



DIFFERENCES IN SELF-EFFICACY BETWEEN STUDENTS WITH DYSLEXIA AND THOSE WITHOUT AFTER PERFORMING AN ACADEMIC VS. CREATIVITY TASK

Maria J. Avitia

Dyslexia

◦ International Dyslexia Association

- “Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge” (Lyon et al., 2003 p. 2).



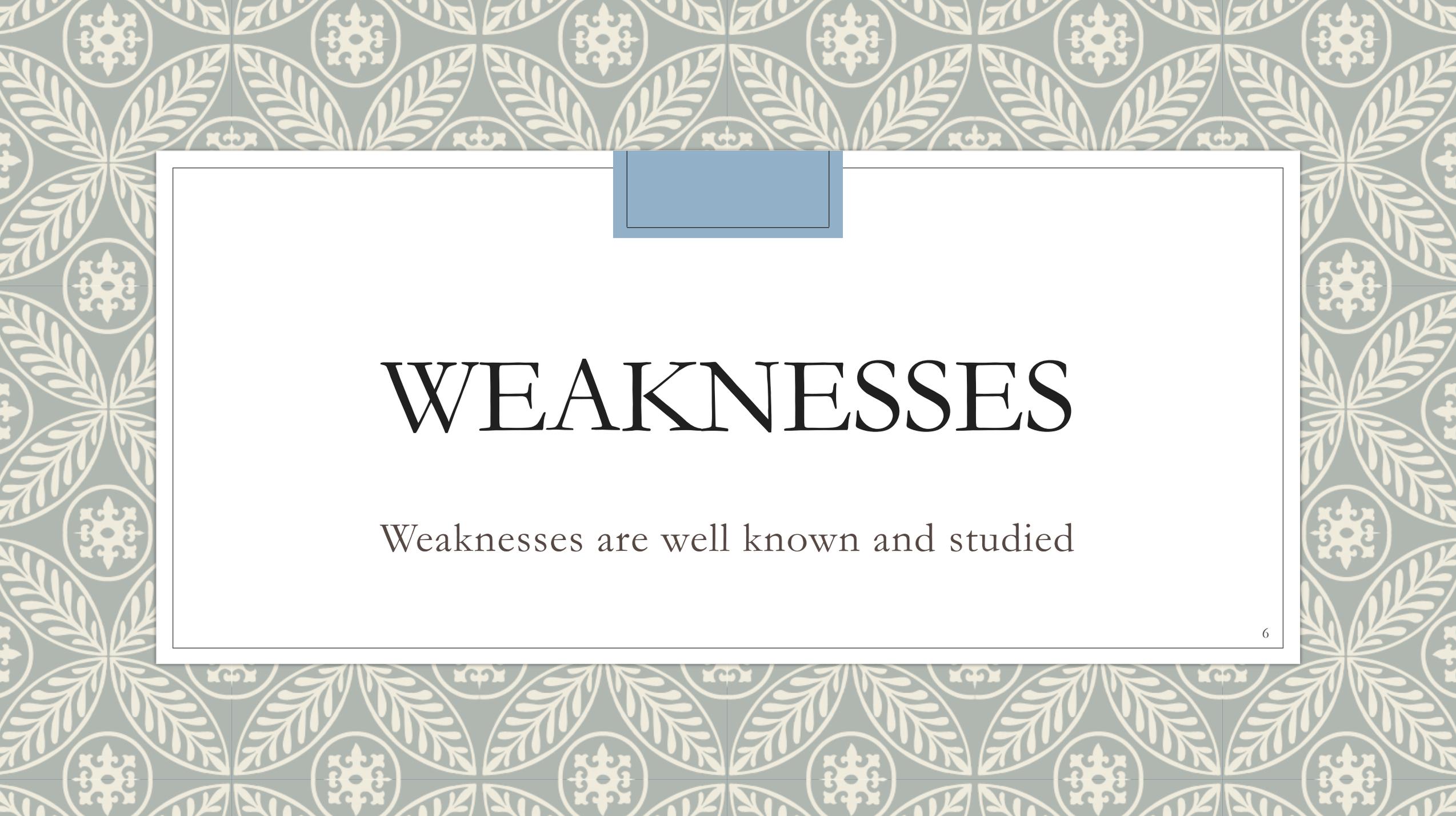
SELF-ESTEEM & SELF-EFFICACY

Self-Esteem & Self-Efficacy Research

- Students with Dyslexia have been found to have lower self-esteem than controls.
 - Riddick, Sterling, Farmer, & Morgan (1999)
- Students with Dyslexia used more Self-handicapping methods as defensive strategies.
 - Alesi, Rappo, & Pepi (2012)
- They mediated the relationship between performance accomplishments and academic achievement
 - (Lane, Lane, & Kyprianou, 2004)

