when we talk about how convenient it is for patients. And you know who could really benefit from that convenience? Kids needing braces! Pediatric orthodontics is seeing a huge surge in teledentistry applications, and it's pretty cool what they're doing.

Think about it: getting to the orthodontist can be tough. School schedules, after-school activities, parents' work – it all adds up. That's where virtual consultations come in. Instead of trekking to the office for that initial "should we even consider braces?" appointment, families can now often do it from their living room. They send in some photos, maybe even a short video, and the orthodontist can give them a preliminary assessment. It saves time, gas, and a whole lot of hassle.

But it's not just about the initial consultations. Remote monitoring is another big deal. Imagine a smartphone app that lets you track your kid's progress with their aligners or braces. Some apps even have features where you can take pictures of your kid's teeth, and the orthodontist can review them remotely, checking for things like proper aligner fit or any potential problems. This means fewer in-office visits for routine checks, which is a win for everyone. It's like having a virtual orthodontist in your pocket, keeping an eye on things and intervening only when necessary.

Ultimately, these teledentistry applications in pediatric orthodontics are making orthodontic care more accessible and convenient for families. It frees up time, reduces the stress of appointments, and can even lead to earlier intervention, potentially resulting in better outcomes. It's a really exciting development that's making a real difference in how kids get the orthodontic care they need.

**\* Early detection and management of periodontal problems during orthodontic care.**

Teledentistry, while streamlining many aspects of orthodontic care, has a particularly interesting impact on parental involvement. On one hand, it can genuinely enhance it. Imagine a busy parent, juggling work and family, now able to participate in virtual consultations. Instead of missing work for every appointment, they can join a quick video call to discuss progress and address concerns with the orthodontist, right from their office or home. This accessibility fosters a sense of being more connected and informed about their child's treatment.

However, there's also a potential for a slight disconnect. Traditional in-person appointments often involve a deeper level of interaction – a casual chat with the orthodontist about the child's oral hygiene habits, a physical demonstration of how to use elastics, or a more immediate, tangible sense of the child's comfort level during treatment. While teledentistry uses technology to bridge geographical gaps, it might inadvertently create a subtle emotional distance. It requires a conscious effort from both the orthodontist and the parent to maintain that important personal connection and ensure the child feels fully supported throughout the process. In essence, teledentistry offers a powerful tool for parental engagement, but its true value lies in how thoughtfully it's integrated into the overall treatment plan, always prioritizing the child's wellbeing and the parent-child-orthodontist relationship.

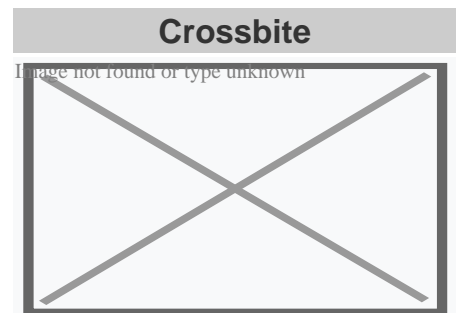
## **\* Collaboration between orthodontists and periodontists for optimal outcomes.**

Teledentistry offers a tempting shortcut to convenience, particularly for busy families navigating pediatric orthodontics. But before we fully embrace virtual smiles, we need to acknowledge the potential potholes on this digital road. One significant limitation is the "touch and feel" aspect. Orthodontics often requires a skilled clinician to physically assess a child's bite, jaw alignment, and tooth movement. While intraoral scanners and remote monitoring can provide valuable data, they may not fully replicate the comprehensive examination possible in a traditional office setting. This is especially crucial for younger patients who may struggle to articulate subtle discomfort or changes.

Ethical considerations also come into play. Ensuring patient privacy and data security is paramount, particularly with sensitive health information belonging to minors. We need robust safeguards to prevent unauthorized access and misuse of images and records transmitted electronically. Furthermore, the potential for misdiagnosis or delayed treatment due to reliance on remote assessments is a real concern. What happens if a subtle but critical issue is missed during a virtual consultation? Clear protocols and training are needed to minimize these risks.

Finally, accessibility must be considered. While teledentistry can bridge geographical gaps, it also risks widening the digital divide. Not all families have reliable internet access or the necessary technology to participate effectively. We need to ensure that teledentistry solutions don't inadvertently exclude vulnerable populations and that traditional in-person care remains readily available. The convenience of teledentistry is undeniable, but it shouldn't come at the expense of quality care, ethical practice, or equitable access for all children.

### About crossbite



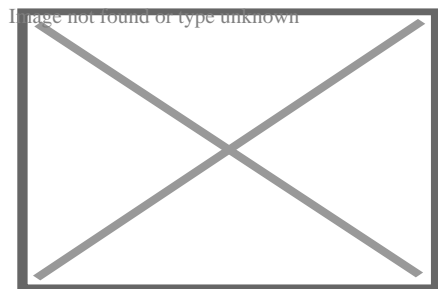
Unilateral posterior crossbite

**Specialty** Orthodontics

In dentistry, **crossbite** is a form of malocclusion where a tooth (or teeth) has a more buccal or lingual position (that is, the tooth is either closer to the cheek or to the tongue) than its corresponding antagonist tooth in the upper or lower dental arch. In other words, crossbite is a lateral misalignment of the dental arches.<sup>[1][2]</sup>

### Anterior crossbite

[edit]



## Class 1 with anterior crossbite

An anterior crossbite can be referred as negative overjet, and is typical of class III skeletal relations (prognathism).

# Primary/mixed dentitions

[edit]

An anterior crossbite in a child with baby teeth or mixed dentition may happen due to either dental misalignment or skeletal misalignment. Dental causes may be due to displacement of one or two teeth, where skeletal causes involve either mandibular hyperplasia, maxillary hypoplasia or combination of both.

## Dental crossbite

[edit]

An anterior crossbite due to dental component involves displacement of either maxillary central or lateral incisors lingual to their original erupting positions. This may happen due to delayed eruption of the primary teeth leading to permanent teeth moving lingual to their primary predecessors. This will lead to anterior crossbite where upon biting, upper teeth are behind the lower front teeth and may involve few or all frontal incisors. In this type of crossbite, the maxillary and mandibular proportions are normal to each other and to the cranial base. Another reason that may lead to a dental crossbite is crowding in the maxillary arch. Permanent teeth will tend to erupt lingual to the primary teeth in presence of crowding. Side-effects caused by dental crossbite can be increased recession on the buccal of lower incisors and higher chance of inflammation in the same area. Another term for an anterior crossbite due to dental interferences is *Pseudo Class III Crossbite or Malocclusion*.

## Single tooth crossbite

[edit]

Single tooth crossbites can occur due to uneruption of a primary teeth in a timely manner which causes permanent tooth to erupt in a different eruption pattern which is lingual to the primary tooth.[<sup>3</sup>] Single tooth crossbites are often fixed by using a finger-spring based appliances.[<sup>4</sup>][<sup>5</sup>] This type of spring can be attached to a removable appliance which is used by patient every day to correct the tooth position.

