

**Reference:** Dice JL, Dendy D, Sizer PS, Cook CE, Feuling S, Brismée JM. Use of Manual Therapy in Children: A United States Physical Therapy Delphi Investigation

**Context:** Sparse research is available regarding OMT effectiveness in managing children with musculoskeletal and neurological impairments.

**Objective:** (1) To build consensus amongst physical therapists holding advanced credentials in pediatrics, neurodevelopmental treatment (PCS/NDT group) and manual therapy (FAAOMPT group) regarding the appropriate OMT techniques use in the pediatric population; and (2) identify barriers and factors, which contribute to therapists' decision to use OMT techniques.

**Design:** Three-round Delphi investigation

**Setting:** Data collection was performed via Qualtrics® electronic platform.

**Specimens, Patients or Other Participants:** United States physical therapists with credentials including PCS, C/NDT and FAAOMPT were recruited for a three-round Delphi investigation. Delphi Round 1 was emailed to 835 physical therapists. Round 1 included 42 FAAOMPT and 41 PCS/NDT respondents (10% response rate) with the final round including 16 FAAOMPT and 17 PCS/NDT respondents from 21 states.

**Intervention(s):** An initial electronic survey identified musculoskeletal and neurological impairments and manual techniques considered most effective to treat those impairments. Responses from Round 1 were used to create Round 2, during which respondents used a 4-point Likert scale to score each survey item. In the Round 3, respondents again scored each item to establish consensus.

**Main Outcome Measure(s):** In addition to descriptive statistics, composite scores were calculated for each manual technique by impairment. Analysis was completed between groups to identify factors and barriers influencing decisions.

**Results:** Data were categorized per group: (1) FAAOMPT, and (2) PCS/NDT. Composite scores were calculated for each manual technique by impairment as well as within and between group differences ( $\alpha=0.05$ ,  $p<0.05$ ). Neuromuscular techniques were felt an effective treatment across all impairments. Consensus indicated joint mobilizations effective to treat joint and muscle/myofascial impairments. Visceral manipulation and craniosacral therapy were considered ineffective in treating most impairments. There was strong disagreement in the general utilization of grade 5 manipulation and dry needling. The most significant barriers for using OMT techniques in pediatric population were lack of knowledge and fear of harming patients or litigation.

**Conclusions:** While consensus was reached regarding selected techniques, differences in opinion between groups imply a strong treatment bias based on experience, training and/or knowledge. Our findings should serve as an initial step in

creating manual therapy guidelines and developing education opportunities to enhance physical therapists' knowledge in treating children.