Self-Esteem & Self-Efficacy Research

- Students with a positive diagnosis of dyslexia who took ownership of the label had higher self-esteem
 - (Glazzard, 2010)
- Students who perceived their disability as something with strengths and weakness tended to have higher career ambitions and academic self-esteem
 - (Griffin & Pollak, 2009).



WEAKNESSES

Weaknesses are well known and studied



STRENGTHS

More elusive. Lots of anecdotal information on strengths but research not so good.

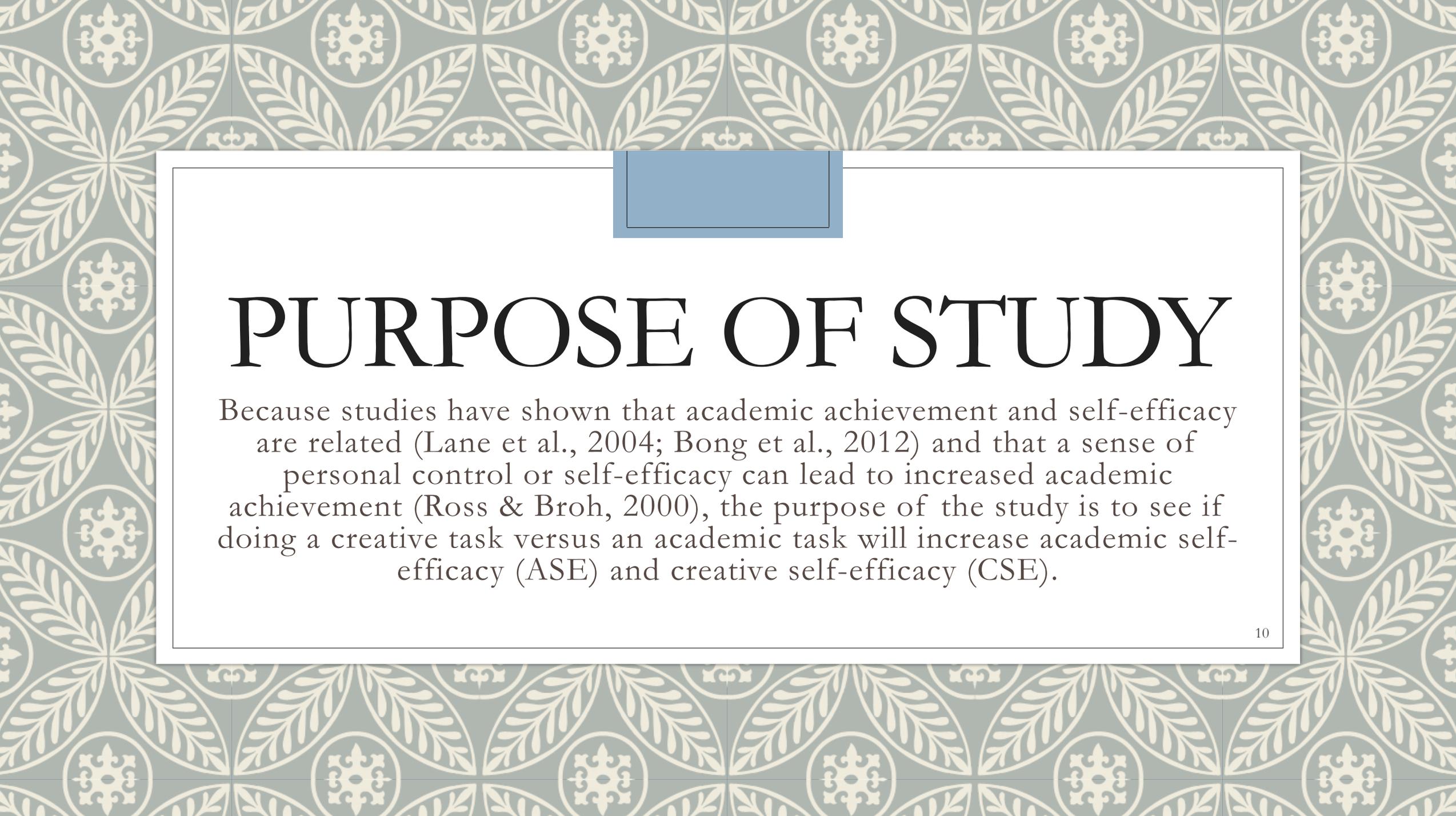


CREATIVITY

Traditionally defined as having two main components:
being new or different and being task appropriate
(J.C. Kaufman, 2016).

Creativity and Dyslexia

- Many researchers have looked at the relationship between creativity and Dyslexia
 - Adults with dyslexia scored higher than controls in verbal and drawing creative tasks. (Everatt, 1997; Everatt, Steffert, and Smythe, 1999)
 - Tafti, Hameedy, and Baghal (2009): students with dyslexia scored higher on the TTCT figural form than those without
