

# The Art & Science of Transformational Change

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## Effects of SuperBrain Yoga exercise on the behavioral indicators leading to Attention Deficit with Hyperactivity Disorder (ADHD): A pre-post comparative study

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# Acknowledgments

**Grand Master Choa Kok Sui,**  
developer of *Pranic Healing* and  
*SuperBrain Yoga* techniques.



**ACEP's The Science of Energy Healing course**



# Rationale for the Study

- 80% of adult mental illness has roots in disorders appearing in childhood.
- Emotional and behavioral issues in early life undermine the evolution of individuals, families and society in general.
- Attention Deficit with Hyperactivity Disorder (ADHD) has high prevalence in Uruguay (7.6%)
- Prevalence of ADHD for children in lower social-economic strata is 15.2%, these children having no access to psychiatric, psychotherapeutic or psychopedagogic treatment.
- References: Viola, L.; Garrido, G.; Varela, A. (2008); Viola, L. & Garrido, G. (2009)



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# Rationale for the Study (cont.)

- Less than 30% of children diagnosed with ADHD are treated. (Viola & Garrido, 2009)
- Finding a therapeutic means of intervention that is brief, benign, and low cost to help schoolchildren is considered to be urgent and essential.

## *Research Question*

- **Can energy psychology techniques be used as complementary treatment to mitigate symptoms indicative of potential ADHD?**

# Research Objectives

- GENERAL OBJECTIVE: Test techniques for improving behavior of children in the classroom.
- SPECIFIC OBJECTIVE: To gather quantitative evidence on the efficacy of the Superbrain Yoga (SBY) exercise in improving those classroom behavioral indicators involved in ADHD

# Research Objectives (cont.)

- RESEARCH QUESTIONS:

- Does regular practice of SBY reduce the disruptive behaviors associated with ADHD?
- Do the effects of SBY last after practice is discontinued?
- Is SBY a benign practice?

- WORKING HYPOTHESIS:

- The practice of SBY is associated with a reduction of disruptive classroom behavior in school children.

# Theoretical Framework

- Superbrain Yoga is purported to
  - “pump-up” life energy from the lower chakras (Basic, Sex, Navel) involved in instinctive drives, to the upper chakras (Solar Plexus, Heart, Throat, Ajna and Crown)
  - Regulate drives with higher human functions (self-esteem, compassion, thinking, will power, spirituality).
- Chakras operate as “energy transformers” that step energy frequencies up or down, enhancing the corresponding functions with the development of each chakra.

Source: Choa, KS (1990, 1993, 2005, 2010)

# Theoretical Framework

- The SBY exercise:
  - Stems from a millenary practice promoted by ancient Rishis in India to calm children
  - Is known as the “*Ganesha*” (aka “*Ganapati*”) exercise
    - This is a reference to the Indian deity with child body and elephant head that symbolically alludes to a child with high intelligence and the ability to listen carefully.
  - Is a simple physical and breathing exercise that takes less than one minute a day to practice
- Grand Master Choa Kok Sui was able to check the proper way of making the necessary energy connections to enhance effects by using scanning techniques from Pranic Healing.