## Skeletal crossbite

[edit]

An anterior crossbite due to skeletal reasons will involve a deficient maxilla and a more hyperplastic or overgrown mandible. People with this type of crossbite will have dental compensation which involves proclined maxillary incisors and retroclined mandibular incisors. A proper diagnosis can be made by having a person bite into their centric relation will show mandibular incisors ahead of the maxillary incisors, which will show the skeletal discrepancy between the two jaws.<sup>[6]</sup>

## Posterior crossbite

[edit]

Bjork defined posterior crossbite as a malocclusion where the buccal cusps of canine, premolar and molar of upper teeth occlude lingually to the buccal cusps of canine, premolar and molar of lower teeth.<sup>[7]</sup> Posterior crossbite is often correlated to a narrow maxilla and upper dental arch. A posterior crossbite can be unilateral, bilateral, single-tooth or entire segment crossbite. Posterior crossbite has been reported to occur between 7–23% of the population.<sup>[8]</sup><sup>[9]</sup> The most common type of posterior crossbite to occur is the unilateral crossbite which occurs in 80% to 97% of the posterior crossbite cases.<sup>[10]</sup><sup>[3]</sup> Posterior crossbites also occur most commonly in primary and mixed dentition. This type of crossbite usually presents with a *functional shift of the mandible towards the side of the crossbite*. Posterior crossbite can occur due to either skeletal, dental or functional abnormalities. One of the common reasons for development of posterior crossbite is the size difference between maxilla and mandible, where maxilla is smaller than mandible.<sup>[11]</sup> Posterior crossbite can result due to

- Upper Airway Obstruction where people with "adenoid faces" who have trouble breathing through their nose. They have an open bite malocclusion and present with development of posterior crossbite.<sup>[12]</sup>
- Prolong digit or suckling habits which can lead to constriction of maxilla posteriorly<sup>[13]</sup>
- Prolong pacifier use (beyond age 4)<sup>[13]</sup>

## Connections with TMD

[edit]

# Unilateral posterior crossbite

[edit]

Unilateral crossbite involves one side of the arch. The most common cause of unilateral crossbite is a narrow maxillary dental arch. This can happen due to habits such as digit sucking, prolonged use of pacifier or upper airway obstruction. Due to the discrepancy between the maxillary and mandibular arch, neuromuscular guidance of the mandible causes mandible to shift towards the side of the crossbite.<sup>[14]</sup> This is also known as Functional mandibular shift. This shift can become structural if left untreated for a long time during growth, leading to skeletal asymmetries. Unilateral crossbites can present with following features in a child

- Lower midline deviation<sup>[15]</sup> to the crossbite side
- Class 2 Subdivision relationships
- Temporomandibular disorders <sup>[16]</sup>

## Treatment

[edit]

A child with posterior crossbite should be treated immediately if the child shifts their mandible on closing, which is often seen in a unilateral crossbite as mentioned above. The best age to treat a child with crossbite is in their mixed dentition when their palatal sutures have not fused to each other. Palatal expansion allows more space in an arch to relieve crowding and correct posterior crossbite. The correction can include any type of palatal expanders that will expand the palate which resolves the narrow constriction of the maxilla.<sup>[9]</sup> There are several therapies that can be used to correct a posterior crossbite: braces, 'Z' spring or cantilever spring, quad helix, removable plates, clear aligner therapy, or a Delaire mask. The correct therapy should be decided by the orthodontist depending on the type and severity of the crossbite.

One of the keys in diagnosing the anterior crossbite due to skeletal vs dental causes is diagnosing a CR-CO shift in a patient. An adolescent presenting with anterior crossbite may be positioning their mandible forward into centric occlusion (CO) due to the dental interferences. Thus finding their occlusion in centric relation (CR) is key in diagnosis. For anterior crossbite, if their CO matches their CR then the patient truly has a skeletal component to their crossbite. If the CR shows a less severe class 3 malocclusion or teeth not in anterior crossbite, this may mean that their anterior crossbite results due to dental interferences.<sup>[17]</sup>

Goal to treat unilateral crossbites should definitely include removal of occlusal interferences and elimination of the functional shift. Treating posterior crossbites early may help prevent the occurrence of Temporomandibular joint pathology.<sup>[18]</sup>

Unilateral crossbites can also be diagnosed and treated properly by using a Deprogramming splint. This splint has flat occlusal surface which causes the muscles to deprogram themselves and establish new sensory engrams. When the splint is removed, a proper centric relation bite can be diagnosed from the bite.<sup>[19]</sup>

# Self-correction

[edit]

Literature states that very few crossbites tend to self-correct which often justify the treatment approach of correcting these bites as early as possible.<sup>[9]</sup> Only 0–9% of crossbites self-correct. Lindner et al. reported that 50% of crossbites were corrected in 76 four-year-old children.<sup>[20]</sup>

## See also

[edit]

- List of palatal expanders
- Palatal expansion
- Malocclusion

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[edit]

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## External links

[edit]

### Classification

D

- **ICD-10:** K07.2
- **ICD-9-CM:** 524.27

- v
- t
- e

## Orthodontics

### Diagnosis

- Bolton analysis
- Cephalometric analysis
- Cephalometry
- Dentition analysis
- Failure of eruption of teeth
- Little's Irregularity Index
- Malocclusion
- Scissor bite
- Standard anatomical position
- Tooth ankylosis
- Tongue thrust

### Conditions

- Overbite
- Overjet
- Open bite
- Crossbite
- Dental crowding
- Dental spacing
- Bimaxillary Protrusion
- Prognathism
- Retrognathism
- Maxillary hypoplasia
- Condylar hyperplasia
- Overeruption
- Mouth breathing
- Temporomandibular dysfunction

## **Appliances**

- ACCO appliance
- Archwire
- Activator appliance
- Braces
- Damon system
- Elastics
- Frankel appliance
- Invisalign
- Lingual arch
- Lip bumper
- Herbst Appliance
- List of orthodontic functional appliances
- List of palatal expanders
- Lingual braces
- Headgear
- Orthodontic technology
- Orthodontic spacer
- Palatal lift prosthesis
- Palatal expander
- Quad helix
- Retainer
- SureSmile
- Self-ligating braces
- Splint activator
- Twin Block Appliance

## **Procedures**

- Anchorage (orthodontics)
- Cantilever mechanics
- Fiberotomy
- Interproximal reduction
- Intrusion (orthodontics)
- Molar distalization
- SARPE
- Serial extraction

## **Materials**

- Beta-titanium
- Nickel titanium
- Stainless steel
- TiMolium
- Elgiloy
- Ceramic
- Composite
- Dental elastics

- Edward Angle
- Spencer Atkinson
- Clifford Ballard
- Raymond Begg
- Hans Peter Bimler
- Samir Bishara
- Arne Björk
- Charles B. Bolton
- Holly Broadbent Sr.
- Allan G. Brodie
- Charles J. Burstone
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- David Di Biase
- Jean Delaire
- Terry Dischinger
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- John Nutting Farrar
- Rolf Frankel
- Sheldon Friel
- Thomas M. Graber
- Charles A. Hawley
- Reed Holdaway
- John Hooper (Orthodontist)
- Joseph Jarabak
- Harold Kesling
- Albert Ketcham
- Juri Kurol

#### **Notable contributors**

- Craven Kurz
- Benno Lischer
- James A. McNamara
- Birte Melsen
- Robert Moyers
- Hayes Nance
- Ravindra Nanda
- George Northcroft
- Dean Harold Noyes
- Frederick Bogue Noyes
- Albin Oppenheim
- Herbert A. Pullen
- Earl W. Renfroe
- Robert M. Ricketts
- Alfred Paul Rogers
- Ronald Roth
- Everett Shapiro
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- Frederick Lester Stanton
- Earl Emanuel Shepard
- Cecil C. Stiles

## **Organizations**

- American Association of Orthodontists
- American Board of Orthodontics
- British Orthodontic Society
- Canadian Association of Orthodontists
- Indian Orthodontic Society
- Italian Academy of Orthodontic Technology
- Society for Orthodontic Dental Technology (Germany)