 - Alves and Nakano (2014): did not find any difference between children with dyslexia and those without in the Child Figural Creativity Test.
 - Kapoula et al. (2016): found that children and teenagers with dyslexia were more creative than their peers.



PURPOSE OF STUDY

Because studies have shown that academic achievement and self-efficacy are related (Lane et al., 2004; Bong et al., 2012) and that a sense of personal control or self-efficacy can lead to increased academic achievement (Ross & Broh, 2000), the purpose of the study is to see if doing a creative task versus an academic task will increase academic self-efficacy (ASE) and creative self-efficacy (CSE).

Research Question 1:

Is there a difference in the change of **ASE** between students with dyslexia and controls after doing an academic versus a creative task?

	Academic	Creative
Dyslexia		
Control		

Research Question 2:

- Is there a difference in the change of **CSE** between students with dyslexia and controls after doing an academic versus a creative task?

	Academic	Creative
Dyslexia		
Control		

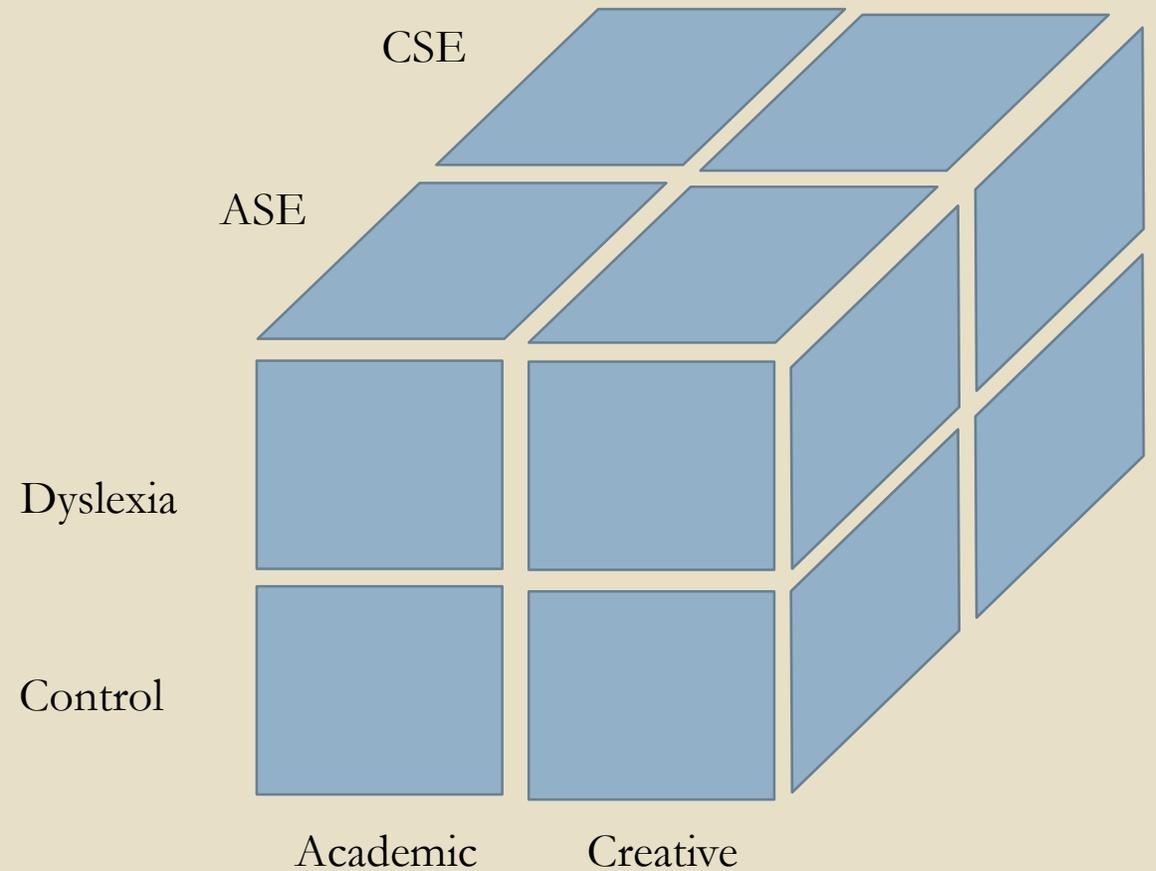
Research Question 3:

