

Research Opportunities: Alert Program® and Self-Regulation

We, at TherapyWorks, Inc. (TWI), are committed to supporting research and other scholarly endeavors related to the concept of self-regulation and/or, more specifically, the application of the Alert Program®. This document provides useful information and guidance to faculty members and graduate researchers interested in this topic and is organized into the following areas of focus:

- I. Potential Areas of Research Interest
 - A. Application Across the Ages & Across the Function/Dysfunction Continuum
 - B. TWI Product Effectiveness
 - C. Training and Education
- II. Research Support Considerations
- III. Research Communications with TWI

I. POTENTIAL AREAS OF INTEREST

The first task in the research process (and often the most daunting one) is generating possible research questions. The following outlines specific areas related to self-regulation and the application of the Alert Program®. Each of the following sections provides possible areas of research interest and related questions. This is intended to help brainstorm and narrow the research focus. It is not intended to be all-inclusive but merely a guide to help facilitate the identification of research questions.

A. Application Across the Ages & Across the Function/Dysfunction Continuum

While the Alert Program® was originally designed for children with learning disabilities, ages eight to 12, it has been successfully adapted for application to individuals across the age span and across the function/dysfunction continuum. The following suggests potential areas of interest related to chronological age categories as well as *examples* of possible research focus.

1. Infancy/Toddlerhood (0-3 year old) Population
 - a) *Neurotypical Development (examples)*
 - *Effect of self-regulation knowledge on parenting skills infant/toddlers.*
 - *Effect of self-regulation knowledge on parent sense of competency.*
 - b) *Special Needs Population (examples)*
 - *Use of self-regulation strategies with FAS infants/toddlers*
 - *Effect of self-regulation knowledge on parents of premies*
 - *Effect of self-regulation knowledge on parents of children with Down Syndrome*
 - *Effect of self-regulation knowledge on parents of children who are deaf or blind*
2. Preschool (3-5 year old) Population
 - a) *Neurotypical Development (examples)*
 - *Typical sensory-motor preferences in preschool population*

- *Improvement in knowledge and ability of parent (or educator) to observe sensory-motor preferences and/or alert levels in preschool population after learning the Alert Program®*
 - *Use of Alert Program® concepts, language and strategies adapted for preschool educators and families*
- b) *Special Needs Population (examples)*
- *Effect of using Alert Program® concepts, language and strategies in supporting at-risk preschoolers development*
 - *Effect of self-regulation knowledge on parents of children with autism*
 - *Effect on attention and preschoolers' ability to learn in "circle time" with use of sensory strategies after preschool educators taught Alert Program® concepts*
 - *Effect of providing self-regulation strategies to children with autism in preschool*
3. Early Elementary School (Grades K-5) Population
- a) *Neurotypical Development (examples)*
- *Use of Alert Program® in general education.*
 - *Use of Alert Program® in promoting development of social-emotional skills*
 - *Use of Alert Program® in decreasing behavior problems and more on-task behavior in general education classroom.*
 - *Effect of self-regulation knowledge on teachers in general education*
- b) *Special Needs Population (examples)*
- *Use of Alert Program® in school-based services for students with ASD*
 - *Level of peer support in supporting "Engine" levels.*
 - *Effect of self-regulation knowledge on teachers (or parents)*
 - *Changes in perception of "behavior problems" among teachers of children with special needs after learning the Alert Program® concepts (including their own self-regulation and sensory-motor preferences)*
4. Middle School (Grades 6-8) Population
- a) *Neurotypical Development (examples)*
- *Transition patterns supportive of independent self-regulation*
 - *Levels of self-knowledge related to self-regulation at this age.*
 - *Effect on Study Skill development when students in general education are taught Alert Program® concepts and use self-regulation strategies for homework (or class time)*
- b) *Special Needs Population (examples)*
- *Effectiveness of teaching teachers of students with special needs about self-regulation concepts and strategies.*
 - *Use of the Alert Program® concepts in promoting social skills development among those with autism*
 - *Effect of self-regulation knowledge in teens with special needs*
5. High School (Grades 9-12) Population
- a) *Neurotypical Development (examples)*
- *Documenting typical sensory-motor preferences in self-regulation of adolescents.*
- b) *Special Needs Population (examples)*
- *Self-regulation self-knowledge in students at risk for school drop-out.*
 - *Use of Alert Program® in OT intervention with young adolescents with psychoses.*
 - *Effect of self-regulation knowledge on students with ADD after learning Alert Program® concepts. What is the ability of the adolescent to self-advocate for*

individualized learning adaptations and to request permission to use self-regulation strategies in general education?

6. Adulthood (Young-Middle-Aged) Population
 - a) *Enhancement of Normal Self-Regulation (examples)*
 - *Role of self-regulation concepts in promoting health and wellbeing in general population.*
 - *Relationship between self-regulation knowledge and routine occupations*
 - b) *Sensory-Regulation Dysfunction (examples)*
 - *Role of self-regulation knowledge and skill in increasing occupational competence in individuals with chronic mentally illness.*
 - *Relationship between self-regulation knowledge and self-care*
7. Adulthood (Elder) Population
 - a) *Enhancement of Neurotypical Self-Regulation (examples)*
 - *Relationship between elder knowledge of self-regulation strategies and routine occupations.*
 - *Effect of self-regulation knowledge when mobility is limited*
 - b) *Sensory-Regulation Dysfunction (examples)*
 - *Effectiveness of training Skilled Nursing Facility staff in behaviors related to self-regulation dysfunction.*
 - *Perceived benefits of self-regulation knowledge of elders with dementia by skilled nursing facility staff*

B. TWI Product Effectiveness

TherapyWorks, Inc. (TWI) offers various products and support resources for the practitioner and families. Evaluating the most effective and efficient materials and tools for given populations would allow the practitioner to choose the best approach for a specific population or setting. Research could focus on any population (e.g. autism, ADD, FAS, other specific learning challenges), any age range, and any setting including general education, special education, home or community settings.

