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# The importance of friends in autobiographical memory



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## Introduction

- **Autobiographical memory** – memories of significant personal experiences from an individual's life (Wang & Conway, 2004) – and **self-construal** – constellation of thoughts, feelings, and actions concerning one's relationship to others and the self as distinct from others (Singelis, 2004) – are considered to be mutually interrelated
- Many cross-cultural studies investigate this relationship, but they tend to focus on recall of earliest childhood memories
- Therefore, family is typically the most prominent setting of these memories, as family's role for individual's self-construal is the most important in this period
- But the roles of other people for individual's self-construal might change during development – such as in adolescence, where friends and school could become at least as influential as family
- Based on the mutual interrelatedness of autobiographical memory and self-construal, the importance of the family, school and friendship settings for adolescent's self-construal should then be reflected in this adolescent's autobiographical memories
- Thus, rather than asking for *earliest* childhood memories (selection by **time**), we instead ask for the most *meaningful* memories (selection by **importance**) to elicit memories that are the most relevant to the adolescent's current self

## Pilot results and suggested model

- In a pilot study, we asked 22 Norwegian adolescents ( $M = 17.95$ ) to recall three meaningful memories about their family, school and friends
- We found:
  1. Adolescents' meaningful **friendship memories were most recent and family memories oldest**;
  2. When asked to rate how often they have thought or talked about the specific (just recalled) memories and about family, school and friendship memories in general, the **friendship memories were the most frequently rehearsed** (in both cases) and **family memories the least**; and
  3. When coding the adolescents' recalled memories for the amount of relatedness – based on how many times they refer to other people and how many times they refer to themselves – the **family memories included the highest amount of relatedness, the school memory the lowest, with friendship memories falling in between.**
- A similar pattern was found in the Slovak sample reported in Antalíková, Gulbrandsen, Hansen, de la Mata, & Santamaría (2011) with the following model suggested (see Figure 1).

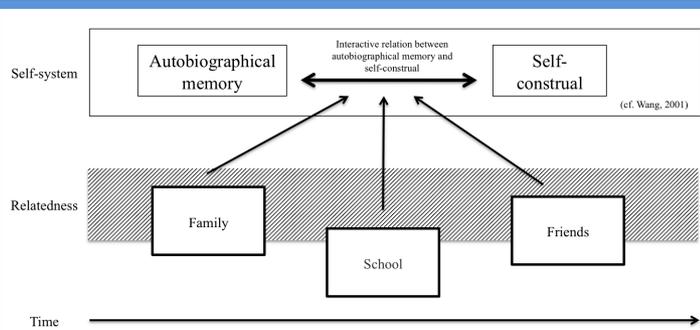


Figure 1. Settings' contributions to self-construal: The developmental trajectory of settings' shifting dominance in adolescents' life, as reflected in the recency and relatedness of their meaningful memories.

## Aim of the current study

1. To investigate whether the results can be replicated in the Danish sample;
2. To compare Slovaks and Danes.

## Participants

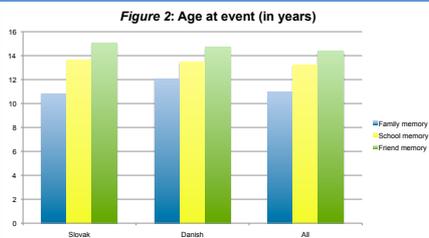
- 40 Slovak adolescents ( $M = 18.2$ )
- 52 Danish adolescents ( $M = 19.1$ )

## Method

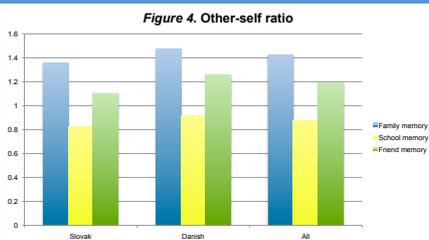
Similar to pilot study:

- Questionnaire asking to recall memories from three settings, which should be at least 1 year old and of a special meaning to the participant
- The settings were presented in two alternative sequences in order to test for sequence effect – there was none
- Participants also reported their age at the time of these events and gave a rating of how often they have thought or talked about the particular memory they have just recalled and about memories from this setting in general and (on a scale from 1 = never before to 7 = very often)
- Memories were coded for relatedness (after Wang & Conway, 2004)

