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Riding the Waves: Therapeutic Surfing to Improve Social Skills for Children with Autism

Search Terms: (Children OR Adolescents) AND (Autism) AND (Surf) AND (Social); (Children OR Adolescents) AND (Autism) AND (Therapeutic Surfing) AND (Social); (Children OR Adolescents) AND (Autism OR Developmental Disorder) AND (Therapeutic Surfing) AND (Social)

Years: 2007-2015

Databases: SPORTDiscus, Academic OneFile, EBSCOhost, ERIC, Hospitality & Tourism Complete, PsycARTICLES, PsycINFO, Psychology and Behavioral Sciences Collection, and Google Scholar

Number of articles: 6

Summary of Research Findings

Children with autism may have difficulties forming and maintaining meaningful relationships with their peers (Reichow & Volkmar, 2009). These difficulties can lead to social isolation (Delaney & Madigan, 2009), and can impact their social, emotional and cognitive development, academic achievements (Stichter, Randolph, Gage, & Schmidt, 2007), and self-esteem (Chamberlain, Kasari, & Rotheram-Fuller, 2007). Thus, it is important to have children with autism involved in interventions to effectively teach social skills, such as therapeutic surfing camps.

Therapeutic surfing camps can be used as an intervention to foster development of social skills in children with autism. The surfing camps highlighted in this literature review covered 3 different surfing programs that included participants with ages ranging from 5-18 and varying levels of developmental disabilities and behavioral problems. These programs lasted two days, six weeks or eight weeks, and the number of participants involved ranged from 11 to 121. The two-day surfing camp taught participants the physical skills necessary to surf, and then utilized group activities, socials, and self-reflection to promote interactions and build their social skills among their peers and staff (Cavanaugh & Rademacher, 2014; Cavanaugh et al., 2013). The two-day camps utilized video-modeling, a promising evidence-based practice, and social skills groups, an established evidence-based practice, in order to effectively teach the desired social behaviors (Reichow & Volkmar, 2010). The Wave Project, a six-week surfing intervention, utilized one-on-one surfing training within a group setting to develop confidence, self-reliance, self-management, and social skills in children with autism (Godfrey, Devine-Wright, & Taylor, 2015; Colpus & Taylor, 2014). The goals of the eight-week adapted surfing program were primarily centered on developing physical surfing skills (Clapham et al., 2014). Through learning these movements and interacting with volunteers and peers, the children were also able to improve across many domains, including the psychosocial domain.

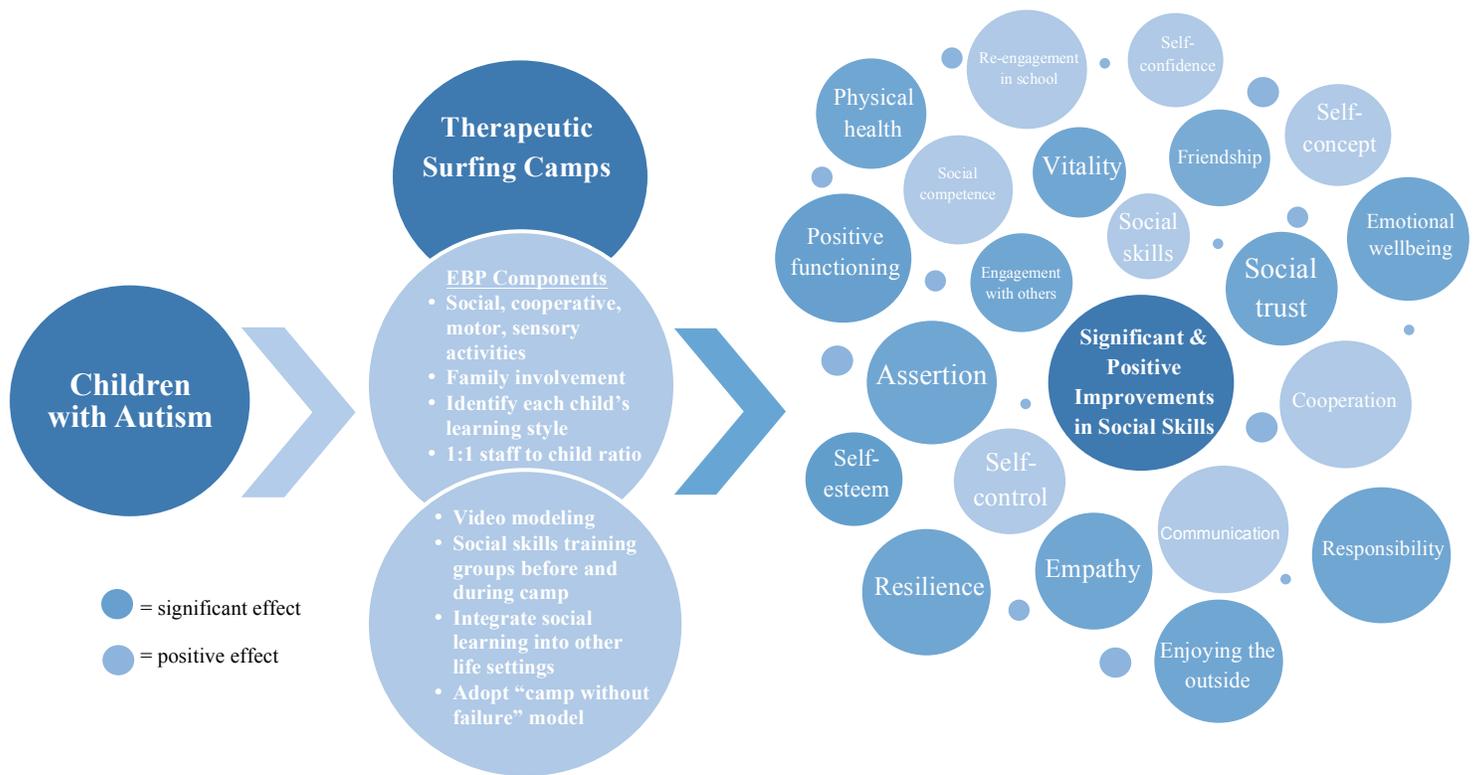
Overall, the surfing resulted in significant outcomes for assertion, empathy, responsibility, engagement (Cavanaugh & Rademacher, 2014), positive functioning, resilience, self-esteem, emotional wellbeing, vitality, friendship, social trust, physical health, and enjoyment in the outside environment (Godfrey, Devine-Wright, & Taylor, 2015). While there was not significant outcomes for the following results, there was a positive effect on the results for social competence, social skills, self-concept, communication, cooperation, responsibility, engagement, self-control (Cavanaugh & Rademacher, 2014), self-confidence (Clapham et al., 2014), well-being and re-engagement in school (Colpus & Taylor, 2014). Improvements in these skills are integral in being able to form meaningful social supports, and acts as a basis to form new skills to further these improvements (Cavanaugh & Rademacher, 2014). Long-term benefits from these programs were seen in peer relationships that extended past the camp (Cavanaugh et al., 2013), and participants' continuation in future camps (Godfrey et al., 2015), which is of importance as it shows the longevity of the positive benefits of the surfing camps.