Is there a difference in the difference score between students with dyslexia and controls in ASE and CSE?

	ASE	CSE
Dyslexia		
Control		

Analysis

- 2x2x2 quasi-experimental mixed design to analyze
 - (2) group: Dyslexia v. Control
 - (2) domain: Academic v. Creative
 - (2) and task: CSE v. ASE.



Participants

Sample

- 50 Middle School Students
 - 25 With Dyslexia (Clinical Group)
 - 25 Without Dyslexia (Control Group)

Matching

- Gender
- Age
 - Within 12 months of their age
- T-test will be ran on the 3 variables to make sure groups are equivalent.

Self-Efficacy Measure

- Creative and Academic self-efficacy will be assessed using a modified version of Beghetto, Kaufman, and Baxter (2011) creative self-efficacy scales for science and math, here called Creative Self-efficacy (CSE) and Academic Self-efficacy (ASE).
 - Alpha = .90.

ID# _____

Please rate your responses below on a 1 to 5 scale.

1 **2** **3** **4** **5**
Not at all true of me, Somewhat true of me Very true of me

Creative Self-Efficacy

- 1) _____ I like coming up with new ideas.
- 2) _____ I have a good imagination.
- 3) _____ I have a lot of new ideas.
- 4) _____ I am good at coming up with my own creative projects.
- 5) _____ I am good at coming up with new ways of solving problems.

