

# Meta-Analyses of the Effect of Self-Regulated Learning Interventions on Self-Regulated Learning and Achievement

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# Meta-Analyses of the Effect of Self-Regulated Learning Interventions on Self-Regulated Learning and Achievement

Renée S. Jansen, Anouschka van Leeuwen, Jeroen Janssen, & Liesbeth Kester

Department of Education and Pedagogy – Education, Faculty of Social and Behavioral Sciences, Utrecht University, The Netherlands

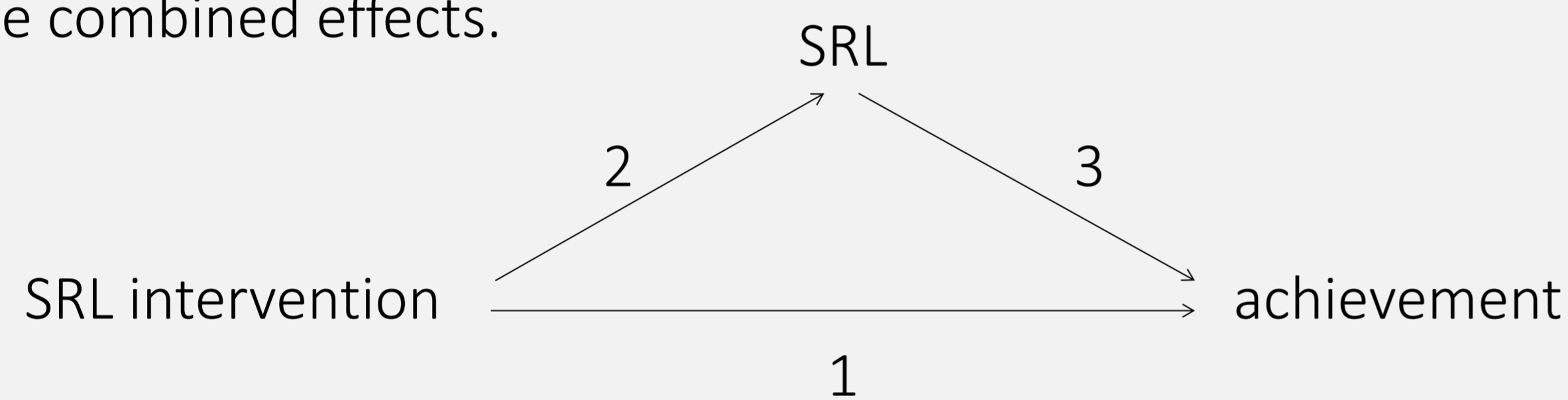
## Introduction

Self-regulated learning (SRL) processes are initiated by the individual to acquire knowledge and skills (Zimmerman, 2015). SRL processes include metacognitive (e.g., planning, goal setting) and resource management (e.g., time management, help seeking) activities. Higher levels of SRL are known to be related to better performance (Pintrich & de Groot, 1990).

Previous meta-analyses have shown significant relationships between SRL interventions and use of SRL strategies and between SRL interventions and achievement (e.g., Boer, Donker-Bergstra, Kostons, & Korpershoek, 2013; Dignath & Büttner, 2008). The effects of SRL interventions on SRL and achievement have however never been synthesized and combined with results on the relation between SRL and achievement.