## **Journals**

- American Journal of Orthodontics and Dentofacial Orthopedics
- The Angle Orthodontist
- Journal of Orthodontics

## **Institution**

- Angle School of Orthodontia

- v
- t
- e

Dental disease involving the jaw

## **General**

- Jaw abnormality
- malocclusion
- Orthodontics
- Gnathitis

## **Size**

- Micrognathism
- Maxillary hypoplasia

## **Maxilla and Mandible**

- Cherubism
- Congenital epulis
- Torus mandibularis
- Torus palatinus

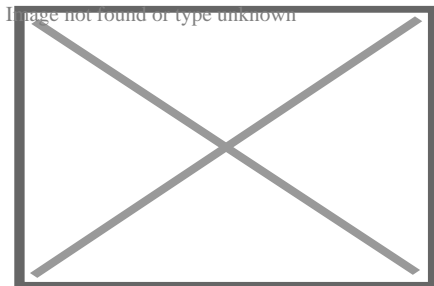
## Other

- Jaw and base of cranium
  - Prognathism
  - Retrognathism
- Dental arch
  - Crossbite
  - Overbite
- Temporomandibular joint disorder

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## About child

"Children" and "Childhood" redirect here. For other uses, see Child (disambiguation), Children (disambiguation), and Childhood (disambiguation).



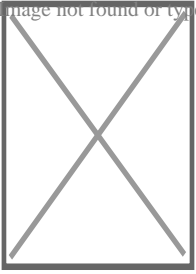
International children in traditional clothing at Liberty Weekend

- **v**
- **t**
- **e**

Part of a series on

**Human growth  
and development**

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## **Stages**

- Gamete
- Zygote
- Embryo
- Fetus
- Infant
- Toddler
- Child
- Preadolescent
- Adolescent
- Emerging and early adulthood
- Young adult
- Middle adult
- Old adult
- Dying

## **Biological milestones**

- Fertilization
- Pregnancy
- Childbirth
- Walking
- Language acquisition
- Puberty
- Menopause
- Ageing
- Death

## **Development and psychology**

- Pre- and perinatal
- Infant and child
- Nature versus nurture
- Adolescent
- Youth
- Young adult
- Adult
- Maturity

## Developmental stage theories

- Attachment
- Ecological
- Psychosocial
- Psychosexual development
- Moral
- Cognitive
- Cultural-historical
- Evolutionary

-  Psychology portal

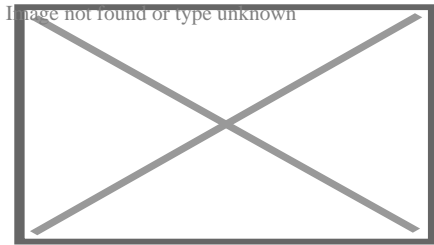
A **child** (pl. **children**) is a human being between the stages of birth and puberty,<sup>[1][2]</sup> or between the developmental period of infancy and puberty.<sup>[3]</sup> The term may also refer to an unborn human being.<sup>[4][5]</sup> In English-speaking countries, the legal definition of *child* generally refers to a minor, in this case as a person younger than the local age of majority (there are exceptions like, for example, the consume and purchase of alcoholic beverage even after said age of majority<sup>[6]</sup>), regardless of their physical, mental and sexual development as biological adults.<sup>[1][7][8]</sup> Children generally have fewer rights and responsibilities than adults. They are generally classed as unable to make serious decisions.

*Child* may also describe a relationship with a parent (such as sons and daughters of any age)<sup>[9]</sup> or, metaphorically, an authority figure, or signify group membership in a clan, tribe, or religion; it can also signify being strongly affected by a specific time, place, or circumstance, as in "a child of nature" or "a child of the Sixties."<sup>[10]</sup>

## Biological, legal and social definitions

[edit]





Children playing ball games, Roman artwork, 2nd century AD

In the biological sciences, a child is usually defined as a person between birth and puberty,<sup>[1][2]</sup> or between the developmental period of infancy and puberty.<sup>[3]</sup> Legally, the term *child* may refer to anyone below the age of majority or some other age limit.

The United Nations Convention on the Rights of the Child defines *child* as, "A human being below the age of 18 years unless under the law applicable to the child, majority is attained earlier."<sup>[11]</sup> This is ratified by 192 of 194 member countries. The term *child* may also refer to someone below another legally defined age limit unconnected to the age of majority. In Singapore, for example, a *child* is legally defined as someone under the age of 14 under the "Children and Young Persons Act" whereas the age of majority is 21.<sup>[12][13]</sup> In U.S. Immigration Law, a child refers to anyone who is under the age of 21.<sup>[14]</sup>

Some English definitions of the word *child* include the fetus (sometimes termed *the unborn*).<sup>[15]</sup> In many cultures, a child is considered an adult after undergoing a rite of passage, which may or may not correspond to the time of puberty.

Children generally have fewer rights than adults and are classed as unable to make serious decisions, and legally must always be under the care of a responsible adult or child custody, whether their parents divorce or not.

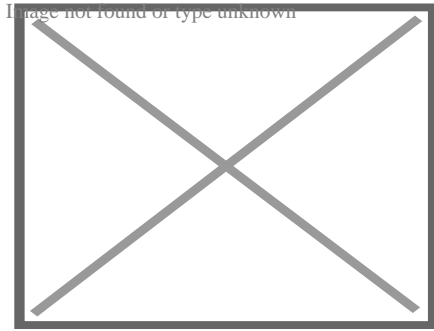
## Developmental stages of childhood

[edit]

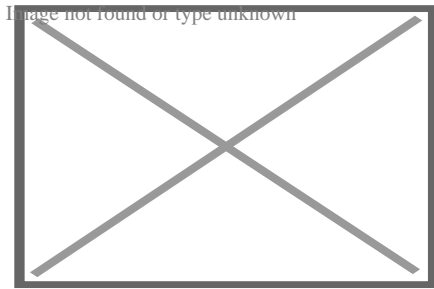
Further information: Child development stages and Child development

# Early childhood

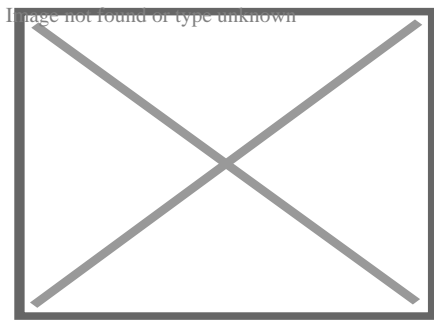
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Children playing the violin in a group recital, Ithaca, New York, 2011



Children in Madagascar, 2011



Child playing piano, 1984

Early childhood follows the infancy stage and begins with toddlerhood when the child begins speaking or taking steps independently.<sup>[16]</sup><sup>[17]</sup> While toddlerhood ends around age 3 when the child becomes less dependent on parental assistance for basic needs, early childhood continues approximately until the age of 5 or 6. However, according to the National Association for the Education of Young Children, early childhood also includes infancy. At this stage children are learning through observing, experimenting and communicating with others. Adults supervise and support the development process of the child, which then will lead to the child's autonomy. Also during this stage, a strong emotional bond is created between the child and the care providers. The children also start preschool and kindergarten at this age: and hence their social lives.

