Liberi: Bringing Action to Exergames for Children with Cerebral Palsy

Figure 1 Top: Youth with CP in a design session. Middle and bottom: Gekku Race and Bobo Ranch, two action-oriented minigames in Liberi.

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Abstract
Children with cerebral palsy (CP) want to play fast-paced action-oriented videogames similar to those played by their friends. This is particularly true of *exergames,* whose physically-active gameplay matches the fast pace of action games. But disabilities resulting from CP can make it difficult to play action games. Guidelines for developing games for people with motor disabilities steer away from high-paced action. Through a year-long participatory process with children with CP, we developed Liberi (Figure 1), an action-oriented exergame that shows how to bring action to exergames for children with CP at level III on the Gross Motor Function Classification Scale. A follow-up eight-week home trial found Liberi to be playable and enjoyable.

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Exergame; exertion interface; active game; video game design; children; cerebral palsy.

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