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► **To cite this version:**

Lison Bouhours, Olivier Houde, Gregoire Borst, Anaëlle Camarda, Mathieu Cassotti. How the social pressure influences creativity in children and adults?. Society for Neurosciences of Creativity, Mar 2019, San Francisco, United States. hal-02885028

**HAL Id: hal-02885028**

**<https://hal.science/hal-02885028>**

Submitted on 30 Jun 2020

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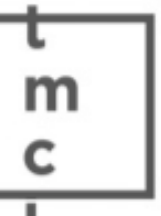
# How does social pressure influence creativity in children, adolescents and adults ?

Anaëlle Camarda<sup>1</sup> & Mathieu Cassotti<sup>2 3</sup>

<sup>1</sup>Centre de Gestion Scientifique, Mines ParisTech, France

<sup>2</sup>LaPsyDÉ, UMR 8240, CNRS, Université Paris Descartes, Université de Caen, PRES Sorbonne Paris Cité, France

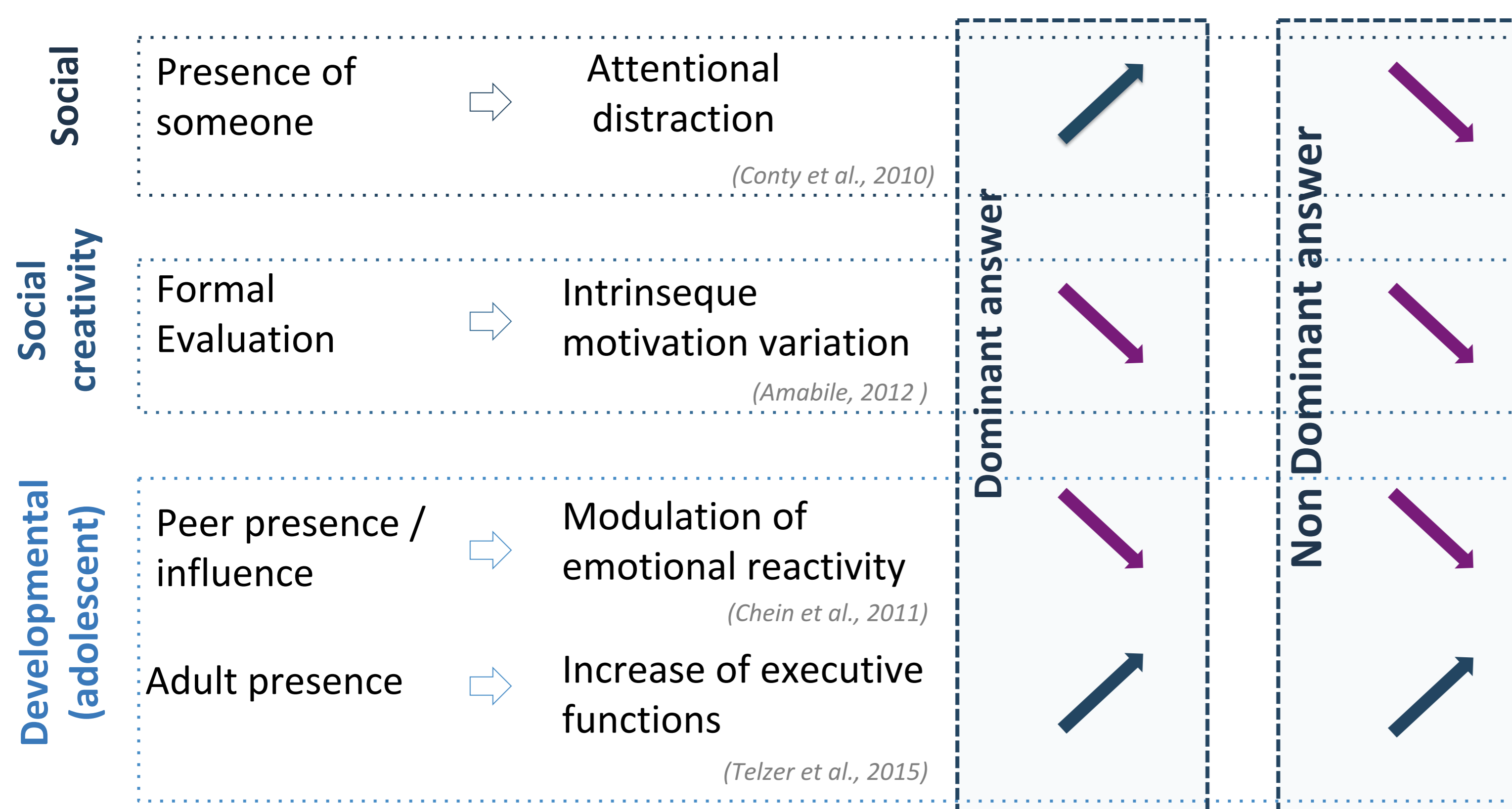
<sup>3</sup>Institut Universitaire de France