1. Sensory Diet Categories as described in the Alert Program®:
Mouth, Move, Touch, Look, Listen (*examples*)
 - *Frequency in use of various strategies.*
 - *Pragmatics and use in classroom application*
2. "Take Five! Staying Alert at Home and School" (*examples*)
 - *Parental access and value*
 - *Teacher's knowledge and ability to create sensory diets after reading the book*
3. "Test Drive: Introducing the Alert Program® Through Song" (*examples*)
 - *Efficiency & effectiveness of "Test Drive" teaching the Alert Program® concepts through music as compared to traditional "Leader's Guide" approach*
 - *Integration of "Test Drive" music in to daily classroom routine*
4. "Alert: Go Fish!" (*examples*)
 - *Outcomes of use*
 - *Ability to label alert levels by children by playing traditional Alert: Go Fish! Card game or Alert: Go Fish Concentration/Memory games*
5. "Alert Bingo" (*examples*)

- *Outcomes of use*
 - *Ability of differently aged children to translate what is learned in game to using the self-regulation strategies in their classroom or home*
6. "Keeping on Track: Alert Program® Companion Game" (*examples*)
- *Outcomes of use*
 - *Ability of differently aged children to translate what is learned in game to using the self-regulation strategies in their classroom or home*
 - *Parents' (or teachers) perceived value and observations of self-regulation knowledge of students who play the board game after learning basic Alert Program® concepts (as compared to those who do not play the board game)*

C. Training and Education

Teaching adults about concepts and strategies for self-regulation is a powerful tool for supporting healthy adult occupational competence as well as supporting children through adult knowledge and application. Researching teaching and training strategies (e.g. outcomes, efficiencies, applications, frequency) results in more successful training outcomes via optimal use of teaching strategies.

1. Professional OT Student Education (*examples*)
 - *Outcome of enhanced OT student self-knowledge of sensory-motor self-regulation patterns on daily routines.*
 - *Value of using the Alert Program® in teaching OT students about the concept of self-regulation.*
 - *Level of generalization of self-regulation concepts to all arenas of practice.*
2. Teacher Training (*examples*)
 - *Effect of teacher sensory-motor preference self- knowledge on understanding students' preferences and behaviors.*
 - *Effect of teacher knowledge of self-regulation concepts on sense of effectiveness in promoting development of student social-emotional development.*
3. Parent Training (*examples*)
 - *Relationship of parent training on self-regulation and morning family routines*
 - *Application of school-based strategies in home environment*
 - *Perceived value or effectiveness of training adoptive foster-care families on concepts of self-regulation via Alert Program®*
4. Training Strategies (*examples*)
 - *Value/Effectiveness of Five-column activity to teach adults.*
 - *Frequency, use, and effectiveness of "Sensory-Motor Preference Checklist for Adults"*

II. RESEARCH SUPPORT CONSIDERATIONS

There are multiple issues that need to be considered before pursuing a particular research question. As a student, your research chair/committee will assure that you have asked/answered significant questions related to the research process (question identification, design, methodology, analysis process, etc.). The following list provides some questions specific to your interest in self-regulation and the Alert Program®:

1. Is there a faculty member who has experience and expertise in self-regulation and the Alert Program®?

2. If there is no faculty member who is experienced and skilled in the Alert Program®, is there a community practitioner who is able to contribute to the research committee process?
3. Who will be your primary supervising practitioner who will be responsible for maintaining the integrity of program implementation?
4. Given the population of interest, is there a practitioner in the community who addresses self-regulation, uses the Alert Program®, and/or is interested in addressing self-regulation with the given population?
5. Is there a community practitioner who would be willing to help you hone a clinically relevant question?
6. Is your research question clinically significant?
7. Does your research question interest and excite you?
8. Have you accessed the document titled "*Alert Program® Literature and Research: Published Literature, Research and Resources*" as part of your review of literature?
9. Have you accessed the document titled "*Guidelines for Using Intellectual Property of TherapyWorks, Inc.*" on the TWI webpage (www.AlertProgram.com)?
10. Is there a financial source for materials and supplies in implementing the research?
11. Is your knowledge related to the theory of sensory integration and the Alert Program® sufficient to support implementation of the research process? Note: distance learning is available at www.alertprogram.com/distance-learning.php
12. Is a suitable and willing source of research subjects available and accessible?
13. How will you remain in contact with TWI to receive copyright permission, suggestions, and provide final research results?

III. RESEARCH COMMUNICATIONS WITH TWI

TherapyWorks, Inc. (TWI) is willing to provide consultation and support for research related to the Alert Program®. To initiate this support, it is recommended that communication with TWI occur as soon as a research question has been finalized. Communications are best accomplished through e-mail (manager@alertprogram.com). Due to time constraints and frequent travel, please plan to streamline your questions or requests for consultation. Also, the more notice a graduate student provides, the more likely TWI can support the project. Once research results are obtained and final papers completed, TWI, with permission of the researchers, includes the final manuscript or publication in the document titled "*Alert Program® Literature and Research: Published Literature, Research and Resources.*" Your work contributes to the pool of evidence that supports effective clinical practice.