'Physical activity measurement instruments for children with cerebral palsy: a systematic review'

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SIR–We read with interest the systematic review of physical activity measurement instruments for children with cerebral palsy (CP) by Capio et al.1 We agree with the authors’ rationale for undertaking the review, that ‘the best instrument or combination of instruments to use to measure physical activity among children with CP has not been established comprehensively in previously published literature’.1 It seems to us, however, that the authors employed a non-traditional definition of physical activity in their review.

Although the concept of physical activity was not explicitly defined in the article, it appears to have been implicitly defined as being very closely related to participation, since the authors stated that, ‘Valid and reliable measures of physical activity among children with CP has not been established comprehensively in previously published literature’.1 It seems to us, however, that the authors employed a non-traditional definition of physical activity in their review.

We would suggest the authors’ conclusion that the Children’s Assessment of Participation and Enjoyment/Preferences for Activity of Children (CAPE/PAC), the Activities Scale for Kids – Performance version (ASKp), and the Uptimer are valid measures of physical activity is potentially misleading since these three tools were neither designed nor validated as measures of physical activity, as the concept is traditionally defined. According to the test developers, the CAPE/PAC was designed and validated as a measure of children’s participation in everyday activities outside of school.3 Although various ‘physical activity’ items are evaluated, these items are used to assess participation in physical activities and not physical activity, per se. For example, there is no distinction between being pulled on an inner tube (a sedentary, rather than a physical activity) and diving and swimming very fast underwater (clearly a physical activity). They are both considered a water sport and a child who engaged in the former could presumably receive the same score for this item as a child who engaged in the latter. As for the ASKp, according to its developers it was designed and validated as a measure of physical disability or physical function.4 Since the final ASKp score includes scores on items such as turning doorknobs or playing quietly (rather sedentary activities) and items such as running with friends (clearly a physical activity), from a content validity perspective, the final score does not appear to represent a measure of physical activity, again as it is traditionally understood. It would appear to us that the Uptimer is also not a valid measure of physical activity, in the above mentioned sense of the term, since the measure does not distinguish between the time spent standing (a rather sedentary activity) and time spent walking or running (two physical activities).5

To conclude, while these three tools may be considered valid measures with respect to their intended purposes, we would suggest that we continue to require a systematic review and appraisal of physical activity measures used with, or perhaps suitable for, children with CP, a review that explicitly defines physical activity in a manner consistent with the body of knowledge already developed.

REFERENCES