## Adolescence (13-19 years)

## Cognitive development



What is happening?	How can I tell?	How can I help?
	B R A I N - B A S E D	DEVELOPMENT
apacity for complex thought, lanning and impulse control acreases	Begins to show improved abilities to organize thoughts, plan ahead, control impulses and direct attention to the task at hand while ignoring distractions (for example, a young person of this age may begin to rely on organizing school commitments in an agenda) May also be more able to postpone enjoyable social activities in order to keep commitments to school or work Begins to rely less on external forms of regulation (such as parental rules) and is more able to regulate behaviour independently	<ul> <li>Provide help, support and advice to keep youth motivated and on task</li> <li>Invite youth to take a leadership role in carrying out tasks</li> <li>Introduce challenges that require problem-solving skills (for example, a scavenger hunt)</li> <li>Provide opportunities for youth to plan and organize activities and events (for example, planning a bake sale, dance or group outing). Older adolescents are able to tackle these initiatives with progressively less direct support</li> </ul>
The brain becomes more provide the prain becomes more provide the provided and efficient provided the provide	Ability to process complicated information and learn new concepts is growing	<ul> <li>Encourage exercises that allow youth to organize abstract ideas and draw reasoned conclusions (for example, developing a "pros and cons" list)</li> <li>Inspire youth to try new experiences (for example, going to a museum, producing music, trying a new sport, participating on a committee)</li> <li>Teach youth to utilize the technology around them to stay organized and develop transferable skills for employment (for example, using the calendar option on a cell phon to stay organized and meet deadlines)</li> </ul>
The ability to assess risks and rewards improves	<ul> <li>Ability to effectively assess risk versus reward is improving</li> <li>May engage in thrill-seeking and risk-taking behaviour such as: <ul> <li>extreme sports (such as sky diving, dirt biking)</li> <li>drinking alcohol or smoking</li> </ul> </li> <li>May be especially motivated by risks and thrills when in the presence of peers</li> <li>Sensitivity to pleasure and reward is further increasing, particularly in the presence of peers</li> <li>May be more sensitive to criticism and peer rejections</li> </ul>	<ul> <li>Maintain open communication and promote honesty and mutual respect</li> <li>Talk about how to assess risk using personal examples</li> <li>Share your own experiences with risky situations (reflecting on your own good and bad choices) to demonstrate trust and respect</li> <li>Encourage youth to take small steps and practice</li> <li>Encourage youth to take positive and reasonable risks (for example, applying for a job) a participate in activities that are adventurous but safe (such as travel or organized sports)</li> <li>Participate in a new, thrilling activity alongside youth</li> <li>Demonstrate interest in youth's activities (this can help them feel comfortable approachi you for information or guidance)</li> <li>Provide guidance and access to tools (for example, protective equipment, a cell phone or a map) and information from a variety of sources (for example, online forums, others wh have had similar experiences) to help them learn and be prepared</li> <li>Encourage youth to make decisions in a calm frame of mind and be realistic about their personal abilities and potential consequences</li> <li>Encourage relationships that are positive and supportive to improve peer-support for prosocial behaviour (acting in ways that benefit others)</li> <li>As youth age, encourage them to stop and think about potential consequences of their behaviour. Motivations to avoid negative consequences are becoming stronger at this stage and may play a larger role in decision making</li> </ul>
The ability to control impulses and regulate behaviour improves	Under conditions of low emotional stress, can anticipate consequences, control impulses, and act on rational choices Under conditions of emotional or physical stress (for example, break-up, lack of sleep) the capacity to make sound decisions is diminished Is able to better organize and plan	<ul> <li>Be patient and compassionate and acknowledge sources of stress (such as a recent argument with friend) that may be influencing a young person's emotions and behaviou</li> <li>If it appears that an adolescent is under emotional stress, give them time and space to c escalate before introducing additional demands</li> <li>Help youth appraise their emotional state by posing questions like: "Are you feeling calmenough to make such an important decision?"; or "Maybe you should sleep on it?"</li> </ul>





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## Cognitive development (Cont'd)



What is happening?	How can I tell?	How can I help?
	DEVELOPMENT OF	REASONING SKILLS
Abstract thought matures	Becomes more able to think abstractly and hypothetically	• Encourage exercises that allow youth to organize abstract ideas and draw reasoned conclusions (for example, developing a "pros and cons" list)
	Begins to suspend beliefs in areas of expertise	• Provide experiences to train and improve skills using spatial working memory (for example play a memory game)
	Develops systems for organizing abstract ideas	• Promote perspective-taking (for example, have youth describe the major changes they would implement if given the opportunity to act as mayor for the day)
		• Introduce diverse perspectives, concepts, and lifestyles through movies, books,
Logical thinking skills improve	More able to think about possibilities, form and evaluate hypotheses, deduce and induce	biographies, guest speakers, case studies and music
	principles that guide decision making	<ul> <li>Stimulate debate and discussion on contentious issues (for example, conflicts, modern medicine, poverty, justice)</li> </ul>
		• Encourage youth to "probe a little further" into the sources of their beliefs, opinions,
Working memory continues to improve	Improving ability to manipulate information held in working memory (for example, solving multi-step math problems or planning and then packing for a trip)	<ul> <li>motivations, and aspirations (go beyond <i>what</i>? and ask <i>why</i>?)</li> <li>Offer counter-arguments to stimulate further reflection</li> </ul>
	Better able to maintain, attend to, update and evaluate information	
Beliefs about knowledge and facts continue to evolve	May adopt a sceptical approach to knowledge in some domains Stops believing that all "facts" exist independently of people's perspectives Begins to question universal social "facts" (for example, speeding while driving is wrong) and see that some truths are relative (what if the driver is a doctor on their way to an emergency?) Begins to think about and question facts and ideas and is sceptical about answers May insist that every answer is as good as any other answer Accepts an authority figure's position (dogma) in areas of uncertainty	



