

Effects of age and culture on narrative recall: retelling of the literal meanings of narrative texts including different cultural implications among American adults

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This study examined age and cultural effects on the recall of narrative texts. Previous cross-cultural study concluded that age and cultural background had effects on the patterns of narrative recall (Hosokawa & Hosokawa, 2006; Hosokawa, 2009). Therefore, it was hypothesized that age and cultural differences were expected to lead different task performance in recall of narrative texts.

【Method】

<Participants> Forty older adults (age: $M=70.8$, $SD=3.83$) and 40 younger adults (age: $M=20.9$, $SD=3.04$) participated in the study. The older adults were recruited from Missoula Senior Citizen's Center in the state of Montana, the U.S. The younger adults were college undergraduates at University of Montana, the U.S.

<Stimulus texts> Two kinds of narrative story were used as the stimulus text; one represented Eastern cultural meanings and the other did Western cultural meanings, including each cultural scenery, characters, and philosophical implications. The Eastern story is composed with 477 words and includes 198 propositions. The Western story is composed with 455 words and includes 186 propositions.

<Procedure> The purpose of the study was explained to participants to have them fill out the consent form to participate in the study in advance. The procedure was as follows; 1. Collecting demographic data, 2. Self-reported health condition, 3. Reading a text, 4. WAIS-R vocabulary subset inserted to avoid rehearsal effect, 5. Oral retelling task: literal meanings and interpretive meanings of the story given, and 6. Rating 5-scale questionnaire on 4-items on the story.

<Scoring of retelling responses> Each retelling response was transcribed from the voice recorder to prepare for coding. The retelling responses were checked against the respective text base for the presence of each proposition to score recall for the literal text. The propositions in the text were rated for levels of importance to assess recall of the gist relative to the details in the text.

【Results】

The number of propositions presented in the response was transformed into a proposition score. The original raw score of the gist and the detail were transformed with the sum of the total number of propositions a denominator.

<Total retelling> A 2 (age) \times 2 (story) ANOVA was conducted. An age effect was found ($F(1, 76)=8.785$, $p<.01$). The younger group recalled more of the propositional text ($M=39.03$, $SD=.13$) than the older group ($M=31.66$, $SD=.13$). A story effect was also found ($F(1, 76)=23.22$, $p<.01$). The Western story group recalled more of the propositions ($M=41.35$, $SD=.13$) than the Eastern story group ($M=29.04$, $SD=.11$).

<Gist vs. detail retelling> A 2 (age) \times 2 (story) ANOVA was conducted on gist and detail retelling in responses by the participants. The significant age effect was found in the gist recall responses ($F(1, 76)=9.665$, $p<.01$). The younger group recalled more of the propositional text ($M=45.77$, $SD=.13$) than the older group ($M=36.64$, $SD=.13$). Also, an age effect was found in the detail recall responses ($F(1, 76)=6.995$, $p<.01$). The younger group recalled more of the propositional text ($M=14.00$, $SD=.08$) than the older group ($M=9.49$, $SD=.07$).

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