## INTRODUCTION

Creativity, defined as the ability to think of something truly new (i.e., original, unexpected), and appropriate (i.e., useful, adaptive concerning task constraints), is a fundamental process that influences many areas of our daily life and is important for instance for education and scientific reasoning. Considerable efforts have been devoted at identifying the influence of social contexts (e.g., effect of the presence of peers or adults) in the domains of reasoning and decision making, leading to inconsistencies in the literature. In fact, while some show a cognitive stimulation effect of the social context, others show a partial or total decrease of individual's cognitive skills. Moreover, there are to date few study that have examined whether social contexts may facilitate (or constrain) creative ideation and whether the effect of social contexts on creativity change with age (Amabile, 2012). *This study aimed at examining how social pressure (i.e. an adult evaluator) affect the ability to generate creative ideas to a problem in children and adults.*

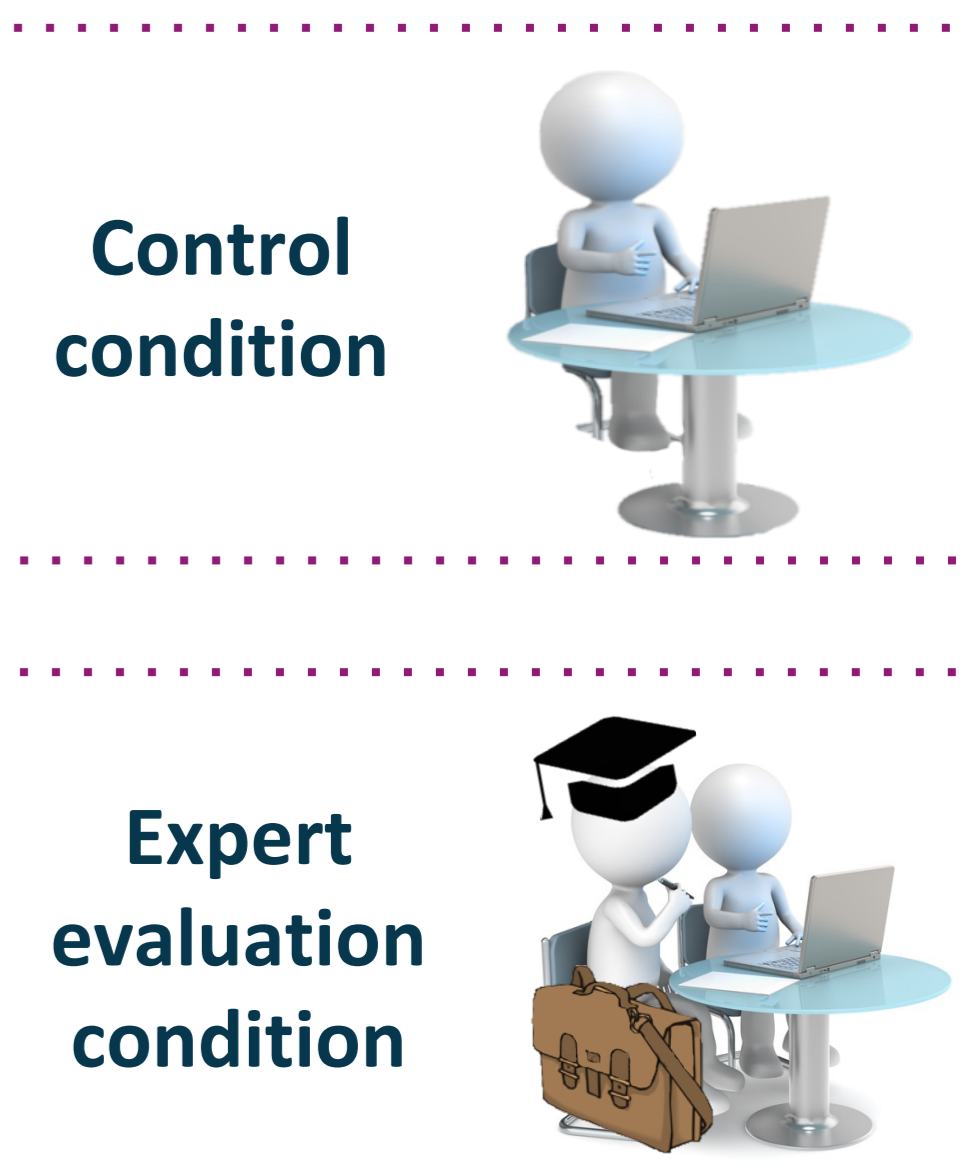
## HYPOTHESIS FROM DIFFERENT FIELDS



## METHOD & PROCEDURE

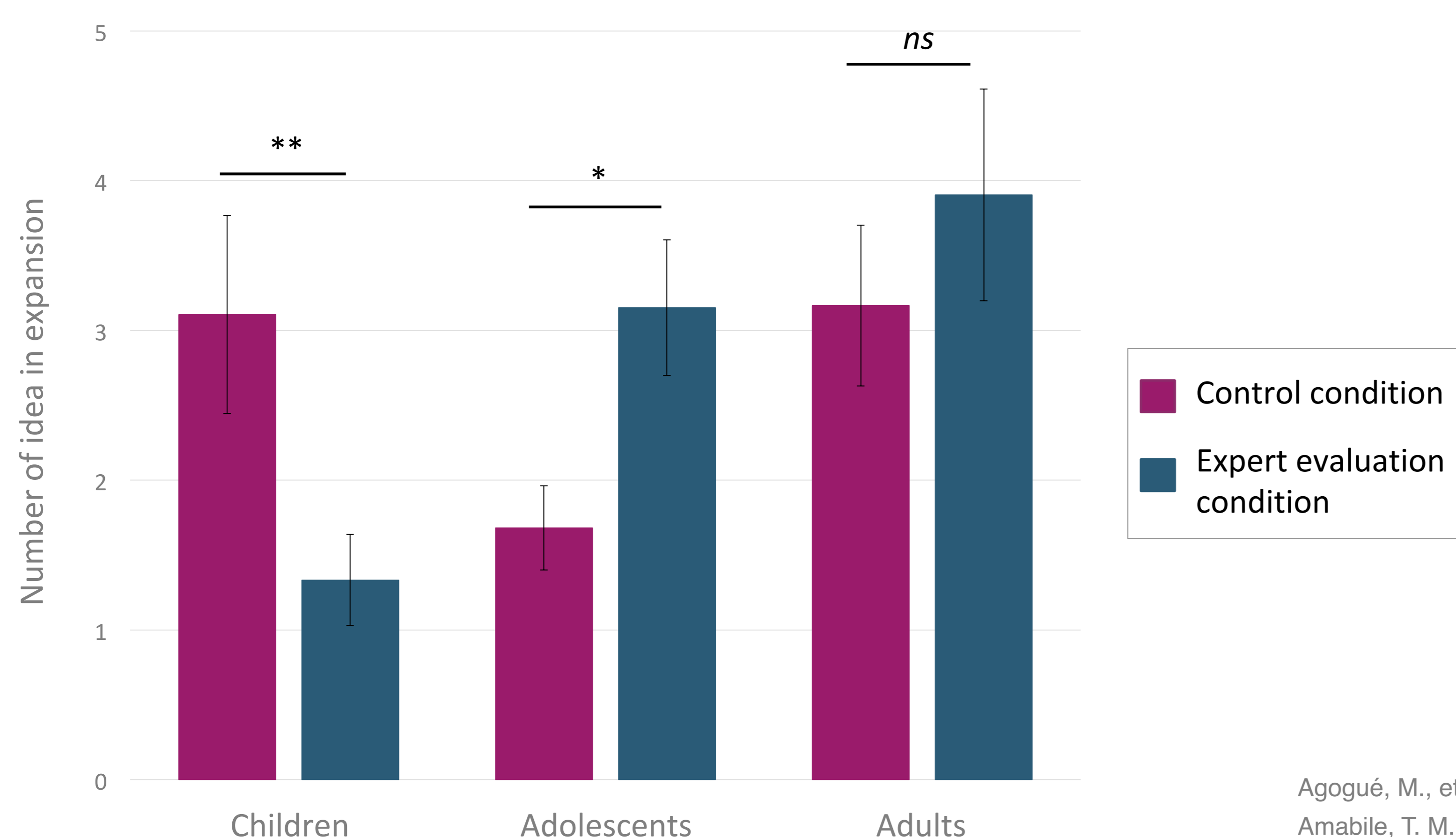
49 Children (from 10 to 12 years,  $m = 11.25$ ), 55 adolescents (from 13 to 15 years,  $m = 13.45$ ), and 45 adults (from 18 to 34 years,  $m = 21.29$ ) were randomly assigned to one of our two experimental conditions (Control condition, and expert evaluation condition). In each condition, they were asked to resolve a creative task, named the « egg task », during five minutes.

