

DO PROMPTS WORK? EXPERIMENTAL INSIGHTS INTO METACOGNITIVE SUPPORT IN DIGITAL LEARNING

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INTRODUCTION:

Digital learning environments require students to assume an active role in managing their own learning processes, positioning **Self-Regulated Learning (SRL)** as a central competence in higher education [9, 13]

Encompasses the coordinated processes of:

- 01 Planning [14]
- 02 Monitoring
- 03 Self-reflection



Consistently associated with improved academic performance [9]

NEVERTHELESS

Many students fail to apply these strategies spontaneously or effectively [7]

What mechanisms can be employed to support SRL ?

Metacognitive prompts are brief instructional cues, such as questions, suggestions, or reminders, designed to direct learners' attention toward key regulatory processes. [12]



Empirical evidence on the effectiveness remains inconclusive, so **what factors may compromise learning outcomes?** [9,10]



Individual characteristics:

- Self-efficacy [4]
- Metacognitive strategies [3]
- Metamemory [1]

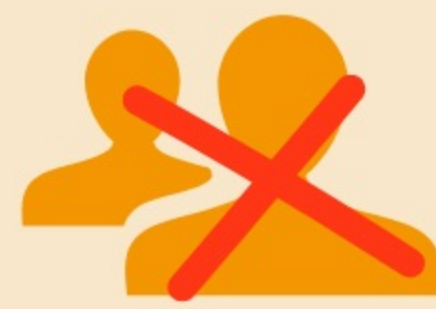
METHOD:

Within-subjects design, with counterbalancing to minimize order and learning effects.

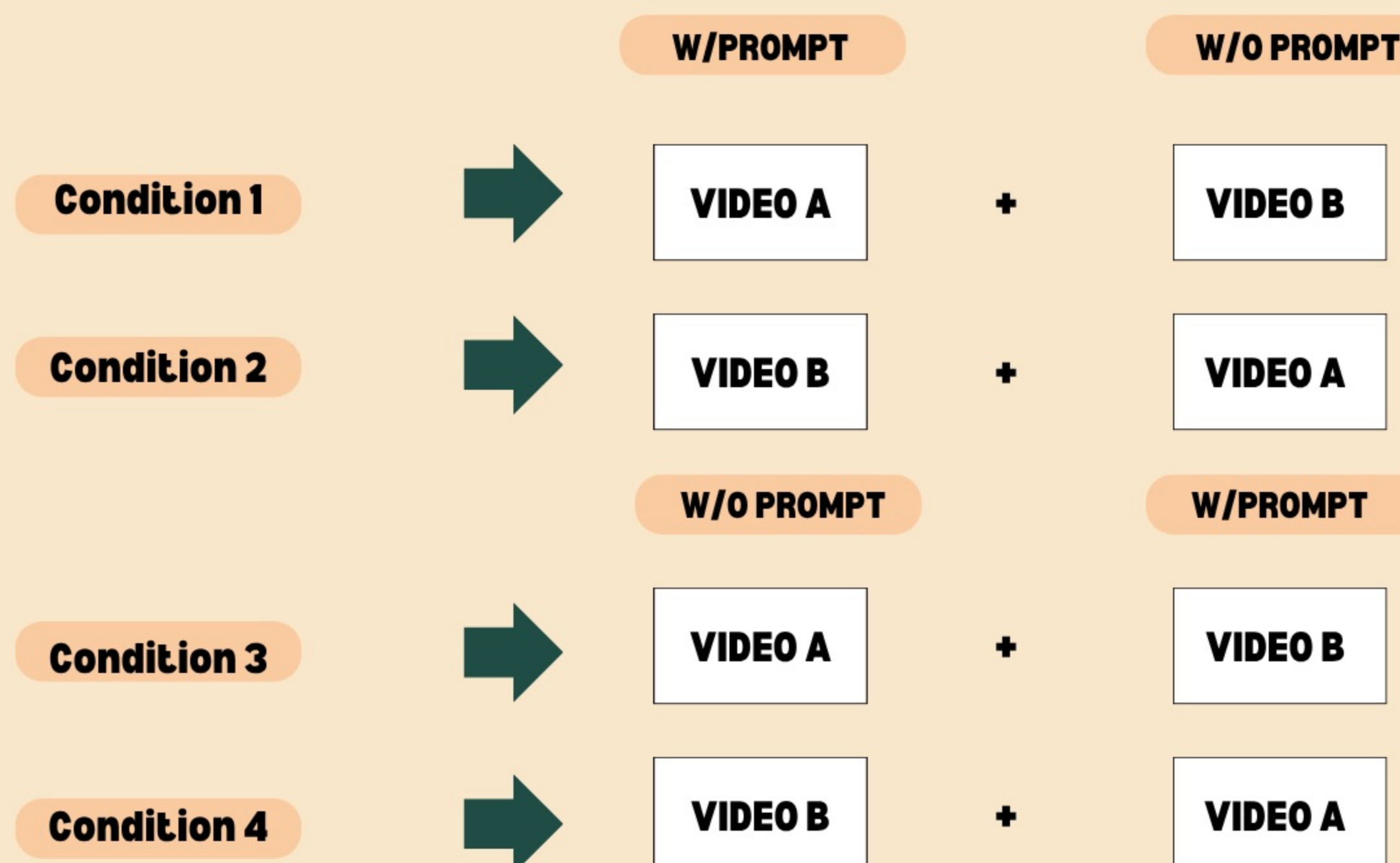
Sample:



