

The Effect of a Visible Timer on Writing Speed

(Outline)

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I . Introduction

A. This study explores how the presence of a visible timer affects the speed at which one writes. Pressure due to a timer is believed to create urgency, therefore increasing productivity levels. Many students, as well as those who have deadlines on projects, school-related or not, have related to feelings of stress, which can affect their speed and their productivity. Learning strategies that can increase writing speed can help college students or students in general during exams or environments where quick and efficient writing is needed (Connelly * et al., 2005).

1. Students often report working faster when a deadline is visually approaching.
(background research needed to support)
2. A visible countdown clock may trigger faster cognitive processing, as well as impulsive writing

B. Research conducted prior supports that visible timers can improve performance in tasks under certain amounts of pressure.

1. Hu et al. found faster response times in visual tasks with countdown clocks.
 - a. Address how his study depicts that too much pressure can have native effects
 - b. Too little stress causes a lack of motivation
2. Background research findings suggest that the perception of time does have an effect on speed
 - a. Visual Timer may boost motivation

- b. However timers may also cause stress, having varying results

II. Methodology

A. Participants

1. On April 2nd, 2025, the class of ENGL 21003: Writing for the Sciences will participate (30 students and 1 instructor)

B. Materials

1. Double Sided Sheet with two Short open-ended responses
2. Slide Show
3. A digital timer for the visible timer condition (one minute)

C. Procedure

1. Participants will complete two writing tasks.
 - a. Task 1: One-minute writing with no visible timer.
 - b. Task 2: One-minute writing with a visible countdown timer.
2. Students' work is collected and remains anonymous
3. Word count from each response will be recorded and compared.

D. Analysis

1. Words will be counted by hand and separated by section (prompt letter)
 - a. Side A and B will be counted individually

2. A mathematical statistical test of choice will be used to analyze data (possibly a t-test)

3. Charts will display word count differences, and attached tables will be displayed and titled

III. Results (Projected, not yet analyzed, although they have been gathered)

A. Participants are expected to produce more words with the visible timer.

1. Most participants may show an increase in words written under pressure.

2. Standard deviations will show variation in individual responses.

IV. Discussion

A. (Hopefully) Findings will support the hypothesis that time pressure increases writing output. A similar study that tested time limit tests on visual display terminal (VDT) visual search tasks tested the effect of clock timing on performance. Researchers measured search speed and accuracy to measure the effect of the presence and type of the clock on performance (Hu et al.). Their outcome indicates a moderate degree of time pressure, with a visible timer can accelerate task performance, supporting my argument that perception of time can determine productivity, with an effect possibly transferred to writing speed on timed tasks. (Will add on whether my data is supported and aligns with a similar study, or does not, which will transition into future directions)

1. This either aligns with studies showing increased performance in high-pressure conditions.

B. Why this study was important: Implications for students and academic environments.

(Connelly * et al., 2005)

1. Visible timers may help students manage time and improve efficiency.
2. May also be a tool to combat procrastination in timed settings.

C. Limitations

1. Small sample size limits generalizability.
2. The study does not assess writing quality, only quantity.
3. Students do not look up at the timer

D. Future Research

1. Expand the study to include writing quality assessments.
2. Investigate long-term effects of training with visible timers.
3. Add a survey on whether participants saw the timer as well as how the presence made them feel

References

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