## Middle childhood

[edit]

Middle childhood begins at around age 7, and ends at around age 9 or 10.<sup>[18]</sup> Together, early and middle childhood are called formative years. In this middle period, children develop socially and mentally. They are at a stage where they make new friends and gain new skills, which will enable them to become more independent and enhance their individuality. During middle childhood, children enter the school years, where they are presented with a different setting than they are used to. This new setting creates new challenges and faces for children.<sup>[19]</sup> Upon the entrance of school, mental disorders that would normally not be noticed come to light. Many of these disorders include: autism, dyslexia, dyscalculia, and ADHD.<sup>[20]</sup>

Special education, least restrictive environment, response to intervention and individualized education plans are all specialized plans to help children with disabilities.<sup>[20]</sup>

Middle childhood is the time when children begin to understand responsibility and are beginning to be shaped by their peers and parents. Chores and more responsible decisions come at this time, as do social comparison and social play.<sup>[20]</sup>

During social play, children learn from and teach each other, often through observation.<sup>[21]</sup>

## Late childhood

[edit]

Main article: Preadolescence

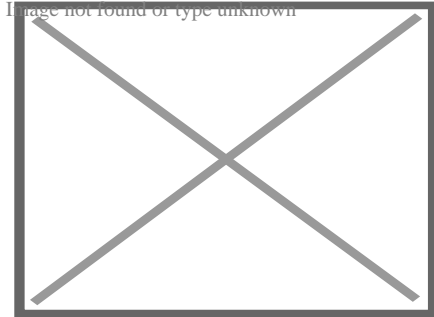
Preadolescence is a stage of human development following early childhood and preceding adolescence. Preadolescence is commonly defined as ages 9–12, ending with the major onset of puberty, with markers such as menarche, spermatarche, and the peak of height velocity occurring. These changes usually occur between ages 11 and 14. It may also be defined as the 2-year period before the major onset of puberty.<sup>[22]</sup> Preadolescence can bring its own challenges and anxieties. Preadolescent children have a different view of the world from younger children in many significant ways. Typically, theirs is a more realistic view of life than the intense, fantasy-oriented world of earliest childhood. Preadolescents have more mature, sensible, realistic thoughts and actions: 'the most "sensible" stage of development...the child is a much *less emotional being* now.'<sup>[23]</sup> Preadolescents may well view human relationships differently (e.g. they may notice the flawed, human side of authority figures). Alongside that, they may begin to develop a sense of self-identity, and to have increased feelings of independence: 'may feel an individual, no longer "just one of the family."' <sup>[24]</sup>

## Developmental stages post-childhood

[edit]

# Adolescence

[edit]



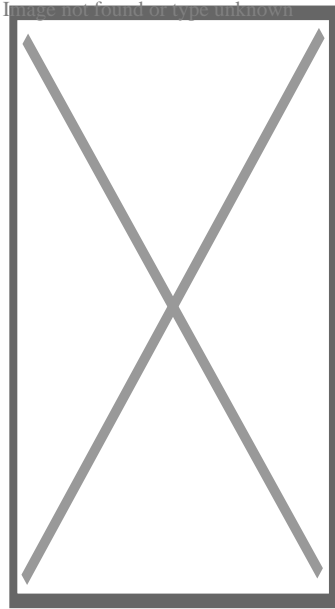
An adolescent girl, photographed by Paolo Monti

Adolescence is usually determined to be between the onset of puberty and legal adulthood: mostly corresponding to the teenage years (13–19). However, puberty usually begins before the teenage years (10—11 for girls and 11—12 for boys). Although biologically a child is a human being between the stages of birth and puberty,<sup>[1][2]</sup> adolescents are legally considered children, as they tend to lack adult rights and are still required to attend compulsory schooling in many cultures, though this varies. The onset of adolescence brings about various physical, psychological and behavioral changes. The end of adolescence and the beginning of adulthood varies by country and by function, and even within a single nation-state or culture there may be different ages at which an individual is considered to be mature enough to be entrusted by society with certain tasks.

## History

[edit]

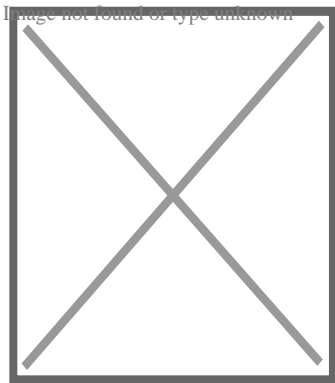
Main article: History of childhood



*Playing Children*, by Song dynasty Chinese artist Su Hanchen, c. 1150 AD.

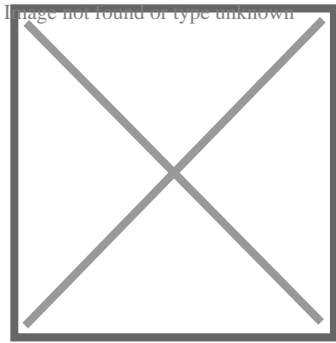
During the European Renaissance, artistic depictions of children increased dramatically, which did not have much effect on the social attitude toward children, however.<sup>[25]</sup>

The French historian Philippe Ariès argued that during the 1600s, the concept of childhood began to emerge in Europe,<sup>[26]</sup> however other historians like Nicholas Orme have challenged this view and argued that childhood has been seen as a separate stage since at least the medieval period.<sup>[27]</sup> Adults saw children as separate beings, innocent and in need of protection and training by the adults around them. The English philosopher John Locke was particularly influential in defining this new attitude towards children, especially with regard to his theory of the tabula rasa, which considered the mind at birth to be a "blank slate". A corollary of this doctrine was that the mind of the child was born blank, and that it was the duty of the parents to imbue the child with correct notions. During the early period of capitalism, the rise of a large, commercial middle class, mainly in the Protestant countries of the Dutch Republic and England, brought about a new family ideology centred around the upbringing of children. Puritanism stressed the importance of individual salvation and concern for the spiritual welfare of children.<sup>[28]</sup>



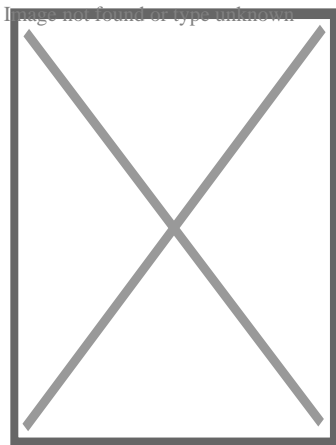
*The Age of Innocence* c. 1785/8. Reynolds emphasized the natural grace of children in his paintings.

The modern notion of childhood with its own autonomy and goals began to emerge during the 18th-century Enlightenment and the Romantic period that followed it.<sup>[29]</sup><sup>[30]</sup> Jean Jacques Rousseau formulated the romantic attitude towards children in his famous 1762 novel *Emile: or, On Education*. Building on the ideas of John Locke and other 17th-century thinkers, Jean-Jaques Rousseau described childhood as a brief period of sanctuary before people encounter the perils and hardships of adulthood.<sup>[29]</sup> Sir Joshua Reynolds' extensive children portraiture demonstrated the new enlightened attitudes toward young children. His 1788 painting *The Age of Innocence* emphasizes the innocence and natural grace of the posing child and soon became a public favourite.<sup>[31]</sup>



Brazilian princesses Leopoldina (left) and Isabel (center) with an unidentified friend, c. 1860.

