

BFMF

Bimanual Fine Motor Function

Version 2.0

BFMF classifies fine motor function in children with cerebral palsy

- BFMF classifies fine motor function according to the child's best ability (capacity) to grasp, hold and manipulate objects for each hand separately
- BFMF can be used in children from 3-18 years of age

References

Beckung E, Hagberg G. *Neuroimpairments, activity limitations, and participation restrictions in children with cerebral palsy*. Dev Med Child Neurol. 2002; 44(5), 309-316.

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Information for users

The Bimanual Fine Motor Function (BFMF) classifies fine motor function in children with cerebral palsy. BFMF describes five levels of fine motor function and covers the entire spectrum of limitations in fine motor function that may be found among children with various cerebral palsy sub-types. Level I includes children with minor limitations and levels IV-V describe children with severe functional limitations.

BFMF can be used for children aged 3–18 years, but ability to perform in-hand-manipulation must be considered in relation to the child’s age. Naturally there is a difference in how a three-year old should be able to manipulate objects, compared with a teenager. For the youngest children the ability to rotate an object in the fingers cannot be expected, but the child may transform an object from the fingers to the palm. If ability to perform in-hand manipulation cannot be established for the youngest children, the BFMF level should be determined according to ability to grasp.

The five levels in BFMF form an ordinal scale, which means that the levels are ‘ordered’ but differences between levels are not necessarily equal, and each level includes children with relatively varied function. It is therefore unlikely that BFMF is sensitive to changes after an intervention.

The new BFMF version 2.0 offers explanatory figures and precise descriptions of the fine motor function levels to facilitate the use of the classification system.

 **Without restriction**
*In-hand-manipulation: with speed and precision
 Grasps all kind of objects with speed and precision*

 **Restriction in advanced fine motor skills**
*In-hand manipulation: reduced speed and precision
 Grasps objects from table; reduced speed and precision*

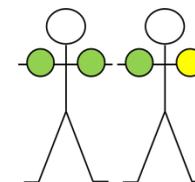
 **Can grasp and hold, no in-hand manipulation**
*No in-hand manipulation, may manipulate against table or body
 Grasps selected objects from the table and other objects from an adapted position, reduced speed and precision*

 **May hold**
*No manipulation of objects
 Cannot grasp objects from the table
 may grasp a few objects from an adapted position
 May hold object placed in hand*

BFMF version 2.0

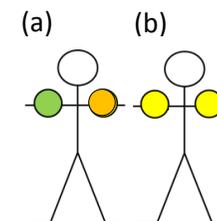
Level I

One hand: manipulates without restrictions. The other hand: manipulates without restrictions or limitations in more advanced fine motor skills



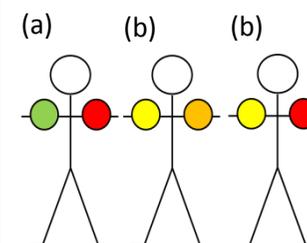
Level II

(a) One hand: manipulates without restrictions. The other hand: only ability to grasp or hold
 (b) Both hands: limitations in more advanced fine motor skills



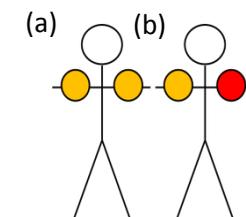
Level III

(a) One hand: manipulates without restrictions. The other hand no functional ability
 (b) One hand: limitations in more advanced fine motor skills. The other hand: only ability to grasp or worse



Level IV

(a) Both hands: only ability to grasp
 (b) One hand: only ability to grasp. The other hand: only ability to hold or worse



Level V

Both hands: only ability to hold or worse