# Superbrain Yoga Practice

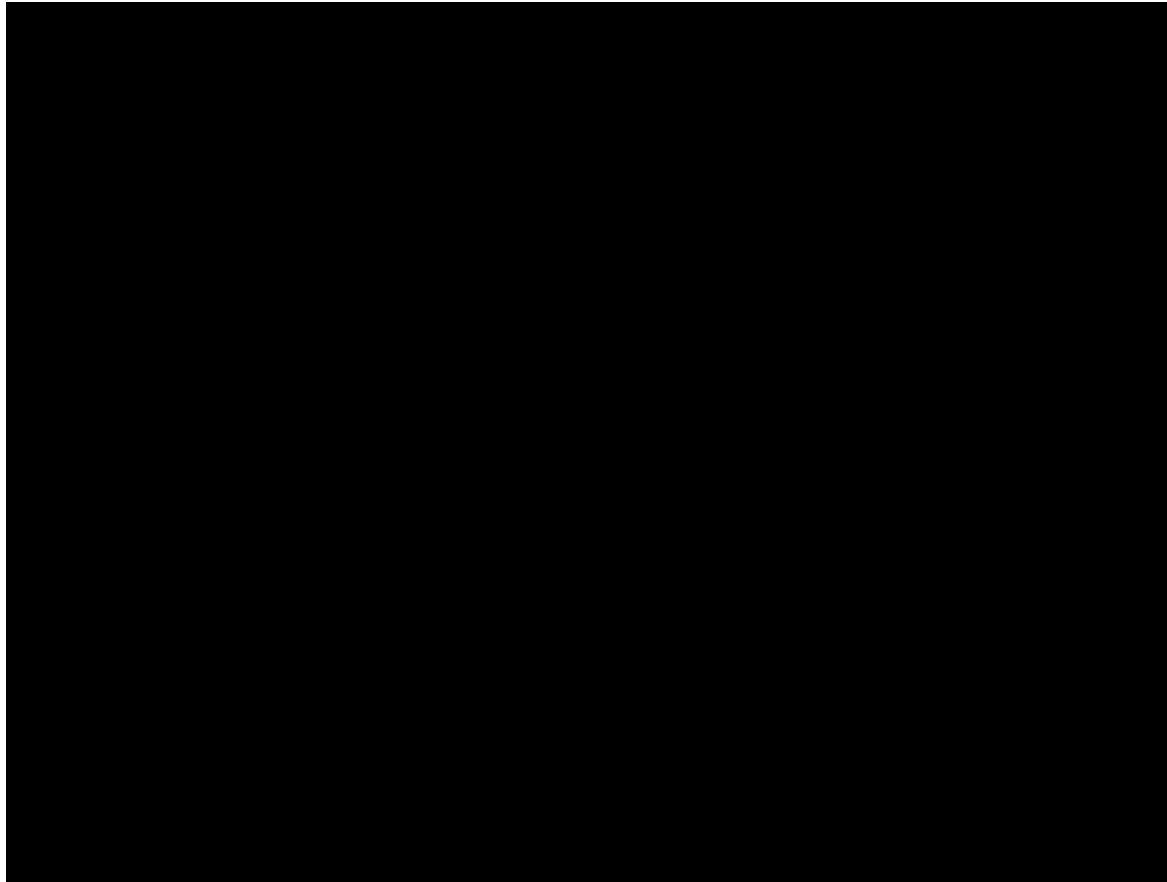


- Inhale while squatting with specific arm-fingers-ears positions, exhale while returning to standing position.
- This is done 7 times (takes about 20 seconds) per session, up to a recommended maximum of 3 daily sessions (21 squats per day). After some practice, it may be done 14 times, twice a day maximum.
- Facing East is recommended for people below 35 years of age and facing North to those aged above 35.



Source: Choa, K.S. (2005) *Superbrain Yoga*. IISPF: Manila

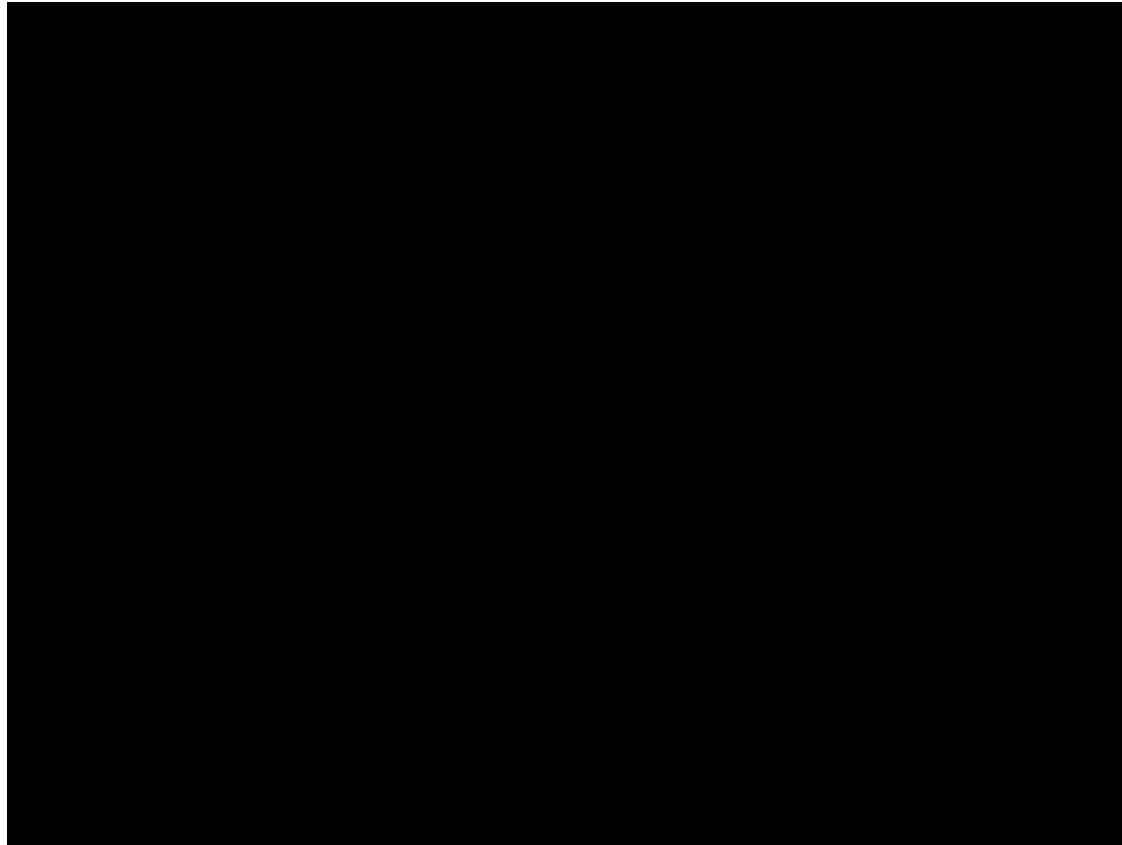
# Superbrain Yoga Practice (cont.)