The idea of childhood as a locus of divinity, purity, and innocence is further expounded upon in William Wordsworth's "Ode: Intimations of Immortality from Recollections of Early Childhood", the imagery of which he "fashioned from a complex mix of pastoral aesthetics, pantheistic views of divinity, and an idea of spiritual purity based on an Edenic notion of pastoral innocence infused with Neoplatonic notions of reincarnation".<sup>[30]</sup> This Romantic conception of childhood, historian Margaret Reeves suggests, has a longer history than generally recognized, with its roots traceable to similarly imaginative constructions of childhood circulating, for example, in the neo-platonic poetry of seventeenth-century metaphysical poet Henry Vaughan (e.g., "The Retreate", 1650; "Childe-hood", 1655). Such views contrasted with the stridently didactic, Calvinist views of infant depravity.<sup>[32]</sup>



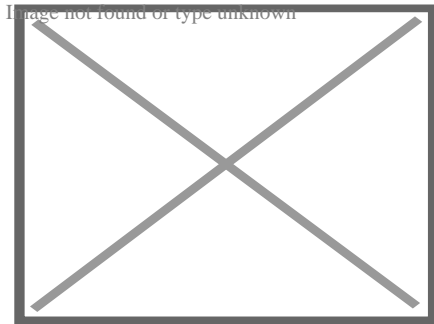
Armenian scouts in 1918

With the onset of industrialisation in England in 1760, the divergence between high-minded romantic ideals of childhood and the reality of the growing magnitude of child exploitation in the workplace, became increasingly apparent. By the late 18th century, British children were specially employed in factories and mines and as chimney sweeps,[<sup>33</sup>] often working long hours in dangerous jobs for low pay.[<sup>34</sup>] As the century wore on, the contradiction between the conditions on the ground for poor children and the middle-class notion of childhood as a time of simplicity and innocence led to the first campaigns for the imposition of legal protection for children.

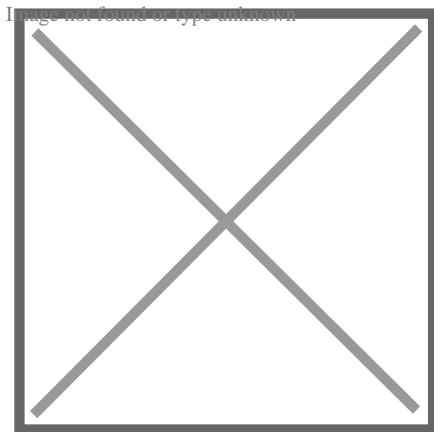
British reformers attacked child labor from the 1830s onward, bolstered by the horrific descriptions of London street life by Charles Dickens.[<sup>35</sup>] The campaign eventually led to the Factory Acts, which mitigated the exploitation of children at the workplace[<sup>33</sup>][<sup>36</sup>]

## Modern concepts of childhood

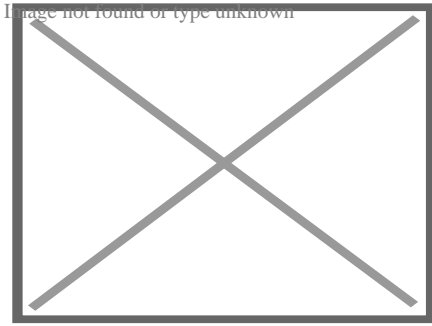
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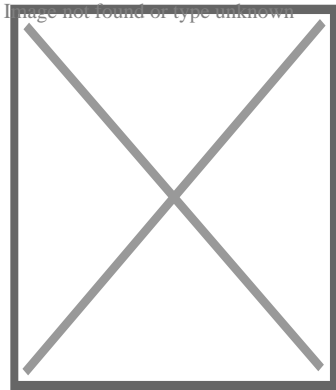
Children play in a fountain in a summer evening, Davis, California.



An old man and his granddaughter in Turkey.



Nepalese children playing with cats.



Harari girls in Ethiopia.

The modern attitude to children emerged by the late 19th century; the Victorian middle and upper classes emphasized the role of the family and the sanctity of the child – an attitude that has remained dominant in Western societies ever since.<sup>[37]</sup> The genre of children's literature took off, with a proliferation of humorous, child-oriented books attuned to the child's imagination. Lewis Carroll's fantasy *Alice's Adventures in Wonderland*, published in 1865 in England, was a landmark in the genre; regarded as the first "English masterpiece written for children", its publication opened the "First Golden Age" of children's literature.

The latter half of the 19th century saw the introduction of compulsory state schooling of children across Europe, which decisively removed children from the workplace into schools.<sup>[38][39]</sup>

The market economy of the 19th century enabled the concept of childhood as a time of fun, happiness, and imagination. Factory-made dolls and doll houses delighted the girls and organized sports and activities were played by the boys.<sup>[40]</sup> The Boy Scouts was founded by Sir Robert Baden-Powell in 1908,<sup>[41][42]</sup> which provided young boys with outdoor activities aiming at developing character, citizenship, and personal fitness qualities.<sup>[43]</sup>

In the 20th century, Philippe Ariès, a French historian specializing in medieval history, suggested that childhood was not a natural phenomenon, but a creation of society in his 1960 book *Centuries of Childhood*. In 1961 he published a study of paintings, gravestones, furniture, and school records, finding that before the 17th century, children were represented as mini-adults.

In 1966, the American philosopher George Boas published the book *The Cult of Childhood*. Since then, historians have increasingly researched childhood in past times.<sup>[44]</sup>



In 2006, Hugh Cunningham published the book *Invention of Childhood*, looking at British childhood from the year 1000, the Middle Ages, to what he refers to as the Post War Period of the 1950s, 1960s and 1970s.<sup>[45]</sup>

Childhood evolves and changes as lifestyles change and adult expectations alter. In the modern era, many adults believe that children should not have any worries or work, as life should be happy and trouble-free. Childhood is seen as a mixture of simplicity, innocence, happiness, fun, imagination, and wonder. It is thought of as a time of playing, learning, socializing, exploring, and worrying in a world without much adult interference.<sup>[29]</sup><sup>[30]</sup>

A "loss of innocence" is a common concept, and is often seen as an integral part of coming of age. It is usually thought of as an experience or period in a child's life that widens their awareness of evil, pain or the world around them. This theme is demonstrated in the novels *To Kill a Mockingbird* and *Lord of the Flies*. The fictional character Peter Pan was the embodiment of a childhood that never ends.<sup>[46]</sup><sup>[47]</sup>

## Healthy childhoods

[edit]

# Role of parents

[edit]

Main article: Parenting

## Children's health

[edit]

Further information: Childhood obesity, Childhood immunizations, and List of childhood diseases

Children's health includes the physical, mental and social well-being of children. Maintaining children's health implies offering them healthy foods, insuring they get enough sleep and exercise, and protecting their safety.<sup>[48]</sup> Children in certain parts of the world often suffer from malnutrition, which is often associated with other conditions, such as diarrhea, pneumonia and malaria.<sup>[49]</sup>

# Child protection

[edit]

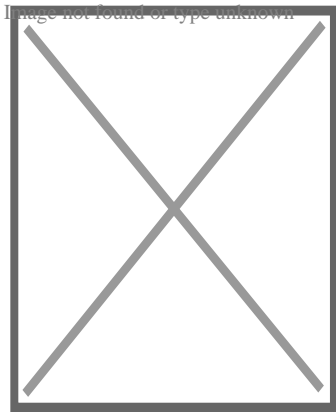
Further information: Child labor, Child labor laws, Risk aversion, Child abuse, and Protection of Children Act

Child protection, according to UNICEF, refers to "preventing and responding to violence, exploitation and abuse against children – including commercial sexual exploitation, trafficking, child labour and harmful traditional practices, such as female genital mutilation/cutting and child marriage".<sup>[50]</sup> The Convention on the Rights of the Child protects the fundamental rights of children.

