

The Effects of Psychosocial Interventions on Academic Outcomes for Children with ADHD

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INTRODUCTION

- Attention Deficit-Hyperactivity Disorder (ADHD) is one of the most common behavioral disorders in children (5-10% prevalence).
- Common treatments include psychopharmacological and psychosocial interventions.
- ADHD diagnosis is associated with negative effects in other domains, such as academic achievement.
- A prior meta-analysis (Daley et al., 2014) examined the effects of psychosocial interventions on several outcome domains, including academic outcomes, for studies that were published through 2012.
- Only seven of the studies included an academic outcome. Consequently, the meta-analysis cannot offer strong evidence on the effectiveness of interventions on these outcomes.
- The goal of this systematic review was to expand on this meta-analysis by identifying additional randomized group-design studies that have examined the effects of psychosocial interventions on academic outcomes.

METHOD

- The search terms used by Daley et al. (2014) were used to search the PsychINFO database for studies published after 2012.
- The search of PsychINFO identified 946 possibly relevant studies.
- Studies were systematically reviewed (i.e., review of study title, review of study abstract, and review of full text of study). Two reviewers conducted all full-text reviews.
- Only studies with randomized, group-design methods, with a psychosocial intervention, and an academic outcome were included ($n = 13$). See Figure 1 for review results.
- Studies from the original Daley et al. (2014) review ($n = 7$) were added to the pool of relevant studies.
- A best evidence synthesis was used to understand systematic trends.