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# Superbrain Yoga Practice (cont.)



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# The 11 chakra system in Pranic Healing

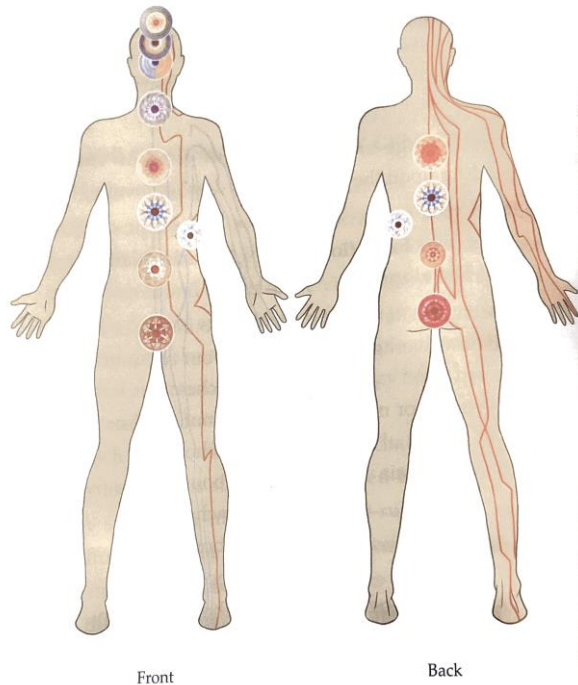
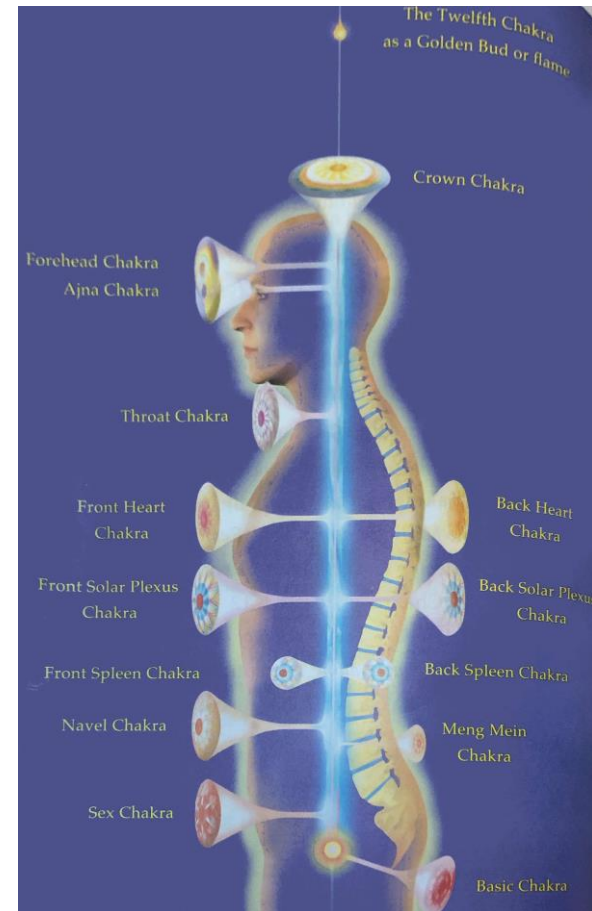