## Play

[edit]

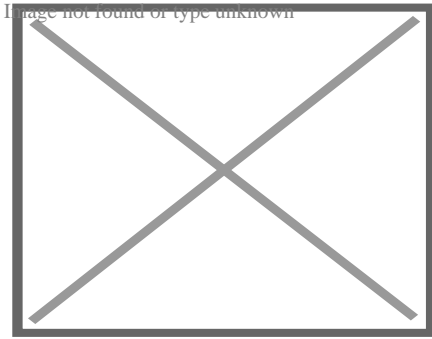
Further information: Play (activity), Playground, Imaginary friend, and Childhood secret club



Dancing at Mother of Peace AIDs orphanage, Zimbabwe

Play is essential to the cognitive, physical, social, and emotional well-being of children.<sup>[51]</sup> It offers children opportunities for physical (running, jumping, climbing, etc.), intellectual (social skills, community norms, ethics and general knowledge) and emotional development (empathy, compassion, and friendships). Unstructured play encourages creativity and imagination. Playing and interacting with other children, as well as some adults, provides opportunities for friendships, social interactions, conflicts and resolutions. However, adults tend to (often mistakenly) assume that virtually all children's social activities can be understood as "play" and, furthermore, that children's play activities do not involve much skill or effort.<sup>[52][53][54][55]</sup>

It is through play that children at a very early age engage and interact in the world around them. Play allows children to create and explore a world they can master, conquering their fears while practicing adult roles, sometimes in conjunction with other children or adult caregivers.<sup>[51]</sup> Undirected play allows children to learn how to work in groups, to share, to negotiate, to resolve conflicts, and to learn self-advocacy skills. However, when play is controlled by adults, children acquiesce to adult rules and concerns and lose some of the benefits play offers them. This is especially true in developing creativity, leadership, and group skills.<sup>[51]</sup>



Ralph Hedley, *The Tournament*, 1898. It depicts poorer boys playing outdoors in a rural part of the Northeast of England.

Play is considered to be very important to optimal child development that it has been recognized by the United Nations Commission on Human Rights as a right of every child.<sup>[11]</sup> Children who are being raised in a hurried and pressured style may limit the protective benefits they would gain from child-driven play.<sup>[51]</sup>

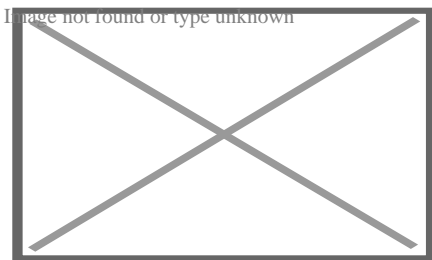
The initiation of play in a classroom setting allows teachers and students to interact through playfulness associated with a learning experience. Therefore, playfulness aids the interactions between adults and children in a learning environment. “Playful Structure” means to combine informal learning with formal learning to produce an effective learning experience for children at a young age.<sup>[56]</sup>

Even though play is considered to be the most important to optimal child development, the environment affects their play and therefore their development. Poor children confront widespread environmental inequities as they experience less social support, and their parents are less responsive and more authoritarian. Children from low income families are less likely to have access to books and computers which would enhance their development.<sup>[57]</sup>

## Street culture

[edit]

Main articles: Children's street culture and Children's street games



Children in front of a movie theatre, Toronto, 1920s.

Children's street culture refers to the cumulative culture created by young children and is sometimes referred to as their *secret world*. It is most common in children between the ages of

seven and twelve. It is strongest in urban working class industrial districts where children are traditionally free to play out in the streets for long periods without supervision. It is invented and largely sustained by children themselves with little adult interference.

Young children's street culture usually takes place on quiet backstreets and pavements, and along routes that venture out into local parks, playgrounds, scrub and wasteland, and to local shops. It often imposes imaginative status on certain sections of the urban realm (local buildings, kerbs, street objects, etc.). Children designate specific areas that serve as informal meeting and relaxation places (see: Sobel, 2001). An urban area that looks faceless or neglected to an adult may have deep 'spirit of place' meanings in to children. Since the advent of indoor distractions such as video games, and television, concerns have been expressed about the vitality – or even the survival – of children's street culture.

## **Geographies of childhood**

[edit]

The geographies of childhood involves how (adult) society perceives the idea of childhood, the many ways adult attitudes and behaviors affect children's lives, including the environment which surrounds children and its implications.<sup>[58]</sup>

The geographies of childhood is similar in some respects to children's geographies which examines the places and spaces in which children live.<sup>[59]</sup>

## **Nature deficit disorder**

[edit]

Main article: Nature deficit disorder

Nature Deficit Disorder, a term coined by Richard Louv in his 2005 book *Last Child in the Woods*, refers to the trend in the United States and Canada towards less time for outdoor play,<sup>[60]</sup><sup>[61]</sup> resulting in a wide range of behavioral problems.<sup>[62]</sup>

With increasing use of cellphones, computers, video games and television, children have more reasons to stay inside rather than outdoors exploring. "The average American child spends 44 hours a week with electronic media".<sup>[63]</sup> Research in 2007 has drawn a correlation between the declining number of National Park visits in the U.S. and increasing consumption of electronic media by children.<sup>[64]</sup> The media has accelerated the trend for children's nature disconnection by deemphasizing views of nature, as in Disney films.<sup>[65]</sup>

## **Age of responsibility**

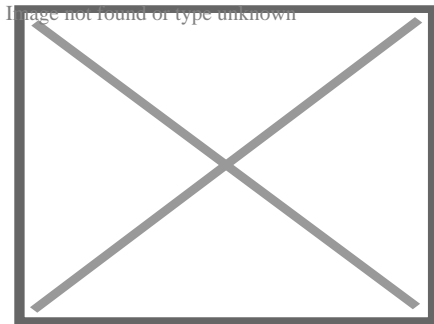
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Further information: Age of consent, Age of majority, Age of criminal responsibility, and Marriageable age

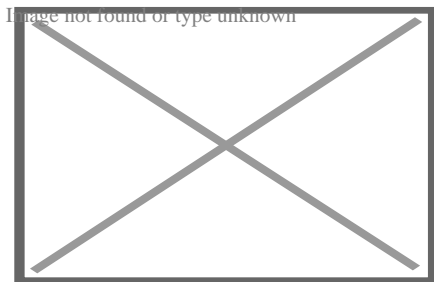
The age at which children are considered responsible for their society-bound actions (e. g. marriage, voting, etc.) has also changed over time,<sup>[66]</sup> and this is reflected in the way they are treated in courts of law. In Roman times, children were regarded as not culpable for crimes, a position later adopted by the Church. In the 19th century, children younger than seven years old were believed incapable of crime. Children from the age of seven forward were considered responsible for their actions. Therefore, they could face criminal charges, be sent to adult prison, and be punished like adults by whipping, branding or hanging. However, courts at the time would consider the offender's age when deliberating sentencing.<sup>[citation needed]</sup> Minimum employment age and marriage age also vary. The age limit of voluntary/involuntary military service is also disputed at the international level.<sup>[67]</sup>

## Education

[edit]



Children in an outdoor classroom in Bié, Angola



Children seated in a Finnish classroom at the school of Torvinen in Sodankylä, Finland, in the 1920s

Main article: Education

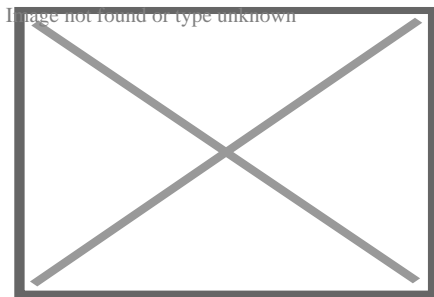
Education, in the general sense, refers to the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and preparing intellectually for mature life.<sup>[68]</sup> Formal education most often takes place through schooling. A right to education has been recognized by some governments. At the global level, Article 13 of the United Nations' 1966 International Covenant on Economic, Social and Cultural Rights (ICESCR) recognizes the right of everyone to an education.<sup>[69]</sup> Education is compulsory in most places up to a certain age,

but attendance at school may not be, with alternative options such as home-schooling or e-learning being recognized as valid forms of education in certain jurisdictions.

