Children's Awareness of Task Distraction and Task Persistence

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Introduction

- Children's abilities to ignore distractions and persist on tasks, by using learning strategies, predict academic performance (Diamond, 2007; Ghiasvand, 2010).
- Several studies have used checklists to ask children which strategies they use to ignore distractions and persist on learning tasks (Meltzer, 2010).
- However, few studies have asked children to define avoiding distractions and persistence in their own words.
- Knowing how children's definitions compare to researchers' definitions is important because children's awareness of learning strategies predicts their academic performance (Meltzer, 2007).
- Studies of metacognition, or 'thinking about thinking', show that children's understanding of their cognition may be limited, especially at young ages (Flavel, 1979).

The Current Study

- This study had two overarching goals:
- (1) to identify and categorize children's self-reported barriers to ignoring distractions and persisting on tasks
- (2) to compare children's definitions of ignoring distractions and persistence to researcher/expert definitions
  - (2a) to observe developmental differences between grade levels

Method

Participants

- N =113, White (58.6%); Black (19.8%), Hispanic (1.8%); Asian/Pacific Islander (7.1%); Other (12.4%)
- 54% boys and 46% girls, from grades 1-6.
- Grade 1: 19.5%; Grade 2: 25.7%; Grade 3: 17.7%; Grade 4: 14.2%; Grade 5: 12.4%; Grade 6: 10.6%

Procedure

- Children completed a questionnaire asking about learning strategies children use to complete tasks.
- Responses were coded for barriers to strategy use and the extent to which child definitions of learning strategies aligned with researcher definitions.

Measures

Children's Knowledge of How They Learn Questionnaire: Measured children's knowledge of learning strategies

Knowledge of Learning Strategies

- *What kinds of things distract you when you are learning something new?*
- *What are some things that make it hard to keep working on an activity until you are finished?*
- *What do you do to help you ignore distractions (not let them bother you)?*
- *What do you do to help yourself keep working on an activity until you are finished?*

Common Barriers to Ignoring Distractions

Common distractions (identified by children):

- Visual distractions (posters, chalkboard, seeing other classmates fooling around)
- Audio distractions (classroom noise)
- Physical contact (classmates touching them)
- Internal distractions (spacing out, thinking about irrelevant topics)

Common Barriers to Persistence

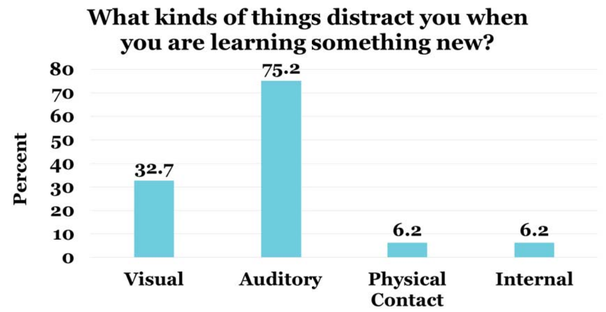
Common barriers to persistence:

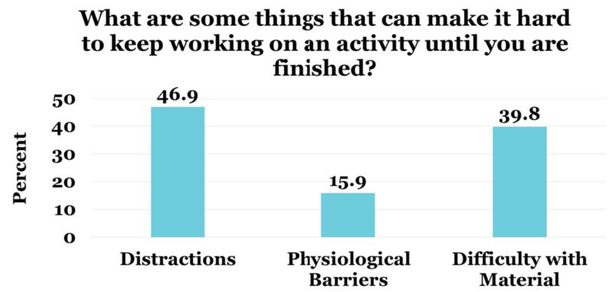
- General distractions (sitting next to friends, classmates talking, classroom posters)
- Physiological barriers (hand starts hurting while writing, feeling tired)
- Difficulty with material (hard problems, not knowing what to do)

Researcher Definitions of Ignoring Distractions & Persisting

Results

Common Barriers to Strategy Use (Child identified)





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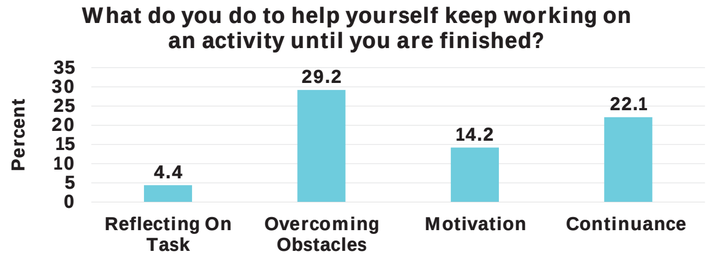
Results Continued

Child vs. Researcher Definitions of Learning Strategies



Grade Level Differences

Strategy	1st	2nd	3rd	4th	5th	6th
Inhibiting task-irrelevant responses	54.5%	44.8%	50%	68.8%	64.3%	50%
Executing goal-directed responses	31.8%	37.9%	55%	37.5%	42.9%	33.3%
Manipulating environment to avoid temptation	4.5%	6.9%	15%	37.5%	14.3%	33.3%
Reflection on Task	0%	6.9%	5%	6.3%	0%	8.3%
Overcoming Obstacles	40.9%	37.9%	25%	37.5%	14.3%	0%
Motivation	9.1%	6.9%	15%	10%	14.3%	50%
Continuance	18.2%	24.1%	10%	37.5%	21.4%	25%

Older children* mentioned manipulating the environment to help them ignore distractions significantly more (M = .29, SE = .06) than younger children (M = .09, SE = .04), F (1, 111) = 8.43, p = .004

In general, older children provided more accurate definitions of ignoring distractions (M = .43, SE = .03) than younger children (M = .33, SE = .03), F (1, 111) = 6.04, p = .015

Note. *Younger children = grades 1-3, Older children = grades 4-6

Discussion

- In terms of barriers to ignoring distractions and persisting, children most often referenced auditory and visual distractions as well as difficulty with material.
- Comparisons of child vs. researcher definitions showed that children were not aware of all of the aspects of ignoring distractions and persisting that have been identified by researchers.
- Older children were aware of more aspects of ignoring distractions and persistence than younger children.
- This shows that there are developmental differences in children's awareness of learning strategies.
- School curriculum should include lessons on awareness of learning strategies and should emphasize proper use of strategies to ignore distractions and to foster academic success.