Fig. 1-2 Major chakras and acupuncture meridians

Major chakras or energy centers are actually major acupuncture points



Choa, K.S. (2010) *The Chakras and their Functions* pp. 10 & 30.  
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Chakras	Acupoints	Glands	Psychological Functions	Personality Function-Attitude of Consciousness
Basic	GV1	Adrenals	Survival instinct (aggression/fear), dynamic action	Sensation-Introverted
Sex	CV2	Gonads	Sexual instinct (pleasure, sexual drive, creativity)	Sensation-Extroverted
Meng-Mein	GV4	Adrenals	Upward flow of pranic energy from basic chakra	
Navel	CV8		Instinct of knowing (gut feelings)	
Solar Plexus	Front SP CV12  Back SP GV7	Pancreas	Self-orientation and lower emotions, positive and negative (ambition, daringness, self-esteem, courage, perseverance, strength, righteous indignation, justice, fairness, anger, irritation, hate, envy, greed, violence, resentment, worry, anxiety, tension, selfishness)	Feeling-Introverted
Spleen, front and back	Front SP16 Back BL50		General well-being. Affects the overall energy level, strength and health.	
Heart	Front CV18  Back GV10	Thymus	Others-orientation and higher emotions (peace, serenity, joy, compassion, kindness, gentleness, tenderness, sensitivity, caring, patience, considerateness, transmutation of lower emotions)	Feeling-Extroverted
Throat	CV23	Thyroid Parathyroid	Concrete, analytical mind, lower mental, higher creativity, art, nurtured by the sex chakra	Thinking-Introverted
Ajna	M-HN3	Pituitary	Abstract, synthetic mind, higher mental, willpower, leadership, emotional self-regulation	Thinking-Extroverted
Forehead	GV24	Pineal	Intuition with form, inner vision, memory	Intuition-Introverted
Crown		Pineal	Cosmic consciousness, will to do good, loving kindness for all (sense of safety through experiencing immortal, eternal, transcendent realms of being)	Intuition-Extroverted



Source: Choa, KS (2010); Garcia, ME (2015)

# Method - Participants

- 90 children from a state-run school in Tacuarembó, Uruguay
  - Regular SBY practice could not be ascertained for 35 children
  - 20 children did not exhibit any disruptive behaviors (as measured by the CTRS-HI, 3-A)
  - 47 girls, 43 boys
  - Demographics representative of overall state-run schools in Uruguay, mostly medium to low social-economic strata
- Confirmed regular practice
  - n=55
  - grades 3 and 4
  - Average age 8.5
  - Non-referred population
  - 12 did not exhibit disruptive behavior



# Method – Inclusion/Exclusion Criteria

- **INCLUSION CRITERIA:**

- Informed consent and authorization to film/photograph, signed by parents.
- Willingness of teacher to participate in the study
  - invest 5-10 minutes per student
  - assess students on 3 occasions (May, July, October) in the academic year
- Willingness of the child to participate in the study and perform the exercise as instructed.
- Correct practice of the exercise for at least 2 months.

- **EXCLUSION CRITERIA**

- Prior exposure to Superbrain Yoga
- Unwillingness of teacher to assess students





# Method - Procedure

- Quasi-Experimental, Pre-Post Design examining Efficacy of Treatment (SBY)
- Procedure
  - First baseline measurement taken in first week of May, one week prior to commencement of the practice. This is two months after classes start (about March 1 in Uruguay) to allow teachers to familiarize themselves with the behavior of their students.
  - Second measurement taken 2nd week of July, after two months of regular practice.
  - Third and last measurement taken in first week of October, after 5 months of regular practice.



# Method – Procedure (cont.)

*April 2018*

- Informed consent gathered from parents

*May 2018*

- Baseline measurement (1st week May, 2018)
- Researcher taught exercise to students and teachers (2nd week)

*May 2018 – October 2018*

- Regular practice 7 or 14 times in the morning and 7 times in the afternoon, 5 days a week.

*July 2018*

- Measurement taken after 2 months of regular practice

*October 2018*

- Last Measurement after 5 months (1st week October)
- Note: Academic year in Uruguay March – December (3 one-week breaks in Fall, Winter, Spring)



# Method – Measurement Tool

- Abbreviated Conners Teachers Rating Scale – Hyperactivity Index (CTRS-HI, 3-AI) (Spanish version Calibrated by Arias Martínez et al. (2012))

CUESTIONARIO DE CONDUCTA DE CONNERS PARA MAESTROS  
(Conners 3-AI, IHC)  
(C.C.E.; Teacher's Questionnaire; C. Keith Conners) Forma Abreviada.

