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# Systematic Review and Meta-Analysis of Distraction and Hypnosis for Needle-Related Pain and Distress in Children and Adolescents FREE

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## Abstract

**Objective** To systematically review the evidence (and quality) for distraction and hypnosis for needle-related pain and distress in children and adolescents. To explore the effects of distraction characteristics (e.g., adult involvement, type of distracter), child age, and study risk of bias on treatment efficacy. **Methods** 26 distraction and 7 hypnosis trials were included and self-report, observer-report, and behavioral pain intensity and distress examined. Distraction studies were coded for 4 intervention characteristics, and all studies coded for child age and study risk of bias. **Results** Findings showed strong support for distraction and hypnosis for reducing pain and distress from needle procedures. The quality of available evidence was low, however. Characteristics of distraction interventions, child age, and study risk of bias showed some influence on treatment efficacy. **Conclusions** Distraction and hypnosis are efficacious in reducing needle-related pain and distress in children. The quality of trials in this area needs to be improved.

**Keywords:** [distraction](#), [distress](#), [empirically supported treatments](#), [hypnosis](#), [needles](#), [pain](#), [randomized controlled trials](#)

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