Figure 1. Flowchart of Study Review Process

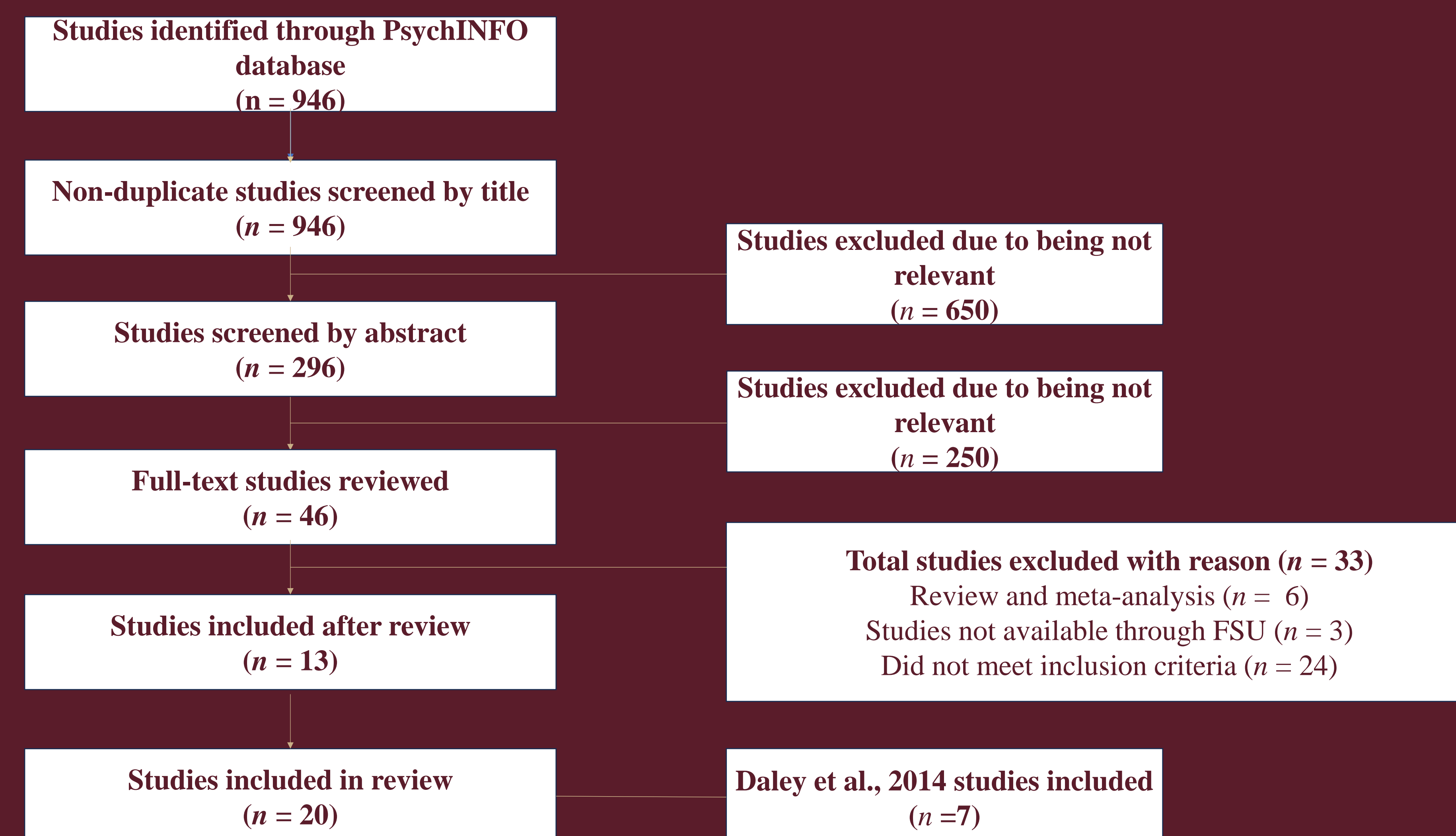


Table 1. Classification of Included Studies by Type of Intervention and Academic Outcome

Studies	Psychosocial Intervention Type			Academic Outcome Type		
	Executive Function Training	Behavior Modeling	Daily Report Cards	Standardized Academic Assessment	Teacher Reports of Academic Skills	GPA
Singh et al., 2022	X			X		
Mikami et al., 2022		X			X	
Chacko et al., 2013	X			X		
Merrill et al., 2016			X	X		
Pfiffner et al., 2018		X			X	
Evans et al., 2016			X		X	
Siebelink 2018			X		X	
Sibley et al., 2021	X				X	
Van Der Donk et al., 2015	X					X
Langberg et al., 2018	X				X	
Van Houdt et al., 2020			X		X	
Sibley et al., 2018	X					X
Holdaway et al., 2020			X		X	
Langberg et al., 2008			X		X	
Langberg et al., 2012	X				X	
Abikoff et al., 2013			X		X	
Evans et al., 2011			X		X	
Fabiano et al., 2010			X		X	
Power et al., 2012			X		X	
MTA et al., 1999		X		X		
Total	7	3	10	4	14	2
Total positive	2	1	7	3	7	0

Note. Effects marked in green represent significant positive effects of intervention.

RESULTS

- Daily report cards were the most common psychosocial intervention (50% of the total), and teacher-reported academic skills was the most common academic outcome (70% of the total).
- Daily report cards displayed positive impacts on academic outcomes 70% of the time, indicating a moderate relation to the effect on academic outcomes according to best evidence synthesis.
- Standardized academic assessments displayed positive effects 75% of the time regardless of which psychosocial intervention was utilized, higher than the other two academic outcome categories.

LIMITATIONS & FUTURE DIRECTIONS

- Only one database was examined, and it is possible that systematically reviewing multiple databases could locate additional studies.
- The datasets from the located studies were not readily available, and it is possible that an integrated data analysis would provide further understanding of the associations between psychosocial interventions and academic outcomes.
- Despite the strengths of best evidence synthesis, utilizing meta-statistics may also increase the clarity of relations between interventions and outcomes; future studies should explore this.

CONCLUSIONS

- The effects of daily report cards were more consistent than the other types of psychosocial interventions.
- However, no psychosocial intervention exceeded the “moderate” threshold of a best evidence synthesis.
- These findings suggest the need for more rigorous research on specific psychosocial interventions to support children’s academic growth.