Children in some countries (especially in parts of Africa and Asia) are often kept out of school, or attend only for short periods. Data from UNICEF indicate that in 2011, 57 million children were out of school; and more than 20% of African children have never attended primary school or have left without completing primary education.<sup>[70]</sup> According to a UN report, warfare is preventing 28 million children worldwide from receiving an education, due to the risk of sexual violence and attacks in schools.<sup>[71]</sup> Other factors that keep children out of school include poverty, child labor, social attitudes, and long distances to school.<sup>[72]</sup><sup>[73]</sup>

## Attitudes toward children

[edit]



Group of breaker boys in Pittston, Pennsylvania, 1911. Child labor was widespread until the early 20th century. In the 21st century, child labor rates are highest in Africa.

Social attitudes toward children differ around the world in various cultures and change over time. A 1988 study on European attitudes toward the centrality of children found that Italy was more child-centric and the Netherlands less child-centric, with other countries, such as Austria, Great Britain, Ireland and West Germany falling in between.<sup>[74]</sup>

## Child marriage

[edit]

In 2013, child marriage rates of female children under the age of 18 reached 75% in Niger, 68% in Central African Republic and Chad, 66% in Bangladesh, and 47% in India.<sup>[75]</sup> According to a 2019 UNICEF report on child marriage, 37% of females were married before the age of 18 in sub-Saharan Africa, followed by South Asia at 30%. Lower levels were found in Latin America and Caribbean (25%), the Middle East and North Africa (18%), and Eastern Europe and Central Asia (11%), while rates in Western Europe and North America were minimal.<sup>[76]</sup> Child marriage is more prevalent with girls, but also involves boys. A 2018 study in the journal *Vulnerable Children and Youth Studies* found that, worldwide, 4.5% of males are married before age 18, with the Central African Republic having the highest average rate at 27.9%.<sup>[77]</sup>

# Fertility and number of children per woman

[edit]

Before contraception became widely available in the 20th century, women had little choice other than abstinence or having often many children. In fact, current population growth concerns have only become possible with drastically reduced child mortality and sustained fertility. In 2017 the global total fertility rate was estimated to be 2.37 children per woman,<sup>[78]</sup> adding about 80 million people to the world population per year. In order to measure the total number of children, scientists often prefer the completed cohort fertility at age 50 years (CCF50).<sup>[78]</sup> Although the number of children is also influenced by cultural norms, religion, peer pressure and other social factors, the CCF50 appears to be most heavily dependent on the educational level of women, ranging from 5–8 children in women without education to less than 2 in women with 12 or more years of education.<sup>[78]</sup>

## Issues

[edit]

# Emergencies and conflicts

[edit]

See also: Declaration on the Protection of Women and Children in Emergency and Armed Conflict, Children in the Israeli–Palestinian conflict, Save the Children, Inter-Agency Network for Education in Emergencies, Military use of children, Trafficking of children, International child abduction, and Refugee children

Emergencies and conflicts pose detrimental risks to the health, safety, and well-being of children. There are many different kinds of conflicts and emergencies, e.g. wars and natural disasters. As of 2010 approximately 13 million children are displaced by armed conflicts and violence around the world.<sup>[79]</sup> Where violent conflicts are the norm, the lives of young children are significantly disrupted and their families have great difficulty in offering the sensitive and consistent care that young children need for their healthy development.<sup>[79]</sup> Studies on the effect of emergencies and conflict on the physical and mental health of children between birth and 8 years old show that where the disaster is natural, the rate of PTSD occurs in anywhere from 3 to 87 percent of affected children.<sup>[80]</sup> However, rates of PTSD for children living in chronic conflict conditions varies from 15 to 50 percent.<sup>[81][82]</sup>

## Child protection

[edit]

This section is an excerpt from Child protection.[edit]

- v
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### Childcare

#### At home

- Parents
- Extended family
- Au pair
- Babysitter
- Governess
- Nanny

#### Outside the home

- Daycare
- Pre-school playgroup

### Educational settings

- Early childhood education
- Homeschooling
- Pre-kindergarten
- Preschool
- Kindergarten
- Primary school

### Institutions and standards

- Child protection
- *In loco parentis*
- Minor

### Related



- Child abuse
- Child marriage
- Child Online Protection
- Family law
- Men in early childhood education
- Orphanage
- Parenting

Child protection (also called child welfare) is the safeguarding of children from violence, exploitation, abuse, abandonment, and neglect.<sup>[83][84][85][86]</sup> It involves identifying signs of potential harm. This includes responding to allegations or suspicions of abuse, providing support and services to protect children, and holding those who have harmed them accountable.<sup>[87]</sup>

The primary goal of child protection is to ensure that all children are safe and free from harm or danger.<sup>[86][88]</sup> Child protection also works to prevent future harm by creating policies and systems that identify and respond to risks before they lead to harm.<sup>[89]</sup>

In order to achieve these goals, research suggests that child protection services should be provided in a holistic way.<sup>[90][91][92]</sup> This means taking into account the social, economic, cultural, psychological, and environmental factors that can contribute to the risk of harm for individual children and their families. Collaboration across sectors and disciplines to create a comprehensive system of support and safety for children is required.<sup>[93][94]</sup>

It is the responsibility of individuals, organizations, and governments to ensure that children are protected from harm and their rights are respected.<sup>[95]</sup> This includes providing a safe environment for children to grow and develop, protecting them from physical, emotional and sexual abuse, and ensuring they have access to education, healthcare, and resources to fulfill their basic needs.<sup>[96]</sup>

Child protection systems are a set of services, usually government-run, designed to protect children and young people who are underage and to encourage family stability. UNICEF defines<sup>[97]</sup> a 'child protection system' as:

"The set of laws, policies, regulations and services needed across all social sectors – especially social welfare, education, health, security and justice – to support prevention and response to protection-related risks. These systems are part of social protection, and extend beyond it. At the level of prevention, their aim includes supporting and strengthening families to reduce social exclusion, and to lower the risk of separation, violence and exploitation. Responsibilities are often spread across government agencies, with services delivered by local authorities, non-State providers, and community groups, making coordination between sectors and levels, including routine referral systems etc., a necessary component of effective child protection systems."

