

ABSTRACT

Research on expressive writing shows that writing about negative emotions or events can improve one's health and well-being. The aim of this study was to investigate potential therapeutic effects of keeping a diary of intrusive memories. These are spontaneous memories of negative events that repeatedly intrude upon consciousness, and cause high levels of stress and avoidance. Non-clinical participants, who reported experiencing negative intrusive memories at least once a day, nominated their three most intrusive memories in an initial interview and then recorded these memories in a diary for 7 days. Participants in the experimental 'memory' group had to fill in a memory questionnaire every time they experienced an intrusive memory. Those in the control 'acknowledge' group, had to acknowledge the occurrence of memory by putting a tick on a diary page. It was expected that recording intrusive memories would significantly reduce participants' depression and state anxiety scores in the 'memory' group but not in the 'acknowledge' group. Results showed that participants' depression and anxiety scores dropped significantly in both groups. However, when participants rated whether diary keeping had any effect on their mood on a 7-point scale (1=*made me feel a lot worse*; 4=*no effect*, 7=*made me feel a lot better*), mean rating of 'memory' group was significantly higher ($M=5.17$) than in the 'acknowledge' group ($M=3.86$). Implications of these findings are discussed.

Introduction

Intrusive memories are involuntary memories of (mostly) negative events which repeatedly intrude upon consciousness, often against one's will, are hard to control and may disrupt one's ongoing activities.

(e.g. memories of a car crash, break up, friend's death)



- ◆ Characteristic of clinical disorders (e.g., PTSD, depression)
 - ◆ But also present in general population
- ◆ High levels of intrusive memories and avoidance are risk factors for later psychopathology in PTSD and depression (Brewin, 1998)
- ◆ Most research uses retrospective self-reports
 - ◆ Very few diary studies of intrusive memories (Berntsen, 2001; Williams & Moulds, 2007)

Aims, hypothesis and rationale

Aim To test a hypothesis that recording intrusive memories in a diary may have therapeutic effect

Rationale

1. Various forms of therapy showing the benefit of processing IMs rather than suppressing them
 2. Beneficial effects of expressive writing on health (Fratraro, 2006; Pennebaker, 1997)
- ◆ However, in expressive writing paradigm people write for 15-20 minutes for 3 or more times. Is engaging with intrusive memories briefly when recording them in diary sufficient for the therapeutic effect to occur?

Method

Participants (Mean age=25.22, SD=9.08)

- ◆ 20 students, 10 professionals (2 males)
- ◆ 3 participants excluded

INCLUSION CRITERIA: Experience negative intrusive memory at least once a day

Design: Pre-test Post-test design

Materials and procedure

- ◆ Depression and Anxiety Questionnaires filled in before and after keeping a diary of intrusive memories
 - BDI – Beck et al. (1961)
 - STAI – Spielberger et al. (1970)

SESSION 1

- ◆ Intrusive memory interview (Reynolds & Brewin, 1999)
 - Nominate and describe up to 3 intrusive memories
 - Rate each nominated memory on a variety of scales
- ◆ Assess depression and state anxiety (BDI & STAI)

KEEPING A DIARY of nominated memories or 7 days

EXPERIMENTAL 'Memory' CONDITION (N=13)

Every time intrusive memory occurs, fill in a diary page with 12 questions

CONTROL 'Acknowledge' CONDITION (N=14)

Every time intrusive memory occurs, put a 'tick' in a space provided in a diary

SESSION 2

- ◆ Collect diary and general debrief
- ◆ Assess depression and state anxiety (BDI and STAI)
- ◆ Self-rated effect of diary keeping on mood