Nombre completo del niño/(a):	
Fecha de nacimiento (d/m/a):	
Edad (años cumplidos):	
Sexo:	
Doc. Ident. No.:	
Nivel y año escolar (Ej.: Primaria, 4º)	
Nombre de la Escuela:	
Nombre completo del padre, madre o responsable:	
Nombre completo del (la) Maestro(a):	
Fecha de aplicación: (d/m/a)	

	Nada	Poco	Bastante	Mucho
1. Tiene excesiva inquietud motora.				
2. Tiene explosiones impredecibles de mal genio.				
3. Se distrae fácilmente, tiene escasa atención.				
4. Molestra frecuentemente a otros niños.				
5. Tiene aspecto enfadado, huraño.				
6. Cambia bruscamente sus estados de ánimo.				
7. Intranquilo, siempre en movimiento.				
8. Es impulsivo e irritable.				
9. No termina las tareas que empieza.				
10. Sus esfuerzos se frustran fácilmente.				
TOTAL (dejar en blanco para el investigador)				

## Behavior descriptors:

- 1) Constantly fidgeting;
- 2) Temper outbursts, explosive, unpredictable behavior;
- 3) Inattentive, easily distracted;
- 4) Disturbs other children;
- 5) Appears angry or withdrawn;
- 6) Mood changes quickly and drastically;
- 7) Restless or overactive;
- 8) Excitable, impulsive;
- 9) Fails to finish things he/she starts;
- 10) Easily frustrated.

## Teachers must rate this behavior as whether:

“Not at all” (Score = 0);

“Just a little” (Score = 1);

“Pretty much” (Score = 2);

“Very much” (Score = 3).

Maximum potential score: 30.

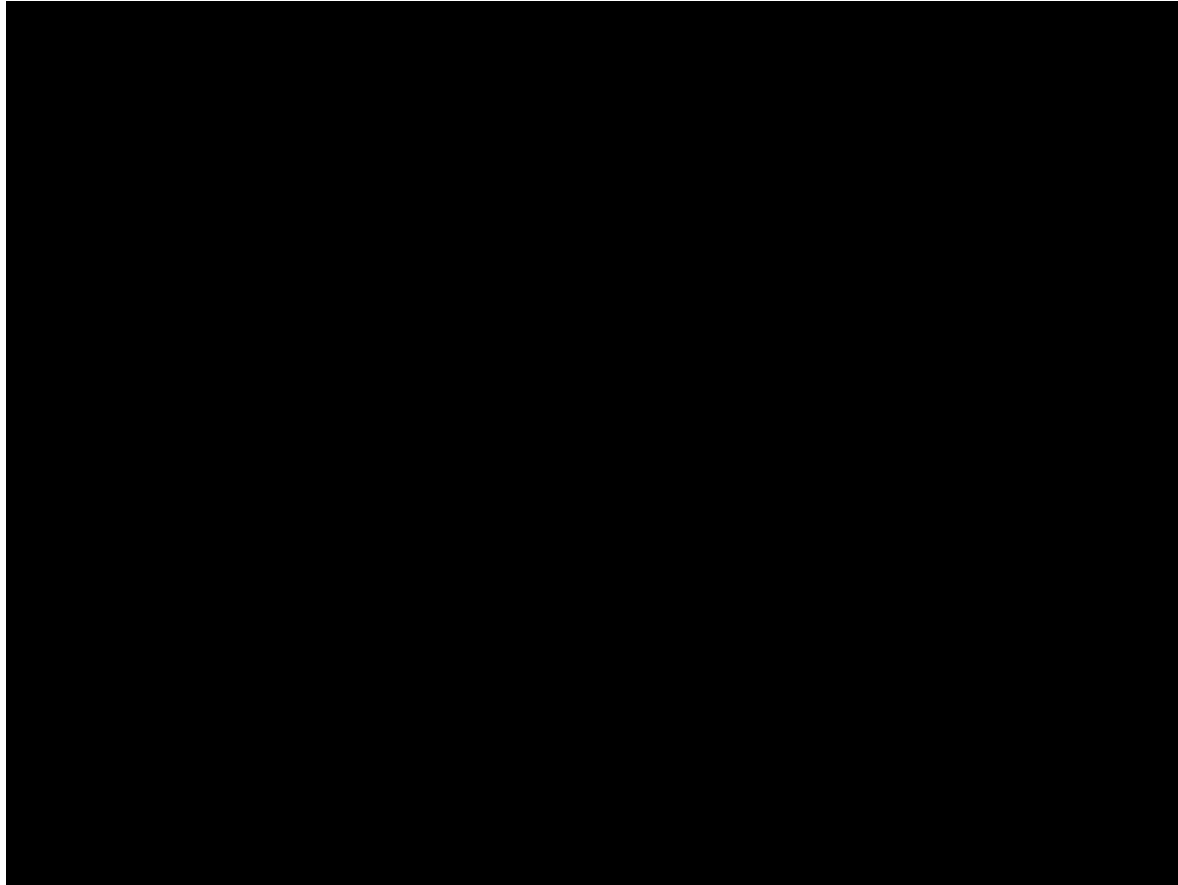
Clinical population would rate above 17 .