Academic Self-Efficacy

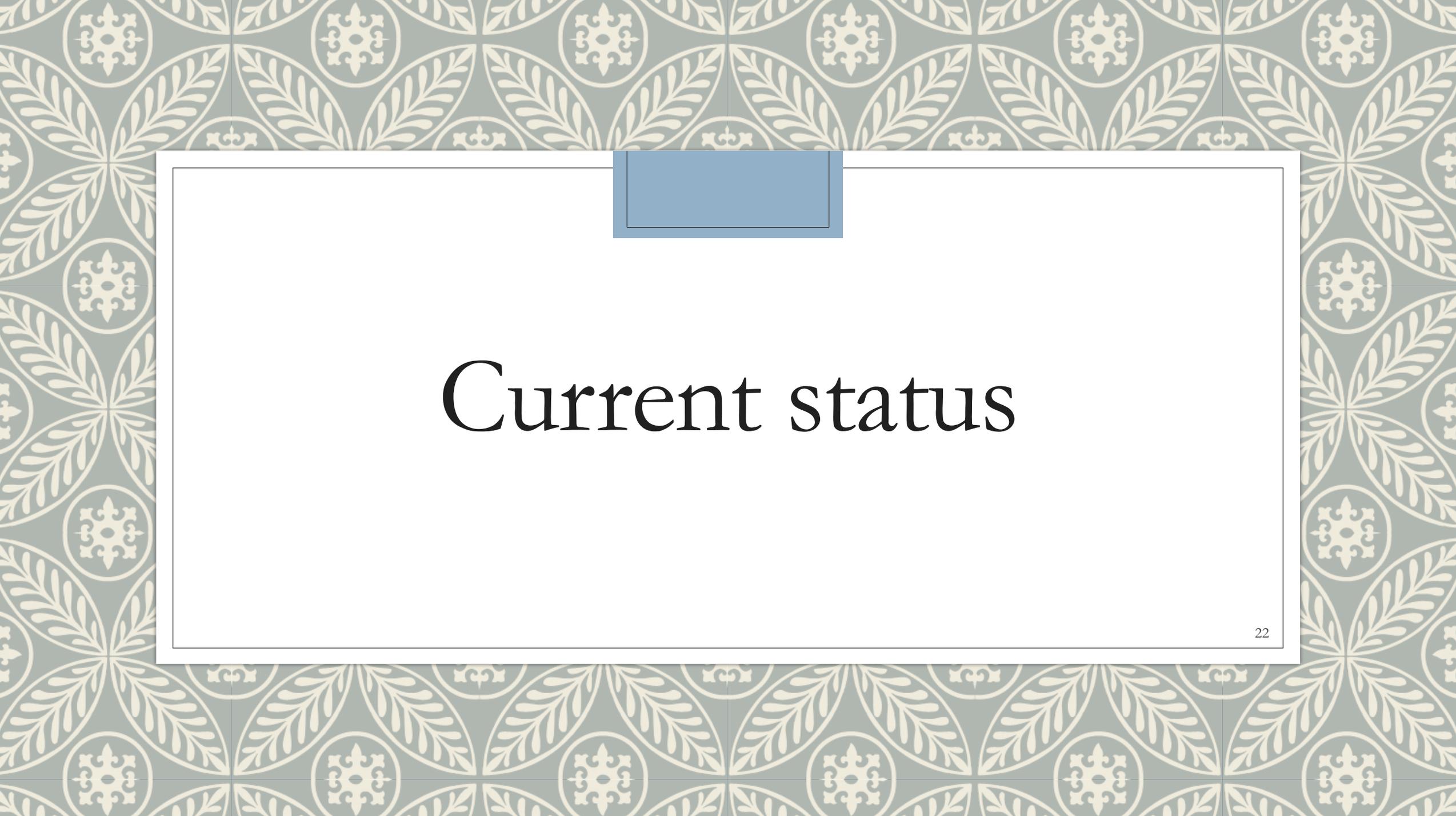
- 1) _____ I'm certain I can master the skills taught in school this year.
- 2) _____ I can do even the hardest school work if I try.
- 3) _____ If I have enough time, I can do a good job on all my school work.
- 4) _____ I can do almost all the work in school if I don't give up.
- 5) _____ Even if the work in school is hard, I can learn it.
- 6) _____ I'm certain I can figure out how to do the most difficult school work.

Creative Measures

- The CAT will be used in four domains
 - Oral, written, drawn, and built
- Students will be asked to think of four imaginary creatures in their head. They will have 10 minutes to describe one orally, 10 minutes to describe one in writing, 10 minutes to draw one on paper, and 10 minutes to build one with clay. The creatures will each have a made-up name so that students can keep them separate between conditions.

Procedures

- Recruit students in schools
 - Targeted recruitment for students with Dyslexia
- Academic Part
 - ASE and CSE
 - Academic measures
 - ASE and CSE
- Creativity Part
 - ASE and CSE
 - Creative measures
 - ASE and CSE



Current status

Currently

- We have collected data for 6 students from 1 public school
- 4 private schools in the New England area who specialize in students with learning disabilities
 - Waiting for IRB approval of the schools
- Uconn Kids for the Control group.



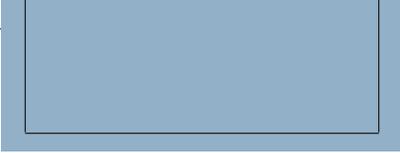
IMPLICATIONS

Implications

- By Identifying strengths we hope to move the literature toward what students with dyslexia can do rather than what they can't do. And thus using these strengths to help increase self-efficacy.
- Potentially, future work could build off these results to create academic interventions.
- If we see that academic self-efficacy increases after doing a creative task, it would provide support for the importance of fostering these abilities.

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QUESTIONS?