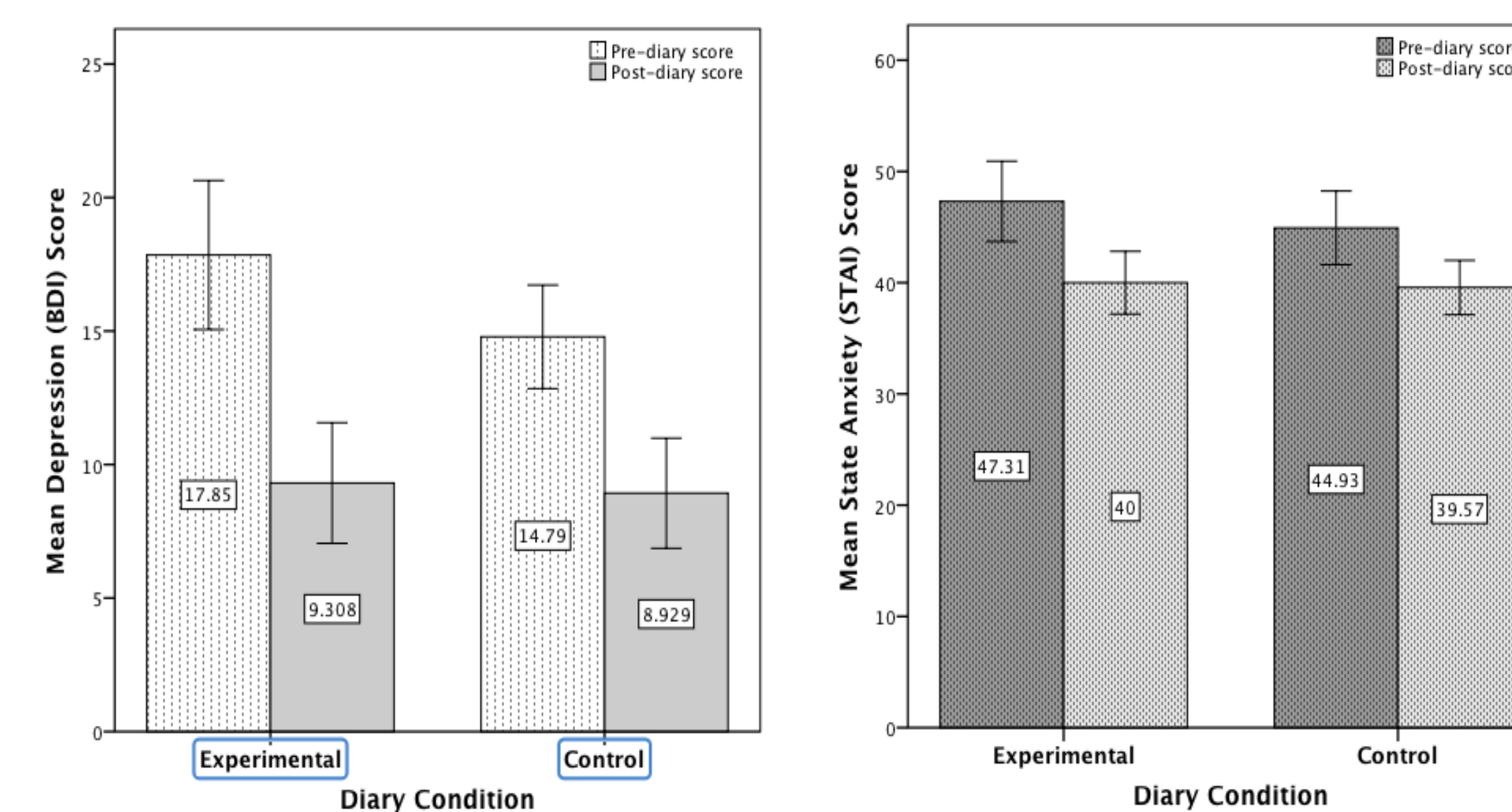
Therapeutic effects of recording intrusive memories in non-clinical participants: A diary study

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Results

Effect of keeping a diary of intrusive memories



BDI scores – Main effect of time, $F(1,25)=29.62$, $p=.000$, partial $\eta^2=.54$
State Anxiety – Main effect of time, $F(1,25)=9.89$, $p=.004$, partial $\eta^2=.28$
Main effect of condition or condition by time interactions not significant.

Results: Self reported therapeutic effect on mood

◆ Did keeping a diary have effect on your mood?

— 1 — 2 — 3 — 4 — 5 — 6 — 7 —
Made me feel a lot worse No effect Made me feel a lot better

Experimental Group

Mean – 5.31 (SD=1.25)

$F(1,25) = 14.48$, $p=.001$, $\eta^2=0.37$

Control Group

Mean – 3.86 (SD=.66)

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Summary and discussion

- Substantial drop in depression and anxiety scores
 - But... in both groups
 - In self report, beneficial effect of diary keeping only in Experimental Condition.
 - The drop was too large and in one direction to represent natural fluctuations in scores

Why was there a drop of scores in both conditions?

- Both groups engaged with memories
 - Even if momentarily in the control group!
- Recording disrupts the rumination cycle?
 - Ed Watkins (personal communication)
- Both groups completed the intrusive memory interview!
 - Research showing beneficial effects of completing the Autobiographical Memory Questionnaire (e.g. Boales et al. 2011; Rubin et al., 2010)

Preliminary conclusions

- Keeping a diary of intrusive memories may have therapeutic effect
- Several therapies use diaries as an assessment tool (e.g., CBT, EMDR)
- ◆ Could it be that the main benefit of therapy, in these cases, comes from keeping a diary?

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