Despite the significant and positive findings in the studies, research on this topic is scarce, and multiple limitations were identified within the studies including possible biases within self-reports, lack of control groups, limited study samples, response-bias effects, and the locations of the camps (Cavanaugh & Rademacher, 2014; Godfrey et al., 2015; Colpus & Taylor, 2014). Additionally, two of the studies in this review were descriptive in nature (how to develop and implement a surfing program and its positive effects), rather than studying the effectiveness of the surfing program (Cavanaugh et al., 2013; Clapham et al., 2014). We however still included the information from these two studies because they can provide practitioners who are interested in implementing and/or researching the outcomes of a therapeutic surfing program for children with autism relevant information, as well as sources for programming.

Knowledge Translation Plan

Certified Therapeutic Recreation Specialists (CTRS) who are trying to implement social skills interventions for children with autism should consider utilizing therapeutic surfing as an evidence-based intervention, due to the significant and positive outcomes that have been noted. In order to achieve optimum results, therapists should consider utilizing techniques found across the studies in this review, such as 1) incorporating activities that build social and cooperative skills, surfing activities that work on motor skills, sensory experiences, and family involvement into the overall experience (Cavanaugh et al., 2013); 2) identifying each participant's learning style and skill baselines beforehand, so that volunteers and staff can teach skills and communicate with each child in the most effective way (Clapham et al., 2014); 3) providing each participant with at least one volunteer or staff member to assure proper surfing techniques are followed and offer the participant a constant social opportunity (Cavanaugh & Rademacher, 2014); 4) considering using a combination of video modeling and social skills groups within the therapeutic surfing camp, as they have been identified in the literature as effective evidence-based interventions for improving social skills (Reichow & Volkmar, 2010); 5) teaching specific social skills prior to, and during camp, and within surfing and non-surfing activities to ensure short-term and long-term maintenance of these skills

(Cavanaugh et al., 2013); 6) incorporating the family of the participants in the social activities to foster a stronger sense of community (Cavanaugh et al., 2013); and 7) focusing on ways to integrate this social learning into the participant's school environment, encourage participants to return to future surfing camps, and allow past participants to act as mentors to future participants so participants can continue to be socially active outside of the camp (Cavanaugh et al., 2013; Godfrey, Devine-Wright, & Taylor, 2015). Lastly, therapeutic surfing camps have upheld the philosophy of being a "camp without failure," which means that each participant is not held to a certain standard, and the therapist should assure that their camp holds the same meaning, as that allows for the participants to feel free to be creative and perform to their own abilities without the fear of failing (Cavanaugh et al., 2013). See Cavanaugh et al. (2013) and Clapham et al. (2014) for more details about planning and organizing a therapeutic surfing camp (e.g., inclusion criteria, consent forms, comfort level in the ocean, information gathering from caregivers, volunteer training, safety orientation, beach access, lifeguards, surf equipment, etc.).



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