

Exploring the Potential of Pennebaker's Writing Paradigm on Betrayal Trauma Sequelae

Carolyn B. Allard Jennifer J. Freyd Takenori Momiyama



Introduction-

nennebaker's Writing Paradigm

- Experimental design in which participants are instructed either to write about emotional events or neutral topics
- Those assigned to emotional writing condition typically display physical and psychological health improvements as compared to those in neutral condition (Pennebaker, 1997; Smyth, 1998)
- Narrative coherence and presence of emotion words may be important for positive outcomes (e.g., Pennebaker, 1993; Pennebaker, 1997)

etrayal Trauma Theory (Freyd, 1996, 2001)

- Distinguishes traumas on the basis of two event dimensions which may elicit different reactions: life-threat (e.g., major car accident; violent rape by a stranger) and social betrayal (e.g., abuse by a close other)
 - Trauma high in betrayal is perpetrated by someone who is close to the victim and/or upon whom the victim is dependent
 - Associated with impaired memory for trauma, presumably for purpose of preserving victimperpetrator relationship, and various negative sequelae, including dissociation, depression, anxiety and physical ailments (e.g., Freyd, Klest, & Allard, 2004)

ationale

- Up until now, paradigm has mostly been applied to emotional but not necessarily traumatic events
 - Those few studies involving traumatic writing have only included one-time non-complex traumas low in betrayal
 - Primary objective: to test generalizability of emotional writing to betrayal trauma
 - Secondary goal: to investigate mechanism behind writing phenomenon by elucidating essay characteristics associated with positive outcomes

articipants

- 65 (51 female, 14 male) physically symptomatic undergraduates recruited from psychology department Human Subjects Pool, and compensated with choice of partial course credit or \$7
- Demographics (representative of UO undergraduate population):

Age: M = 19.94 years (SD = 3.86) and mostly (94.4%) single

Ethnicity: 67 (93.1%) Caucasian; 2 (2.8%) each Asian, African American, Hispanic, Pacific Islander; and 1 (1.4%) American Indian

ssessments

- Trauma assessed at pretest using Brief Betrayal Trauma Survey (Goldberg & Freyd, under review)
 - Psychological health assessed at pre and posttest with time-bound* version of Trauma Symptom Checklist 40 (TSC; Elliott & Briere, 1992)
 - Physical illness symptoms assessed at pre and posttest with time-bound* version of Pennebaker Inventory of Limbic Languidness (PILL; Pennebaker 1982)
- *"time-bound" indicates participants were instructed to report how frequently they had experienced those symptoms during the past 2 weeks

rocedures

- Random assignment to intervention of 2 x 20-minute writing assignments one week apart Group 1: most distressing interpersonal childhood experience (n = 33)
- Group 2: how you spent your time yesterday (n = 32) Completed posttest one month following second writing session

ontent Analysis of Essays

- Counted number of emotion and coherence related words using Pennebaker's Linguistic Inquiry and Word Count computer program (Pennebaker, Francis & Booth, 2001) - see Table 1 in handout for examples
 - Word counts used as predictor variables in regression analyses predicting physical and psychological symptom scores at posttest

Figure 1. Percentage of male and female participants experiencing traumas in each level of betrayal.