**No scores provided to teachers.**

**No ADHD diagnosis intent, just measurement of the extent of those behaviors in the classroom.**



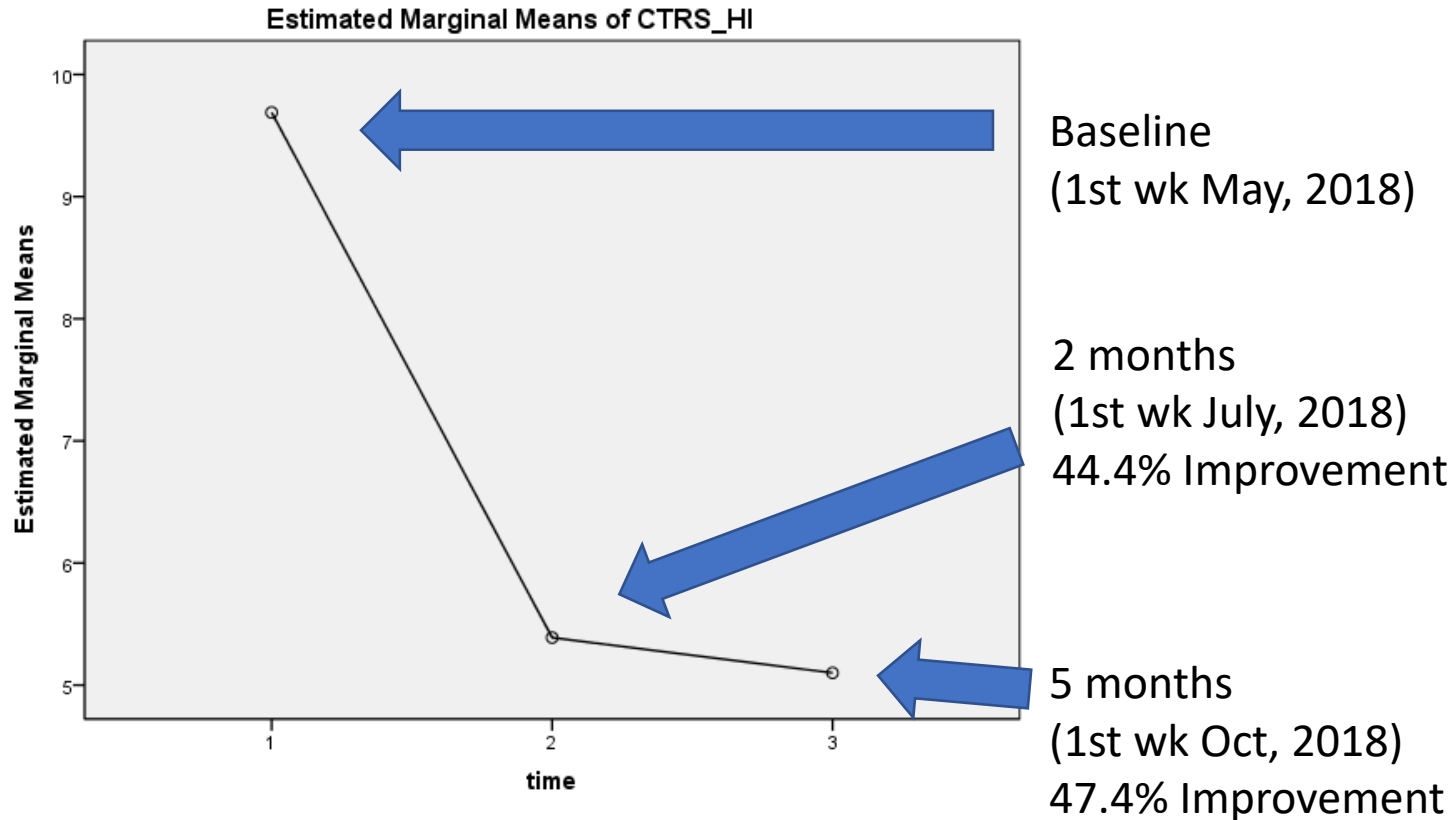
