

# Board Games on Emotional Competences for School-Age Children

**Alexandra Zaharia<sup>1,2,3</sup>**, Linda Dell'Angela<sup>3</sup>, Adam Lobel<sup>3</sup>, David Sander<sup>3</sup>, Andrea C. Samson<sup>1,2,3</sup>

<sup>1</sup>Faculty of Psychology, Swiss Distance University Institute, Brig, Switzerland; <sup>2</sup>Institute of Special Education, University of Fribourg, Switzerland; <sup>3</sup>Swiss Center for Affective Sciences, University of Geneva, Switzerland

## Introduction

**Board games** represent a particular type of play with the potential to train and promote the development of **emotional competences** (EC).

The study aimed at designing and testing three theory-driven board games for children. Each board game focused on one of the following EC: emotion recognition, emotion differentiation, and emotion regulation (here referred to as reappraisal).

We have investigated:

- 1) Players' game experience during EC vs. off-the-shelf games.
- 2) The association between children's EC and the perceived game experience during play.

## Material and method

### Sample

N=177 children

(3 excluded; Experimental group: 95, Control group: 79)

Age range: 8-12 years old

No significant differences between groups in age, gender, socio-economic status, or EC (emotion recognition, emotion differentiation, reappraisal).

### Measures

- **Emotion Recognition** test: Geneva Emotion Recognition Test-Short (GERT-S<sup>1</sup>).
- **Emotion Differentiation** subscale: Emotion Awareness Questionnaire (EAQ<sup>2</sup>).
- **Reappraisal** subscale: Emotion Regulation Questionnaire (ERQ<sup>3</sup>).
- **Perceived game experience** (i.e., positive and negative affect, flow/immersion, difficulty, effort): board game experience questionnaire adapted from the Game Experience Questionnaire (GEQ<sup>4</sup>).

### Board Game Sessions

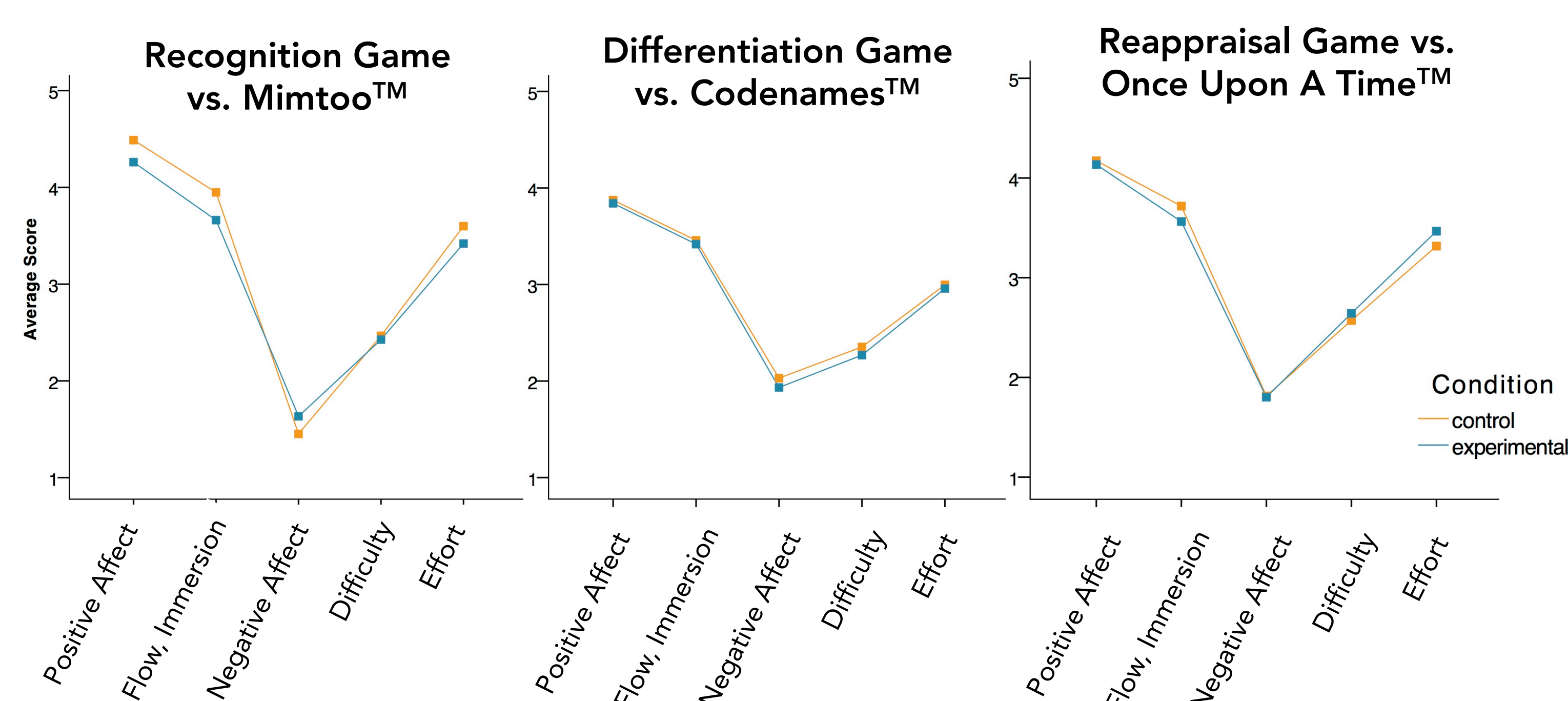
Game Session 1	Game Session 2	Game Session 3
<b>Recognition Game</b> vs. <b>Mimtoo™</b>	<b>Differentiation Game</b> vs. <b>Codenames™</b>	<b>Reappraisal Game</b> vs. <b>Once Upon A Time™</b>
After each session: Board Game Experience Questionnaire		

