

Perceived Feasibility of the KABOOST-School Programme: An Exercise-Based Rehabilitation School Programme for Childhood Cancer Survivors Developed Using Design Research

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Purpose: Childhood cancer survival rates have risen to around 80% in high-income countries, resulting in a growing population of childhood cancer survivors (CCS). Many CCS face long-term health challenges, for which exercise-based rehabilitation programmes have shown benefits. However, hospital-based programmes often face barriers such as high cost and the need to return to the hospital. This study explored the potential of adapting a hospital-based rehabilitation programme, KABOOST, to a school setting.

Methods: Design thinking was applied, involving close collaboration with key stakeholders. During the Empathise phase, focus groups with CCS, parents, and school staff (SS) explored user needs and contextual challenges. In the Ideation phase, CCS and SS co-developed a school-based version of KABOOST. In the Implementation phase, physical education (PE) teachers evaluated the prototype via an online survey.

Results: During the Empathise phase, CCS and their parents (n = 10) emphasised the importance of feeling included and not being seen as ‘different’ when returning to school. Parents expressed emotional challenges in allowing their child to return to school post-treatment and stressed the need of clear communication between them and school. CCS and their parents were enthusiastic about the idea of bringing the rehabilitation programme to school. SS (n = 7) also supported this idea, provided they received clear guidance on what the child can and is allowed to do. There was also a need for practical inspiration – easy-to-implement exercises that could fit within the curriculum. In the ideation phase, three CCS and three SS members adapted the KABOOST programme. This resulted in an inspiration guide with activity types, intensity levels, and creative ways to integrate movement throughout the day – in PE lessons, during recess, and as short ‘movement snacks’. Thirteen PE teachers evaluated the prototype. The programme received a mean feasibility score of 8.3/10, and was rated as clear (8.8), logically structured (8.7), and appropriate for the target group (8.2).

Conclusion: The adapted KABOOST programme was well-received and appears feasible for use in school settings. These findings support further implementation studies to evaluate its effectiveness and scalability in real-world school settings.

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