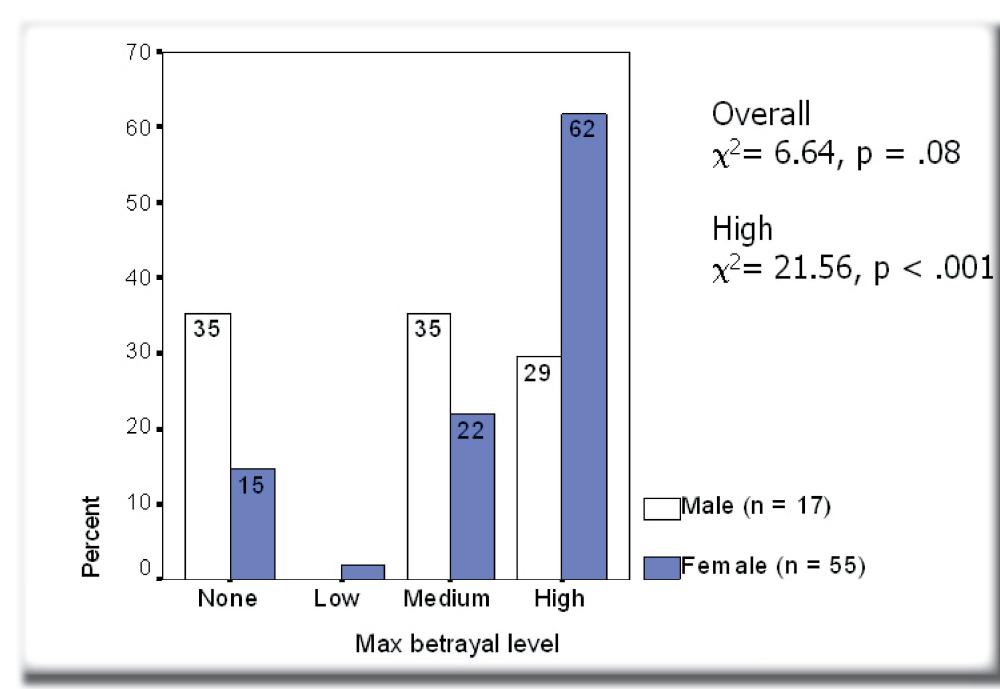
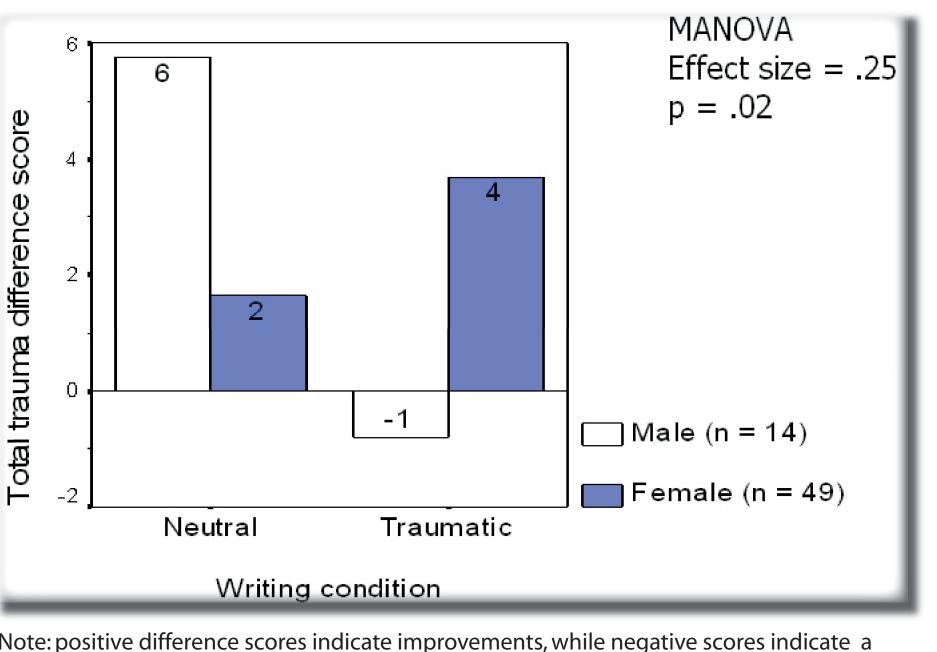


Figure 2. Mean difference scores in total TSC symptoms from pre to posttest by writing condition and gender.



See handout for references.

