

A Scoping Review and Content Analysis of the Outcomes of Adapted Physical Activity Interventions for Children and Youth with Disabilities: using ICF-CY as a Reference

Mi An¹ and Toshihiro Kato²

1) 2) Department of Human Health Sciences, Graduate School of Medicine, Kyoto University, Kyoto, Japan

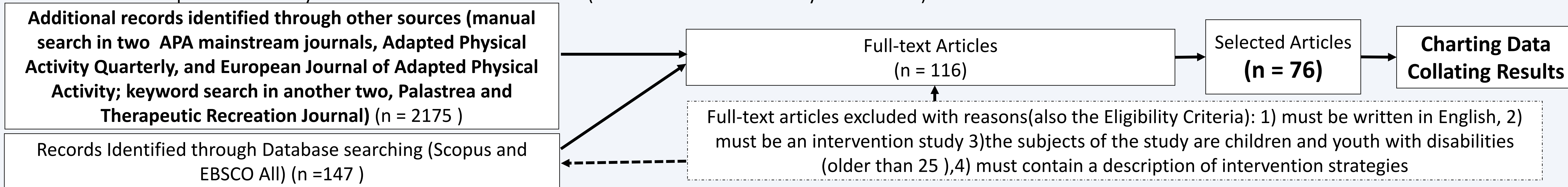
【Keywords】 Adapted Physical Activity, Intervention studies, children and youth with disabilities, ICF-CY

Introduction

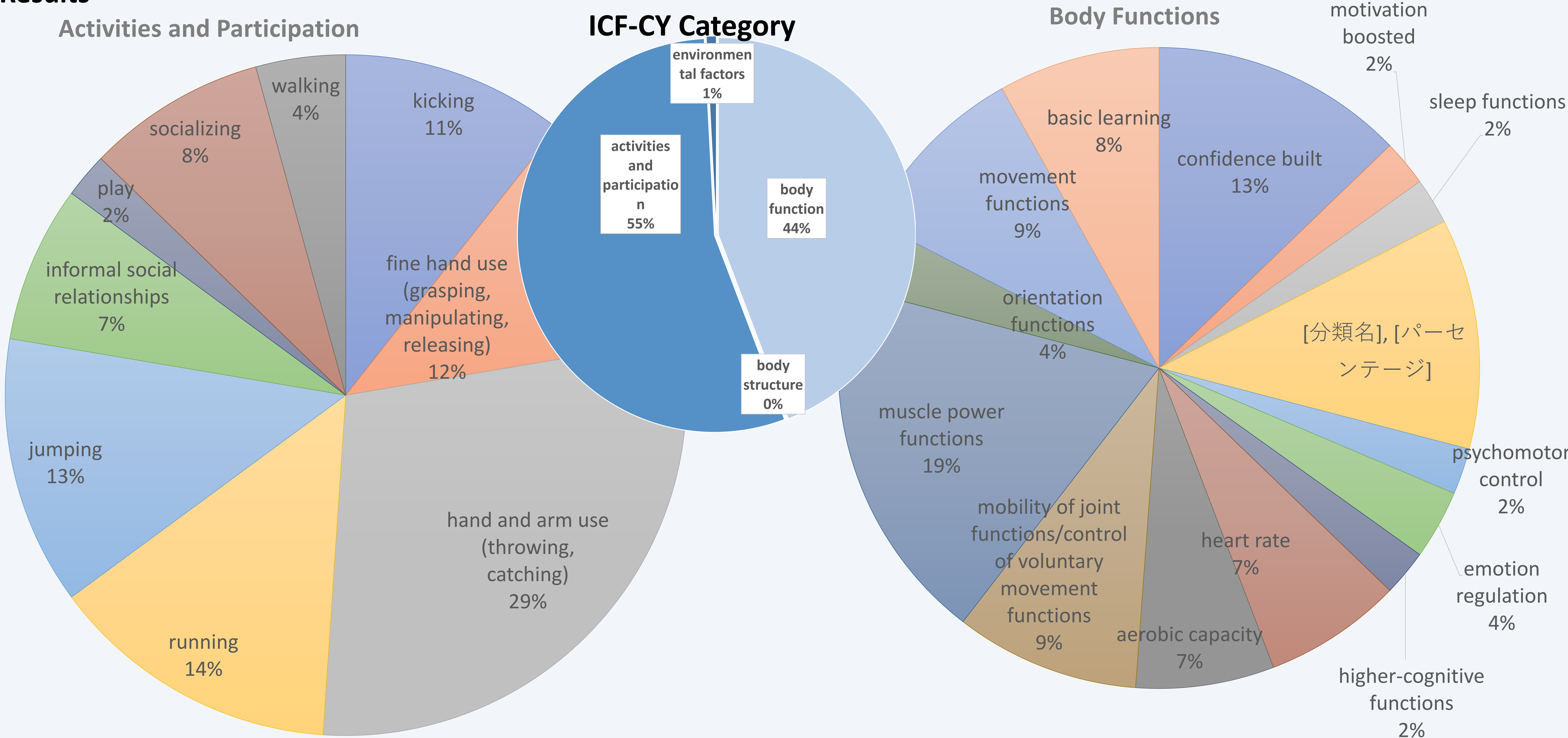
- According to Global Matrix 2.0¹, average grades for both overall physical activity and sedentary behavior for children and youth around the world are low. Compared with their peers without disabilities, children and youth with disabilities are found at a higher risk of obesity and they are not achieving the target recommended amount of daily physical activity²³.
- Rehabilitation therapies and adapted physical activity programs are avenues with intervention potential to combat these lower levels of physical activity and sedentary behavior found in children and youth with disabilities.
- Overall, rehabilitation therapies share some similarities in improving physical activities participation of children and youth disabilities, whereas they have the distinguished roles and duties⁴⁵. Other than receiving rehabilitation therapies, children and youth with disabilities should be encouraged to lead physically active lifestyles.
- As a multi-disciplinary science, adapted physical activity services and supports are provided in all kind of setting⁶ and thus has its potential benefit to children and youth with disabilities in terms of pursuing active lifestyles.
- Compared with rehabilitation therapies, it is not clear what specific outcome APA services can bring to children and youth with disabilities. In addition, there is minimal data indicating the specific outcomes of Adapted Physical Activity interventions for children and youth with disabilities because of its wide range⁷.