# Children Practicing SBY



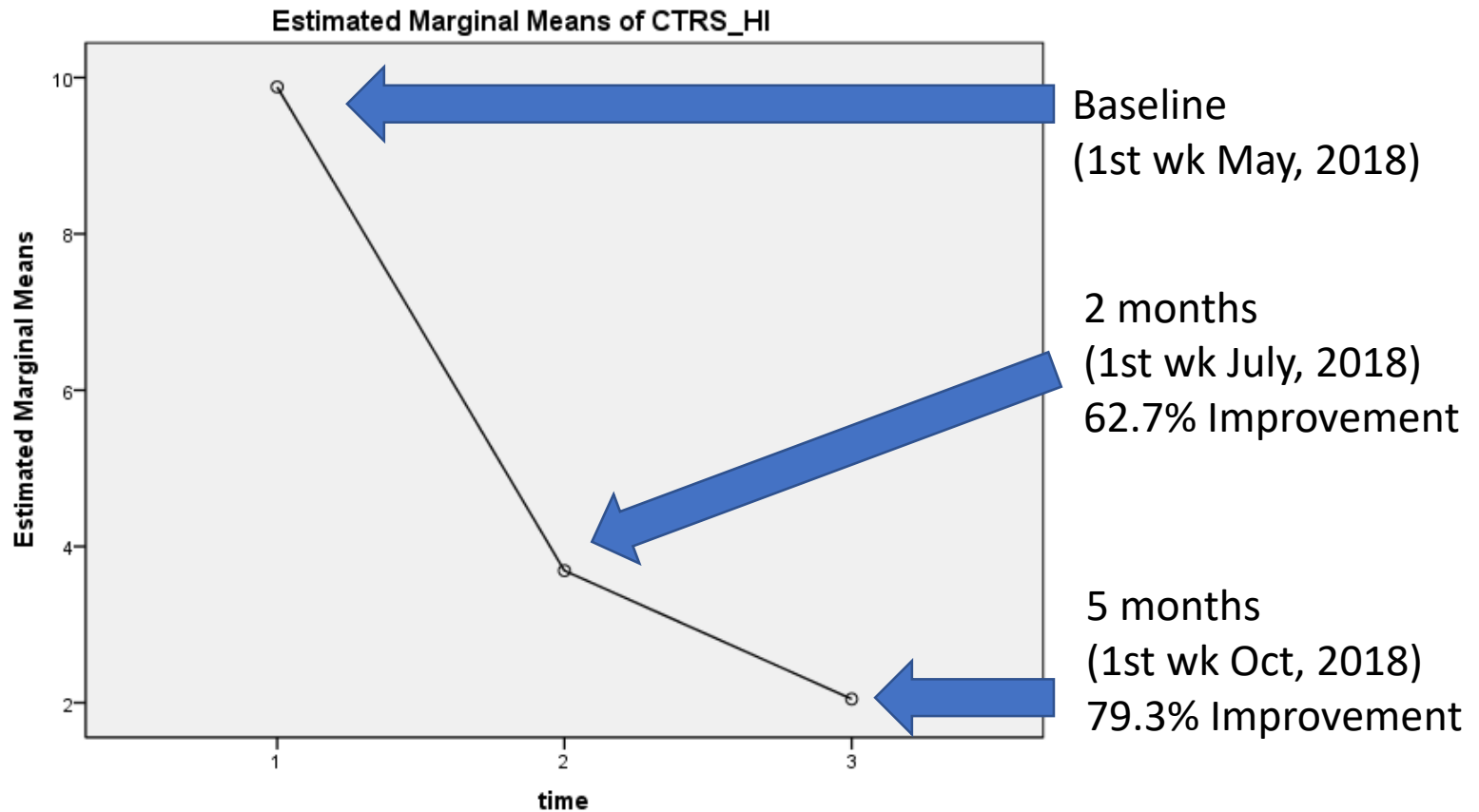
Practice at “Escuela 13”, Tacuarembó, Uruguay – Grade 4, reproduced under written consent of the parents (July, 2018)