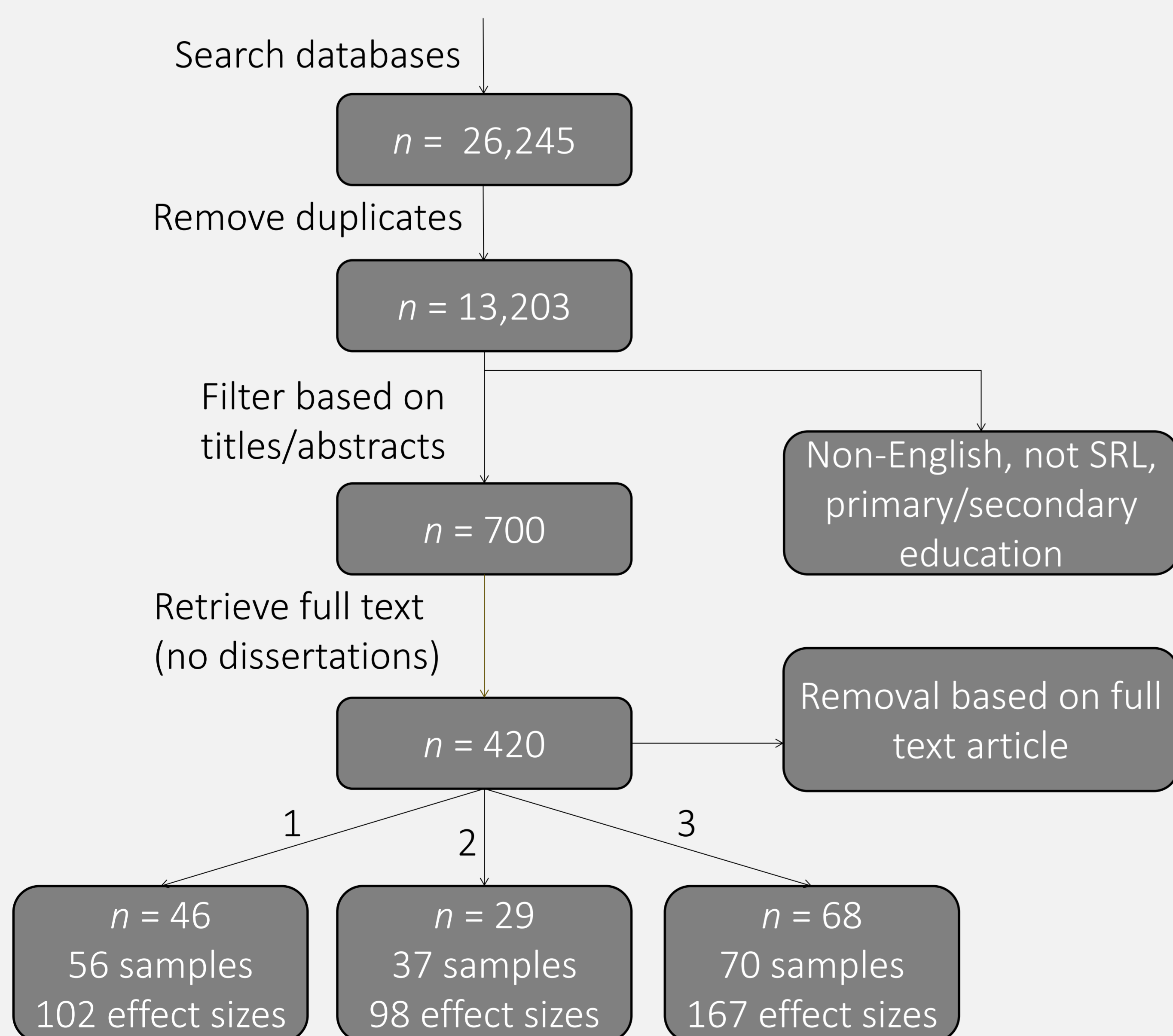
## Research questions

In the present research study we aim to analyze the effects of specific SRL interventions on SRL and achievement. By conducting three meta-analyses simultaneously, variables are operationalized and coded in the same manner for each relationship. Analyses may therefore be conducted on the three relations simultaneously, allowing for conclusions to be drawn on the combined effects.



1. The effect of SRL interventions on achievement.
2. The effect of SRL interventions on SRL.
3. The effect of SRL on achievement.

## Method (literature search)



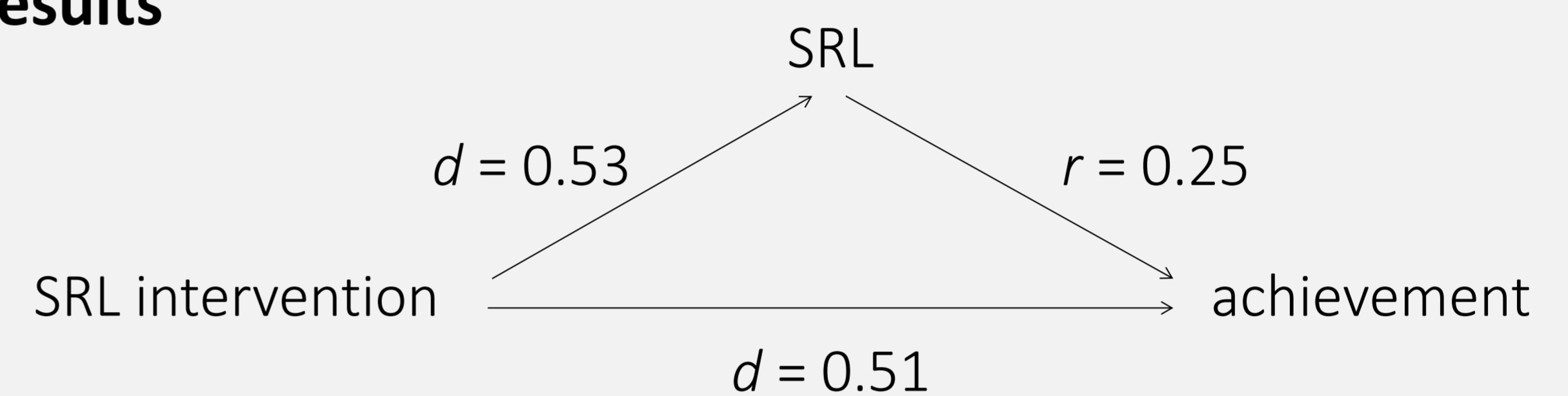
Note. Studies may contain multiple relations and multiple effect sizes.

