

The Protective Equipment Screening Protocol includes information sources derived from research publications and is presented in a format conducive to review and completion by treatment teams. An accompanying case report illustrates protocol-driven protective equipment fading procedures implemented with a self-injurious student.

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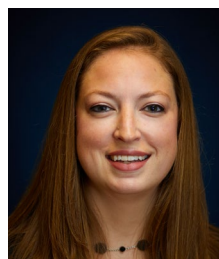
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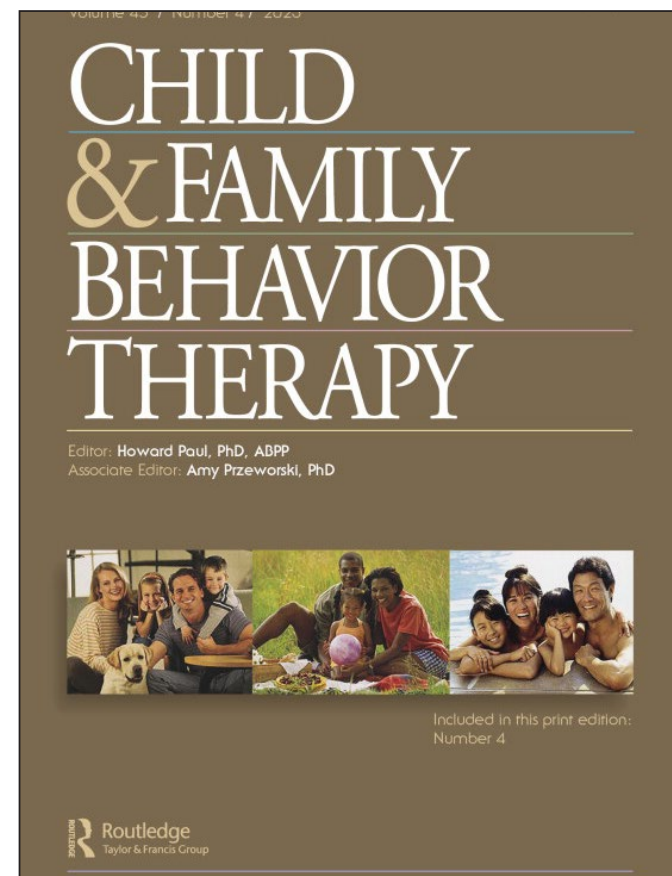
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...equipment fading and the impact into skill acquisition, and adjustment beyond...
 ...case report was presented to illustrate a...
 ...ive equipment fading with a self-injuri...
 ...a formal research study with the exper...
 ...findings to other settings and children...
 ...ded did not permit protective equipme...
 ...gent, in his case being able to freely g...
 ...als during instruction, leisure activi...
 ...educational objectives. We were able...
 ...mits by substituting mittens, modify...
 ...with further degrees of fading. Altho...
 ...as not established, informal follow-up...
 ...was able to maintain low-frequency...
 ...xterity of fingers while wearing partial...
 ...transfer of stimulus control effect rep...
 ...his hands. This approach was used in...
 ...research of Fisher et al. (1997) and Wallace et al. (1999) that...
 ...successful fading from rigid to flexible arm sleeves with children...
 ...who engaged in injury-producing face and head hitting. The po...
 ...of protective equipment fading with Joseph on both self-injury...
 ...sion was another desirable finding.

Fading Protective Equipment in Treating Self-Injury: Description of a Screening Protocol and Case Report

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ABSTRACT
 We describe a screening protocol for making clinical decisions about the fading of protective equipment worn by children with intellectual disability (ID) who injure themselves. The Protective Equipment Screening Protocol includes information sources derived from research publications and is presented in a format conducive to review and completion by treatment teams. An accompanying case report illustrates protocol-driven protective equipment fading procedures implemented with a self-injurious student. Using the screening protocol in a clinical context and research directions are discussed.

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 Fading; intellectual and developmental disabilities; protective equipment; self-injurious behavior

Many persons with intellectual disability (ID) engage in challenging behavior and require intensive intervention to affect change and improve quality of life (Vollmer et al., 2015). In the case of self-injurious behavior (SIB), some individuals wear protective equipment that prevents contusions, abrasions, lacerations, and other bodily harm (Fisher et al., 2013; Luiselli, 1992). Protective equipment may function as mechanical restraint by impeding SIB; for example, through devices such as arm limiters, which do not allow a child or adult to strike body, face, and head with hands (Fisher et al., 1997). Other protective equipment does not restrain movement but blocks the harmful effects of SIB. In illustration, wearing a helmet or gloves guards against injury from head hitting, body punching, and eye gouging (Moore et al., 2004). Sometimes persons wear protective equipment continuously (noncontingent application), or a device is applied for a defined period (e.g., 2 min) contingent on SIB (Dorsey et al., 1982).

Notwithstanding the benefits of protective equipment to manage and treat SIB, there are several potential side effects that must be considered. First, long-term use of protective equipment has been associated with medical problems, including shortening of tendons, bone demineralization, and

Intervention

...began by having Joseph wear large cloth mittens of the Posey mitts. The fading steps were (a) finger flap closed, (c) mittens with finger flaps. The restrictiveness of mittens and gloves during the fading step when Joseph displayed self-injury aggression frequency less than 25 within a 5-h session. The mittens and gloves was increased to the pre-fading self-injury frequency of 50 and within a 30-min interval. Throughout fading, he wore the mittens or gloves. The baseline instructional program and redirection contingent on self-injury was the same throughout the protective equipment fading intervention.

...daily frequency of self-injury and aggression increased dramatically from the onset of and within all of the sessions. When Joseph was first exposed to the fading intervention, self-injury and aggression increased slightly and was reinstated briefly, followed by the wearing of the mittens with good effect. From baseline to the final intervention session, self-injury was decreased by 97% and aggression decreased by 97%. The fading intervention was essential in achieving clinically significant

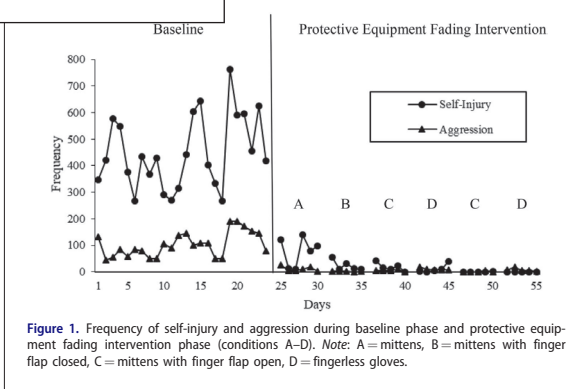


Figure 1. Frequency of self-injury and aggression during baseline phase and protective equipment fading intervention phase (conditions A-D). Note: A = mittens, B = mittens with finger flap closed, C = mittens with finger flap open, D = fingerless gloves.

Disclosure statement
 No potential conflict of interest was reported by the authors.

Data availability statement
 All data produced from this project are included in the published article.

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From a research perspective, one direction for further inquiry is to evaluate the results of fading interventions derived from the Protective Equipment Screening Protocol compared to procedures that were informed from other assessment methods. As noted in a practice context, formal assessment of interrater agreement among treatment team members would strengthen utility of the screening protocol.

Research