### References

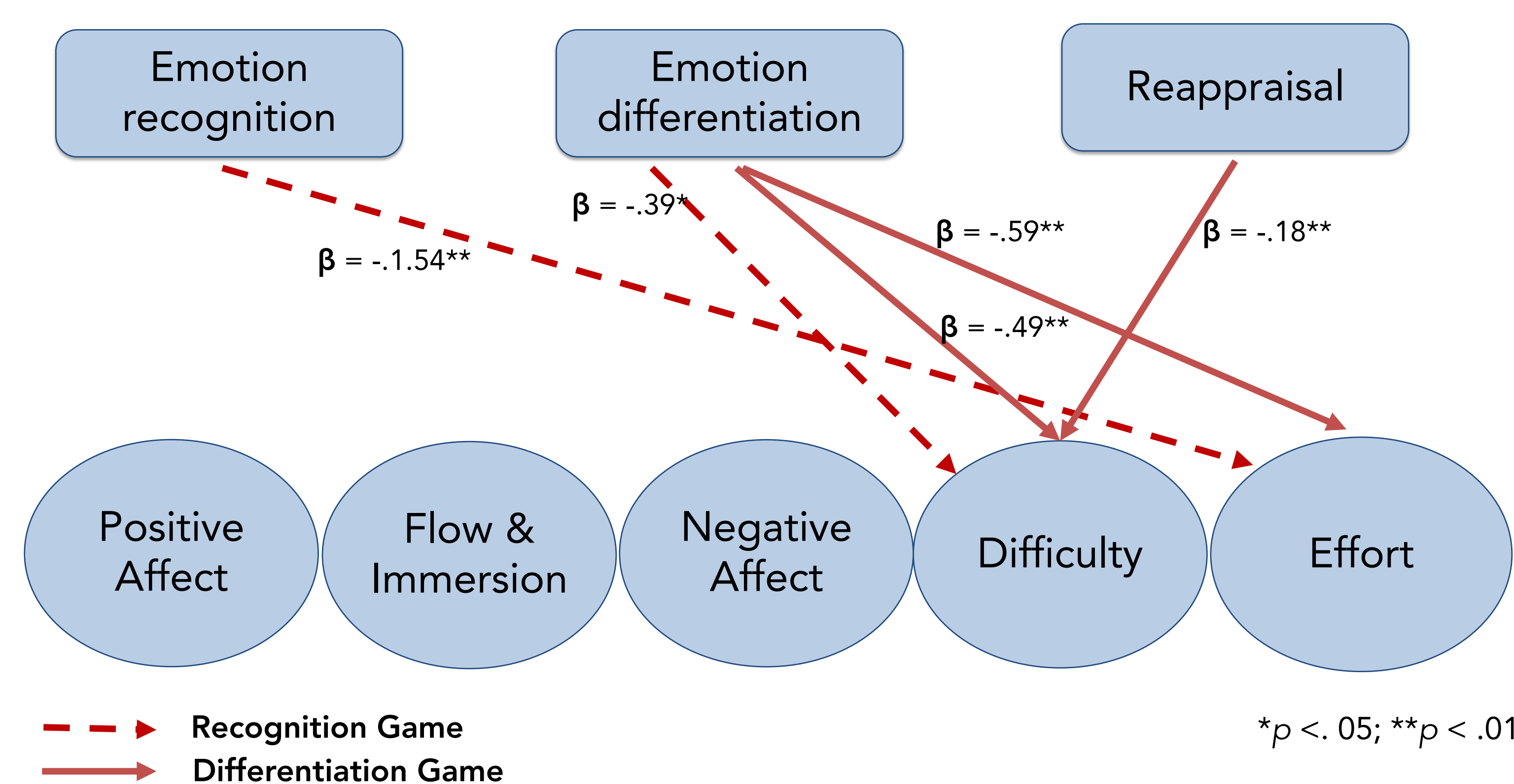
- <sup>1</sup>Schlegel, K., & Scherer, K. R. (2016). Introducing a short version of the Geneva Emotion Recognition Test (GERT-S): Psychometric properties and construct validity. *Behav Res Methods*, 28(4), 1383-1392.
- <sup>2</sup>Layahe, M. et al. (2010). Psychometric properties of the emotion awareness questionnaire for children in a French-speaking population. *Pers Assess*, 92(4), 317-326.
- <sup>3</sup>Gross, J.J., & John, O.P. (2003). Individuals differences in two emotion regulation processes: implications for affect, relationships, and well-being. *J Pers Soc Psychol*, 85(2), 348-362.
- <sup>4</sup>Jsselstein, W. et al. (2013). Game Experience Questionnaire. Eindhoven: Technische Universiteit Eindhoven.

## Results

**Game Experience.** No significant differences between EC board games vs. off-the-shelf board games:



**EC predict perceived game experience (difficulty and effort)** in two of the board games (separate linear regressions):



## Conclusions

The current findings suggest that:

- Two EC games succeeded to challenge the intended EC.
- Children's **EC level** accounts for their game experience, in particular for the perceived **difficulty and effort** during play.

The Recognition and Differentiation Games have demonstrated their potential to be used as ludic tools for assessing and training EC.

Future research should examine the effect of playing the EC games in interventional designs aiming at improving EC.

**For further information:**  
**Alexandra.Zaharia@unidistance.ch**

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