—*United Nations Economic and Social Council (2008), UNICEF Child Protection Strategy, E/ICEF/2008/5/Rev.1, par. 12–13.*

Under Article 19 of the UN Convention on the Rights of the Child, a 'child protection system' provides for the protection of children in and out of the home. One of the ways this can be enabled is through the provision of quality education, the fourth of the United Nations Sustainable Development Goals, in addition to other child protection systems. Some literature argues that child protection begins at conception; even how the conception took place can affect the child's development.<sup>[98]</sup>

## Child abuse and child labor

[edit]

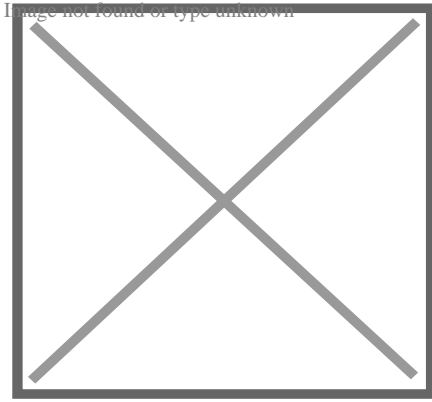
Protection of children from abuse is considered an important contemporary goal. This includes protecting children from exploitation such as child labor, child trafficking and child selling, child sexual abuse, including child prostitution and child pornography, military use of children, and child laundering in illegal adoptions. There exist several international instruments for these purposes, such as:

- Worst Forms of Child Labour Convention
- Minimum Age Convention, 1973
- Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography
- Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse
- Optional Protocol on the Involvement of Children in Armed Conflict
- Hague Adoption Convention

## Climate change

[edit]

This section is an excerpt from Climate change and children.[edit]



A child at a climate demonstration in Juneau, Alaska

Children are more vulnerable to the effects of climate change than adults. The World Health Organization estimated that 88% of the existing global burden of disease caused by climate change affects children under five years of age.<sup>[99]</sup> A *Lancet* review on health and climate change lists children as the worst-affected category by climate change.<sup>[100]</sup> Children under 14 are 44 percent more likely to die from environmental factors,<sup>[101]</sup> and those in urban areas are disproportionately impacted by lower air quality and overcrowding.<sup>[102]</sup>

Children are physically more vulnerable to climate change in all its forms.<sup>[103]</sup> Climate change affects the physical health of children and their well-being. Prevailing inequalities, between and within countries, determine how climate change impacts children.<sup>[104]</sup> Children often have no voice in terms of global responses to climate change.<sup>[103]</sup>

People living in low-income countries experience a higher burden of disease and are less capable of coping with climate change-related threats.<sup>[105]</sup> Nearly every child in the world is at risk from climate change and pollution, while almost half are at extreme risk.<sup>[106]</sup>

## Health

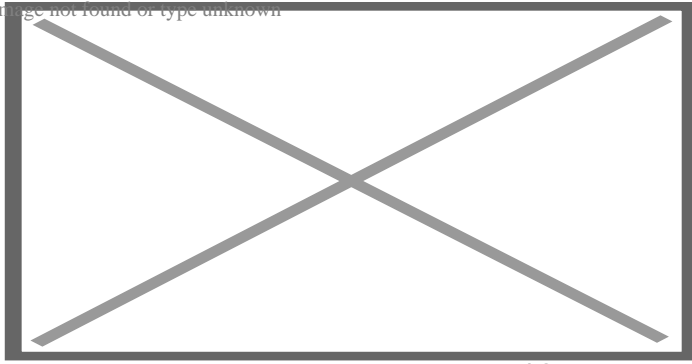
[edit]

# Child mortality

[edit]

Main articles: Child mortality and Infant mortality

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World infant mortality rates in 2012.<sup>[107]</sup>

During the early 17th century in England, about two-thirds of all children died before the age of four.<sup>[108]</sup> During the Industrial Revolution, the life expectancy of children increased dramatically.<sup>[109]</sup> This has continued in England, and in the 21st century child mortality rates have fallen across the world. About 12.6 million under-five infants died worldwide in 1990, which declined to 6.6 million in 2012. The infant mortality rate dropped from 90 deaths per 1,000 live births in 1990, to 48 in 2012. The highest average infant mortality rates are in sub-Saharan Africa, at 98 deaths per 1,000 live births – over double the world's average.<sup>[107]</sup>

## See also

[edit]

Listen to this article (3 minutes)

## Spoken Wikipedia icon

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This audio file was created from a revision of this article dated 24 June 2008, and does not reflect subsequent edits.

(Audio help · More spoken articles)

- Outline of childhood
- Child slavery
- Childlessness
- Depression in childhood and adolescence
- One-child policy
- Religion and children
- Youth rights
- Archaeology of childhood

## Sources

[edit]

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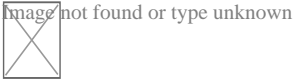
## Further reading

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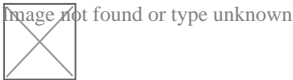
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## Family

- History
- Household
- Nuclear family
- Extended family
- Conjugal family
- Immediate family
- Matrifocal family

## First-degree relatives

- Parent
  - mother
  - father
- Child
  - son
  - daughter
- Sibling
  - brother
  - sister

## **Second-degree relatives**

- Grandparent
- Grandchild
- Uncle/Aunt
- Niece and nephew

## **Third-degree relatives**

- Great-grandparent
- Great-grandchild
- Great-uncle/Great-aunt
- Cousin

## **Family-in-law**

- Spouse
  - wife
  - husband
- Parent-in-law
- Sibling-in-law
- Child-in-law
  - daughter-in-law
  - son-in-law

## **Stepfamily**

- Stepparent
  - stepfather
  - stepmother
- Stepchild
- Stepsibling

## **Kinship terminology**

- Kinship
- Australian Aboriginal kinship
- Adoption
- Affinity
- Consanguinity
- Disownment
- Divorce
- Estrangement
- Family of choice
- Fictive kinship
- Marriage
- Nurture kinship
- Chinese kinship
- Hawaiian kinship
- Sudanese kinship
- Eskimo kinship
- Iroquois kinship
- Crow kinship
- Omaha kinship

## **Genealogy and lineage**

- Bilateral descent
- Common ancestor
- Family name
- Heirloom
- Heredity
- Inheritance
- Lineal descendant
- collateral descent
- Matrilineality
- Patrilineality
- Progenitor
- Clan
- Royal descent

## **Family trees**

- Pedigree chart
- Genogram
- Ahnentafel
  - Genealogical numbering systems
  - Seize quartiers
  - Quarters of nobility

## **Relationships**

- Agape (parental love)
- Eros (marital love)
- Philia (brotherly love)
- Storge (familial love)
- Filial piety
- Polyfidelity

## **Holidays**

- Mother's Day
  - U.S.
- Father's Day
- Father–Daughter Day
- Siblings Day
- National Grandparents Day
- Parents' Day
- Children's Day
  - Japan
- Family Day
  - Canada
- American Family Day
- International Day of Families
- National Family Week
  - UK
- National Adoption Day

## **Related**

- Single parent
- Wedding anniversary
- Godparent
- Birth order
- Only child
- Middle child syndrome
- Sociology of the family
- Museum of Motherhood
- Astronaut family
- Dysfunctional family
- Domestic violence
- Incest
- Sibling abuse
- Sibling estrangement
- Sibling rivalry

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## Development of the human body

- Before birth**
  - Development
  - Zygote
  - Embryo
  - Fetus
  - Gestational age

- Birth and after**
  - Birth
  - Child development
    - Stages
    - Early
    - Puberty
  - Adult development
  - Ageing
  - Senescence
  - Death

- Phases**
  - Early years
    - Infant
    - Toddler
    - Early childhood
    - Childhood
      - Child
  - Youth
    - Preadolescence
    - Adolescence
    - Emerging adulthood
  - Adulthood
    - Young adult
    - Middle adult
    - Elder adult
  - Dying

- Social and legal**
  - Minor
  - Age of majority



## National

- Germany
- United States
- France
- BnF data
- Czech Republic
- Spain
- Latvia
- Sweden
- Israel

## Other

- NARA
- Encyclopedia of Modern Ukraine

IQDENT - Ortodontska Klinika

Phone : +385953817015

City : Zagreb

State : Hrvatska

Zip : 10000

Address : IQDENT - Ortodontska Klinika

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