The Use of Private and Social Speech in Five Year Old Children During Challenging Tasks

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Background & Significance

- Children work through challenging tasks with two forms of communication: Private and Social Speech (Vygosky, 1978).
  - Private Speech: the self-directed monologue that children use.
  - Social Speech: speech directed to other people to elicit task-relevant information or help.
- Private and Social Speech are thought to be universal and a natural part of development, but there exist few studies testing the theoretical premise that these types of speech are used during cognitively challenging tasks.
- Additionally, research does not exist on whether children of different ethnic backgrounds differ in their use of Private and/or Social Speech.

This Study

- Tests theoretical claims that children use Private and Social speech to aid them during challenging tasks.
- Investigates differences in the use of the two forms of speech in children from different backgrounds

Research Questions

1. Is there a change in relative frequency of Private and Social Speech as the task becomes more difficult?  
2. Are there any differences in how Private or Social Speech is used amongst children of Mexican, African American, Chinese, and Dominican descent?

Hypotheses

- Children will increase their use of Private and Social Speech as the task difficulty increases.
- There will be ethnic differences in children’s use of Private and Social Speech:
  - Chinese children are encouraged to exercise self-restraint in communicating uncertainty in learning (Luo, 2013)

Method

Participants
- N=212 children from low income backgrounds and their mothers from New York City
  - African American: 24%, Chinese: 27%, Dominican: 28%, Mexican: 20%

Procedure
- Children were asked to build 12 block structures of increasing difficulty (4 easy items, 4 moderate items, 4 difficult items).
- First the examiner built the structure then instructed the child to replicate with their own blocks. After 3 consecutive incorrect attempts the task will be ended for each child.

Measures
- Dichotomous coding was used for Private and Social Speech to indicate presence or absence for each block item that was built.

Results

Overall, Private Speech was used significantly more frequently than was Social Speech, t(211) = 3.99, p < .001

Private & Social Speech Across Task Difficulty
- Children’s use of Private and Social Speech increased in the presence of more difficult, challenging block building items.
- Hard blocks were categorized as the most challenging and elicited more Private Speech than both easy and medium blocks.

Although Social speech increased for all children with item difficulty, this patterns was not seen for Chinese children.

Results

Use of Private & Social Speech Across Ethnic Groups

- For Private Speech there was a main effect for ethnicity, F (3, 90) = 4.65, p < .01
  - Chinese children engaged in the Private Speech significantly less frequently, followed by Mexicans, African Americans, and Dominicans.

Although Social speech increased for all children with item difficulty, this patterns was not seen for Chinese children.

Examples of Private/Social Speech

Private Speech
- “this here, this here...this up here”
- “I can’t make it, it just won’t work, it can’t stay still”
- “I’ve been looking all over for you”

Social Speech
- “Is it a long one? Both?”
- “this is too big, can I match?”
- “I’m not to tell you, I can’t show you I’m just going to make magic, I can make magic”

Conclusions

- Less than half of children used Private and Social Speech which challenges notion of universality (47.6% and 41.5% respectively)
- Children use more Private than Social Speech during challenging tasks.
- Chinese children used the least amount of Private and Social Speech across the ethnic groups

Future Directions

- Research should aim to identify specific forms of Private and Social Speech that are used during cognitively challenging tasks.
- Additionally, researchers should aim to understand when children use each form of speech, and whether the uses of Private and Social speech differentially predict performance across various tasks.

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