University Portuguese Students (≥18 YO)



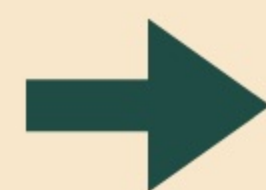
Vision or hearing difficulties that could affect the perception of the task materials



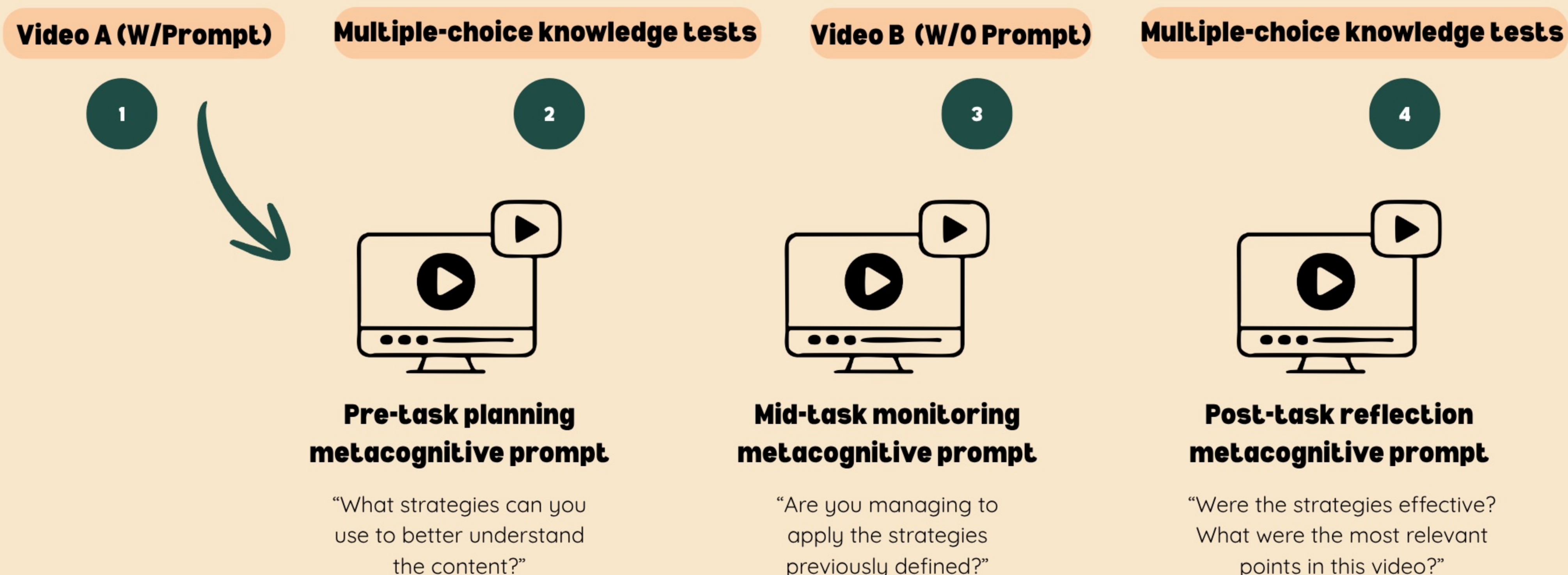
INSTRUMENTS AND TASK (CONDITION 1 EXAMPLE)

Procedure

1. Informed consent
2. Task explanation
3. Sociodemographic questionnaire
4. GSE [2]
5. MSLQ (Metacognitive sub scale) [11]
6. MMQ (Satisfaction sub scale) [5]



Task: two multimedia learning sessions (approximately 10 minutes each)



EXPECTED RESULTS:

1. Students exposed to metacognitive prompts are expected to show higher learning outcomes. [6]
2. Students with higher self-efficacy are expected to show smaller gains from the prompts. [4,8]
3. Students who already use more metacognitive strategies are expected to benefit more from the prompts. [3]

REFERENCES:

