Memory and Motivation as Predictors of Goal Achievement in Students

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BACKGROUND

- Low-to-moderate correlation between goals and outcome reveals a gap between intention and behaviour, with both memory-related and motivational concerns reducing intention fulfillment (1).
- For example, prospective memory (PM) helps individuals to remember and act on future plans (2), while procrastination impedes acting on those plans (3).
- However, memory issues and procrastination/motivation issues have rarely been studied in tandem, making them difficult to compare or to investigate the dynamic relationships between them.

GOALS

- To identify predictors of PM and procrastination in real-world settings.
- To compare the impact of forgetting and procrastination on goal achievement.

METHODS

Participants: 53 undergraduate student participants taking PSYA02 (23.5% M, 76.5% F)

Phase 1: In-Person Assessment

Demographic info
Prospective Memory Concerns Questionnaire (PMCQ; 4)
Adult ADHD Self-Report Scale (ASRS; 5)
Depression Anxiety Stress Scale (DASS-21; 6)
Hopkins Verbal Learning Task – Revised (HVLT-R; 7)
Operation Span Task (O-Span Task; 8)

Phase 2a: Set Intentions

Evening Survey: List **3-5 specific goals** for next day, along with importance, consequences, anxiety, etc.

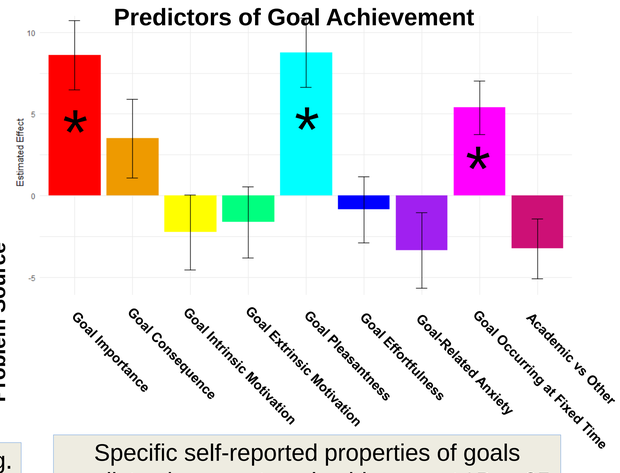
Phase 2b: EMAs + Goal Success (Following Day)

1. **EMAs (x4/Day):** Did you **think** about your goal? Did you **start** your goal?
2. **Evening Survey:** What **%** of your goal did you complete?

RESULTS

Self-reported Predictors of Goal Success and Failure

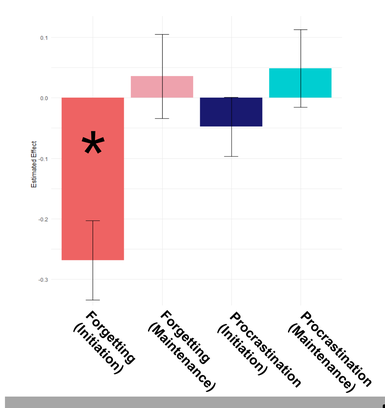
Incomplete goals derived more often from difficulty starting. Procrastination was ~1.5x as frequent as forgetting



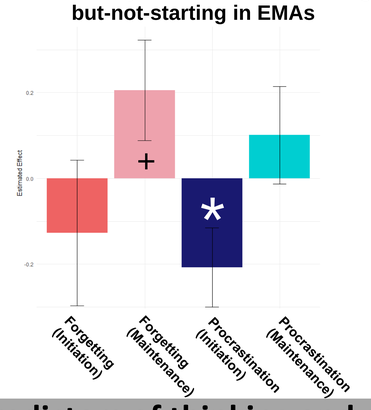
Specific self-reported properties of goals predict subsequent goal achievement *$P < .05$

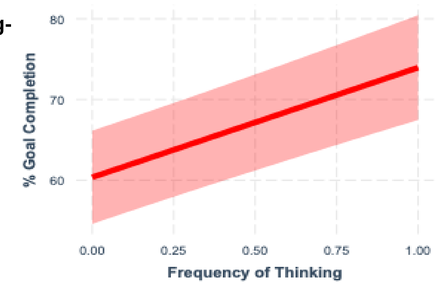
Daily thought and action as predictors of goal success and failure

Self-reported forgetting confirmed by reduced frequency of thought in EMA



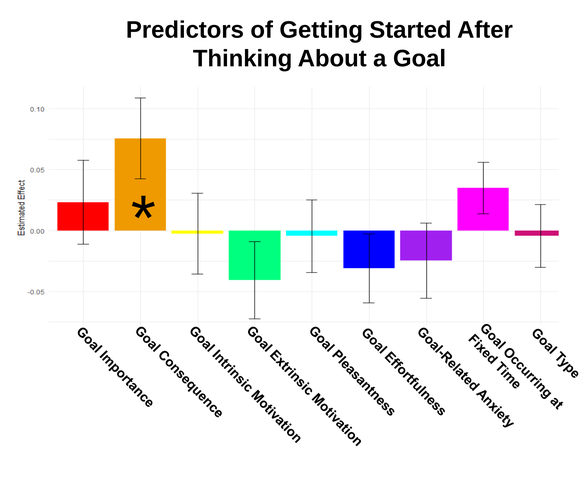
Self-reported procrastination confirmed by more frequent thinking-but-not-starting in EMAs



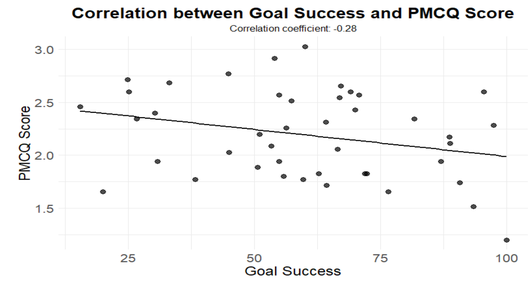


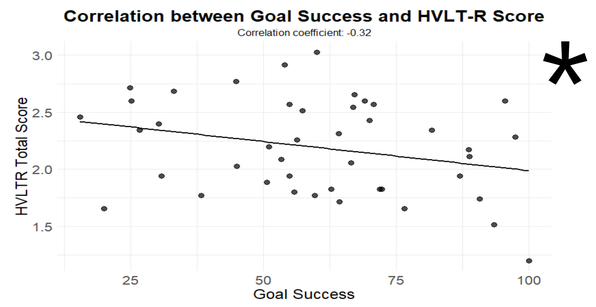
Increased goal-related thought positively associated with % goal completion controlling for all other factors

Predictors of thinking and acting



Individual Differences





CONCLUSIONS

- Students sometimes struggle to achieve goals, with goal initiation, including both forgetting and procrastination, as the biggest barriers.
- Goal importance, pleasantness and goals occurring at a fixed time predict goal success.
- More goal-related thought during the day reduces frequency of self-reported forgetting, and strongly predicts goal completion, placing it alongside procrastination as an important determinant of goal achievement
- Goal importance and fixed timing influence goal-related thought, while only goal consequence significantly predicts initiation after thought.
- Self-report PM ability does not predict goal completion; HVLT-R suggests working memory negatively correlates with goal success.
- Limitations: Larger sample size will be needed to confirm and extend these results

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