**Egg task**  
« Propose as many original solutions as you can to : Ensure that a hen's egg dropped from a height of 10m does not break »



## ANALYSIS & RESULTS

As shown in previous studies (Agogué et al., 2014; Cassotti et al., 2016), individuals tend to use the path of least resistance, leading to Fixation effect. In other words, more than 80% of the answer given try to **damp the shock, protect the eeg or slow the fall**, even if many other categories of ideas exist. Then, we analysed the effect of our experimental condition and age groups on the number of idea given in **the fixation path (dominant answer)** ( $F(1, 143) < 1$ ), and in the **expansion path (outside of fixation – non dominant answer)** ( $F(2, 143) = 5.14, p < .01$ ).



## CONCLUSION

Our results suggest that social context might have opposite influence on creativity in children, adolescents and adults. While it reduces the ability to generate specifically creative ideas for children, it has opposite effect on adolescents. Interestingly, social pressure have no effect on adults' creative performances, in opposition to previous results discussed in the literature (Amabile, 2012). Moreover, given our results, we can hypothesized that executive skills will be a factor driving emotional regulation, and then the emotional reactivity in a context of social pressure.

## CONTACT

[camarda.anaelle@gmail.com](mailto:camarda.anaelle@gmail.com)  
Center for Scientific Management, 75005, Paris

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