‘What outcomes/goals are associated with APA interventions for children and youth with disabilities?’

- #### Methods
- A structured scoping review was conducted following the PRISMA guideline⁸.
 - According to International Classification of Functioning, Disability and Health(ICY) beginners guide⁹, of particular interest in research are intervention studies that compare the outcomes of interventions on similar populations. ICF can facilitate this kind of research by clearly distinguishing interventions – and coding outcomes – in light of the aspect of disability that the intervention addresses. (ICF-CY is the children and youth version)



Results



Discussion

- Among 76 articles, there are 242 outcomes/goals. 107of them (around 44%) aim to improve body function, while only 2 goals (1%) are about reconstructing the environmental factors. The biggest number 133, account for 55% of the overall goals, falls into the Activities and Participation category. (refer to the BLUE graph of ICF-CY category above).
- Changing or Improving the body structures is not one of the outcomes/goals of providing children and youth with disabilities with APA services.
- The main outcomes associated with APA interventions for children and youth with disabilities is improving body functions, especially and muscle power functions, confidence, vestibular function of balance, mobility of joint functions, control of voluntary movement functions and basic learning. It also aims to improving gross and fine motor skills of kicking, fine hand use (grasping, manipulating, releasing), hand and arm use(throwing and catching), running, jumping and building informal social relationships, socializing and playing.

“While emphasizing the importance of body function improvement (especially muscle power functions and building the confidence) as fundamental basis for increasing physical activity level studies for children and youth with disabilities, Adapted Physical Activity intervention studies give more attention on daily activities and participation, by working on upper and lower limbs skills which are similar with Pediatric Physical Therapists outside of the clinical practice setting”

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