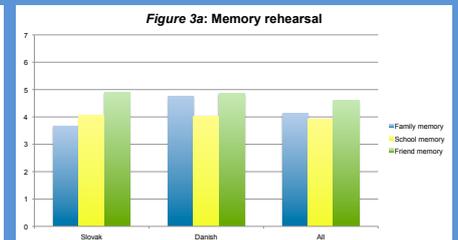
## Results Slovaks vs. Danes



- Mixed ANOVA (2x3) showed a significant main effect of setting on the age at the time of the event,  $F_{(1,839;159;962)} = 22.313, p < .001$ , partial  $\eta^2 = .204$ .
- There was no main effect of culture,  $F_{(1,87)} = .559, p = .457$ , partial  $\eta^2 = .006$ , nor an interaction effect of setting and culture,  $F_{(1,839;159;962)} = 1.738, p = .182$ , partial  $\eta^2 = .020$ .
- All participants recalled family memories that were significantly earlier than school ( $t = -3.812, df = 90, p < .0005$ , one-tailed) and friend memories ( $t = -5.833, df = 88, p < .0005$ , one-tailed)
- Their school memories were also significantly earlier than friend memories ( $t = -3.023, df = 89, p < .0015$ , one-tailed)



- Mixed ANOVA (2x3) showed a significant main effect of setting on both the memory rehearsal,  $F_{(2,180)} = 5.753, p = .004$ , partial  $\eta^2 = .060$ , and the setting rehearsal,  $F_{(2,180)} = 29.205, p < .001$ , partial  $\eta^2 = .245$ .
- There was no main effect of culture on memory rehearsal,  $F_{(1,90)} = 1.637, p = .204$ , partial  $\eta^2 = .018$  (and on setting rehearsal,  $F_{(1,90)} = 1.625, p = .206$ , partial  $\eta^2 = .018$ ), but there was an interaction effect of setting and culture,  $F_{(2,180)} = 3.134, p = .046$ , partial  $\eta^2 = .034$  (and on setting rehearsal,  $F_{(2,180)} = 11.768, p < .001$ , partial  $\eta^2 = .116$ ).
- All participants reported significantly more frequent rehearsal of the recalled friend memory than the family ( $t = 2.309, df = 91, p = .012$ , one-tailed) and school memory ( $t = 3.243, df = 91, p = .001$ , one-tailed); there was no significant difference in the rehearsal of the family and school memory ( $t = .910, df = 91, p = .183$ , one-tailed)
- Similarly, participants reported significantly more frequent rehearsal of friend memories in general than the family ( $t = 5.839, df = 91, p < .0005$ , one-tailed) and school memories ( $t = 7.526, df = 91, p < .0005$ , one-tailed); there was no significant difference in the rehearsal of the family and school memories ( $t = .820, df = 91, p = .207$ , one-tailed)
- Comparing the two cultural groups, Danish adolescents report thinking or talking significantly more about their recalled family memory ( $t = 2.587, df = 66.856, p = .012$ , two-tailed), but also their family memories in general ( $t = 4.009, df = 90, p < .001$ , two-tailed) than Slovak adolescents



- Mixed ANOVA (2x3) showed a significant main effect of setting on the other-self ratio,  $F_{(1,798;156;516)} = 12.596, p < .001$ , partial  $\eta^2 = .123$ .
- There was no main effect of culture,  $F_{(1,90)} = 1.739, p = .191$ , partial  $\eta^2 = .019$ , nor an interaction effect of setting and culture,  $F_{(1,798;156;516)} = .040, p = .945$ , partial  $\eta^2 < .02$ .
- All participants recalled family memories that included significantly more indicators of relatedness than school ( $t = 4.895, df = 91, p < .0005$ , one-tailed) and friend memories ( $t = 1.908, df = 91, p = .03$ , one-tailed)
- Their school memories had also significantly less indicators of relatedness than friend memories ( $t = -3.673, df = 91, p < .0005$ , one-tailed)

- Dependent variables in this study:
  - a) Age at event = age at the time of events (reported)
  - b) Memory rehearsal = frequency of having thought or talked about the just recalled memory (reported on a scale from 1 to 7)
  - c) Setting rehearsal = frequency of having thought or talked about memories about this setting in general (reported on a scale from 1 to 7)
  - d) Other-self ratio = number of references to others / number of references to self (coded after Wang & Conway, 2004)

Where corrected, F-values are after the Greenhouse-Geisser correction.

## Discussion

The suggested model (Figure 1) fits the meaningful memories from Danes too: in terms of memories' age distribution (family oldest, friend most recent) and amount of relatedness (family highest, school lowest). However, rehearsal patterns differed. Young Danes think or talk more about family than young Slovaks. One could speculate that Slovak adolescents "leave" the family setting behind faster than Danish adolescents and that family memories are therefore better representations of "who they were", rather than "who they are right now". This assumption needs to be investigated in further research.

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