## Method (coding)

For each study included in the review, six aspects are coded:

(1) General study information	(2) Educational context	(3) Sample characteristics
(4) SRL intervention (e.g., • length • integration with learning context • type of SRL supported	(5) SRL measurement (e.g., • type of measure • reliability • type of SRL measured	(6) Achievement • type of achievement measure

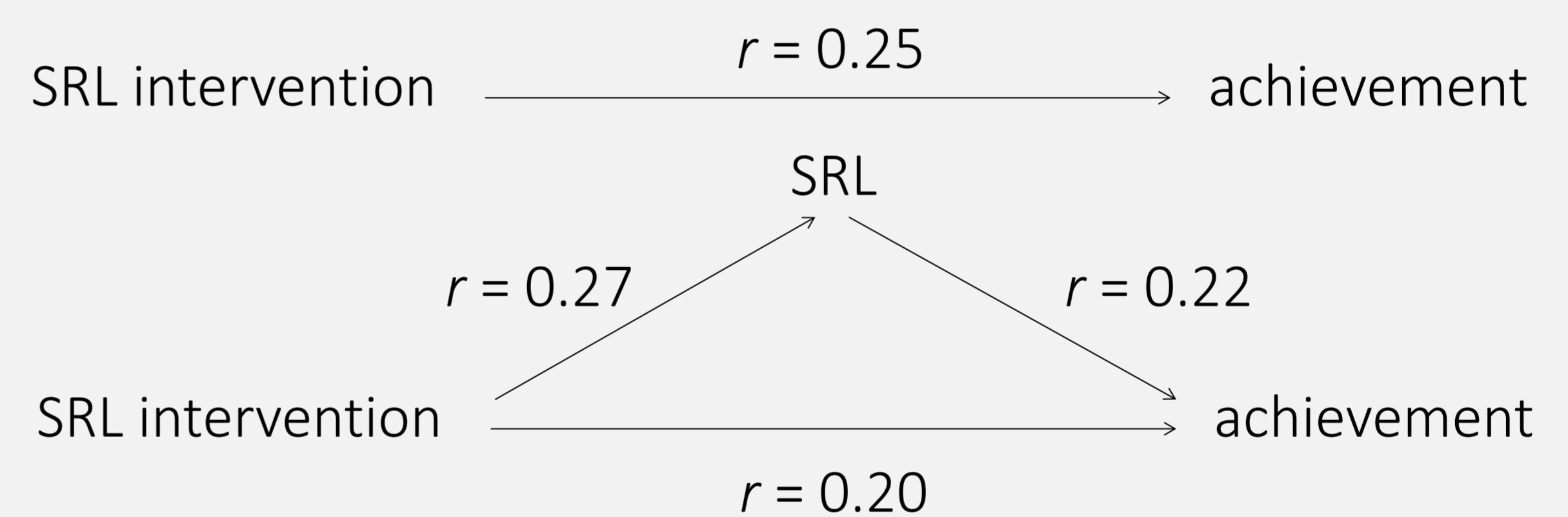
## Results



Moderator analysis is in progress. For the intervention characteristics, significant moderators are:

- The timing of the intervention in relation to the course.
- The type of SRL supported.

Meta-Analytic Structural Equation Modelling (MASEM): mediation analysis



## Conclusions

- SRL interventions have a medium effect on both SRL and achievement. There is also a medium correlation between SRL and achievement.
- The effect of SRL interventions on achievement is only partially mediated through SRL.
- Specific intervention characteristics moderate the effectiveness of the interventions, including the type of SRL support.

## References

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