



CLIMBING CLEVER

How novel movement patterns benefit brains



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Climbing can make us clever

Climbing can make us clever. It is an essential and fun developmental activity for children to strengthen motor skills and muscles. But climbing also connects body and mind. Activities that present challenges for children's cross-coordination and their proprioception strengthen more than the muscles and the motor skills. They will strengthen children's cognitive development as well.



Cross-coordination

When climbing, children combine the movements of both sides of the body as well as the upper and lower body. This cross-coordination activity stimulates the cross-modal perception and the cooperation of the brain halves. This again supports reading skills in young children.

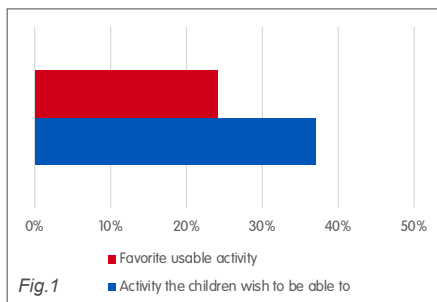
So climbing is a fundamental part of their motor as well as their cognitive development. So for young children, crawling and climbing are essential for brain development. But for older children, and even adults, new research has shown that climbing supports the working memory, too. Popularly speaking, that is the ability to remember where you left the keys. In a child's universe, it is the ability to remember what the teacher just told you¹.

Novel climb tasks

However, clever climbing does not happen on ordinary climbing structures. To realize the full benefit of climbing in playgrounds, you will want to plan graduated climbing activities that involve novel motor planning tasks: organic shapes and materials, bouncing ropes, intriguing nets, inclined and twisted steel elements – and of course, when possible, trees and boulders. Well-designed structures for climbing support a range of body movements and choices to be made.

Children with disabilities

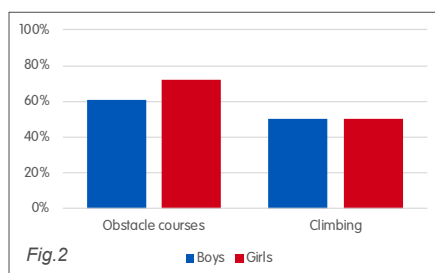
For children with physical disabilities or impairments, a KOMPAN Play Institute user survey² has shown that 24% report climbing as a favorite activity. The survey showed that 37% of the children with disabilities would like to be able to access more climbing activities on playgrounds (Fig. 1).



Apart from being pleasurable, for children with Cerebral Palsy, climbing improves motor skills measurably, and thus the ability to manage daily life more independently³.

Teenagers

For teenagers, too, climbing is extremely popular. In a KOMPAN Play Institute user survey of children ages 13-16⁴, obstacle courses and climbing equipment turned out to be highly popular activities, only outperformed by the classic popularity of swings, which girls rated the highest. Additionally, climbing equipment was the only playground activity that scored equally high with both boys and girls (Fig 2).



Social climbing

We know the value of play is far reaching⁵. To realize the full benefits of play, well designed active play is key. To prolong the play and harvest the benefits of fun climbing, the social

dimension is important, too. Climbing structures should offer specific social features such as meeting points and multi-sided pathways with challenges of varying degrees. This will offer places to socialize, be active and play: The essence of great playgrounds, sustained through good design.



5 Important features for climbing clever units:

1. Present age appropriate novelty to the children, so that new ways of moving benefit working memory skills.
2. Offer graduated challenges and multiple pathways to extend play and develop skills.
3. Feature entry points and ground level activities accessible for children of all abilities.
4. Enable the movement and coordination of multiple body parts at once.
5. Have meeting points and social spaces in the climbing equipment.

References

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- 2 Equality in Play, Jeanette Fich Jespersen & Stine Magnussen, KOMPAN Play Institute 2019
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- 4 Nowhere to Go, Jeanette Fich Jespersen, KOMPAN Play Institute
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