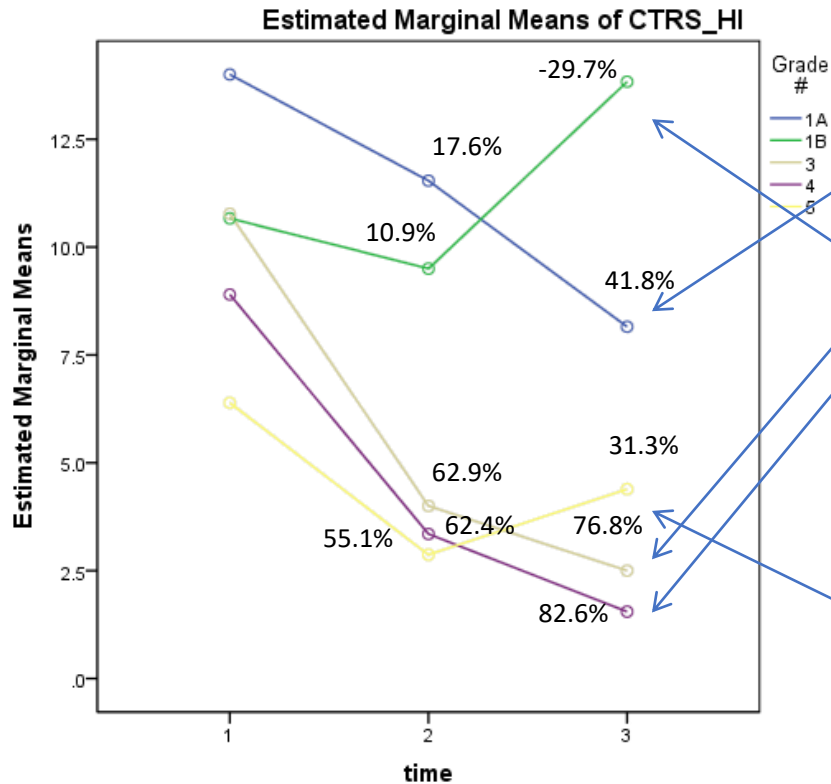
# Results – Aggregate (Grades 1-5)



# Results – Grades 3&4



# Results Disaggregated by Grade



Grades 1A , 3 and 4 show consistent improvement trend in classroom behavior.

Grade 1B is the only one without improvement outcome.

Grade 5 showed more improvement at 2 months than at 5 months.

# Discussion

- Students in most grades displayed improvement in behavior, less disruptive behavior, with regular practice of SBY.
- Two grades (3<sup>rd</sup> and 4<sup>th</sup>) where consistent practice throughout the full 5-month period was ascertained displayed almost 80% reduction in disruptive behaviors.
- Fifth-grade students displayed similar results to 3<sup>rd</sup> and 4<sup>th</sup> grade students (55.1%, 62.9%, 62.4%, respectively) for 2<sup>nd</sup> measurement, but improvement fell to 31.3% after 5 months.



# Conclusions

- Results of this study indicate that regular practice of SBY (e.g. 7, 14 or 21 times a day, 5 days a week) may significantly reduce the incidence of disruptive classroom behavior after 5 months of ongoing practice.
- Reduction in disruptive classroom behavior was evident at 2 months of regular practice.
- Those who did not display disruptive behaviors at the outset (scored “0”) continued to score “0” after 5 months
- In addition to statistical significance, practice of SBY demonstrates **practical significance**
- Grade 5 performance may indicate that if regularity of the practice is discontinued, disruptive behavior in the classroom may increase after discontinuation.





# Recommendations for Further Research

- Use a randomized control trial (RCT) design, with randomly assigned control and treatment groups
- Check proper practice from the beginning by using facilitator who randomly checks performance of SBY exercise
- See if effects of SBY last beyond practice by measuring after practice has been discontinued for one month
- Add a “comments” section at the end of the CTRS-HI form
  - May aid in detecting extraneous variables
  - Will be able to collect qualitative information regarding student behavior
- Reduce teacher’s bias by having multiple informants (auxiliary teachers)

# Thank you!



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**Authors disclosure of potential conflict of interest: most researchers practice Pranic Healing except the School Principal, Maria Teresa Ferraz and Dr. Michelle Vanchu-Orosco, the Research Analyst.**



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