

Accepted Scientific Research Works (Abstracts)

Desired and perceived outcomes related to an elementary school classroom-based yoga program as a basis for quantitative research studies

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Objective: We sought to determine desired and perceived areas of improvement in elementary school (kindergarten – fifth grade) students prior to and after a 10-week classroom-based yoga intervention, respectively. We then used the information to develop specific research questions for an upcoming study employing rigorous scientific methods to quantify outcomes reported from the qualitative data.

Methods: Elementary school teachers were asked to select areas of improvement they wished to see in their students from a list that included academic and behavioral outcomes. This survey was administered prior to a 10-week classroom-based yoga intervention whereby a certified yoga instructor (ChildLight Yoga) gave a 30-minute class, incorporating mind/body/breath exercises specifically designed for elementary school-aged children (Yoga 4 Classrooms™) 1 day/week. A separate group of teachers whose students had completed the 10-week Yoga 4 Classrooms residency program were asked to select the areas they perceived to improve at the end of the residency. Responses were compiled in histogram format to quantify the frequency of responses for each question.

Results: The most frequently occurring responses from the pre-residency classroom teachers were a desire to see improvement in students for the following categories: concentration, ability to shift negative attitude, creativity and self-control. Teachers from the classrooms that had already received the 10-week residency most frequently reported the following improvements in their students: attention span, ability to stay on task, focus/ability to concentrate, respect for self/others, ability to adjust attitude, ability to deal with stress/anxiety, emotional well-being.

Conclusions: Based on these subjective data, we have designed an experimental protocol to assess focus/attention span via the Attention Network Test adapted for children to determine whether the perceived changes in this area after a yoga intervention (Y4C) can be quantified. We will also assess a physiological marker of stress, salivary cortisol, to confirm the perceived improvements in student's ability to deal with stress and anxiety. Finally, we will determine both the acute and chronic effects of the yoga intervention on academic performance by administering standardized math and reading comprehension tests before and after a single yoga session, and before and after the 10-week Y4C residency. The quantitative portion of the study will be in progress during the SYR conference, and at time of abstract submission is partially funded by grants from The DMSE Children's Fitness Foundation.