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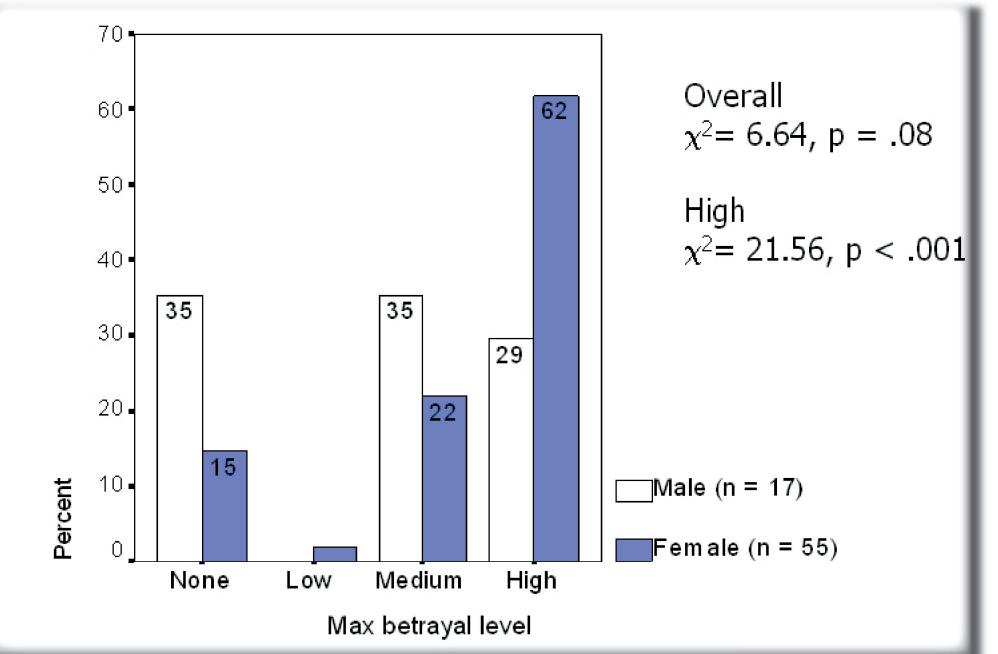
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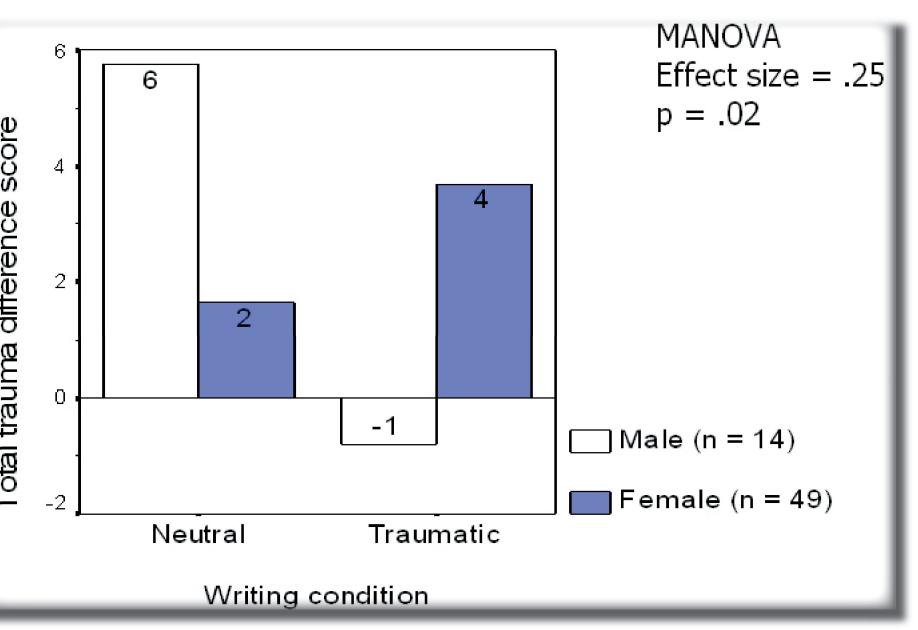
Carolyn B. Allard

Department of Psychology 1227 University of Oregon Eugene OR 97403-1227 callard@uoregon.edu

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-Summary of Results

escriptives

- Over 50% of all participants reported having experienced at least one betrayal trauma
 - Women reported more betrayal trauma than men (see Figure 1)
 - Significant correlations between physical and health symptoms and betrayal trauma

Tntervention Results

- No significant overall main writing or gender effect on symptomatology outcome
- A significant gender by writing condition interaction emerged, which revealed that women in trauma writing condition benefited more than men in terms of psychological health as measured by linear combination of overall TSC measure and its subscales (see Figure 2)

ontent Analysis Results

Generally, greater number of emotion words used in essays significantly predicted decreases in physical and psychological symptoms at posttest for women (see Table 2 in handout):

- More total emotion words used predicted decreased sleeping difficulties
- More total emotion words also predicted decreased physical symptoms, particularly positive emotions in form of optimism and energy, and negative emotions in form of anxiety or fear
- More anxiety or fear words predicted decreased overall psychological symptoms (TSC Total) and specifically dissociation
- However, more anxiety or fear words predicted increased sexual problems
- Number of anger and sadness or depression were not found to significantly predict posttest scores

Mixed results for emotion words were found for men:

- More total emotion words used predicted decreases in depression and sexual problems
- However, more positive feeling words predicted increases in post sexual abuse trauma related symptoms, number of days sick, and number of days activities are restricted due to illness
- And, *increases* in post sexual abuse trauma related symptoms were predicted by use of more anxiety or fear words

Insight words predicted posttest scores for women only:

- More insight words were found to significantly predict decreased physical symptoms as well as number of days activities were restricted by illness
- However, more insight words were found to significantly predict increased sexual problems

Neither the number of total cognitive process nor causation words were found to significantly predict posttest scores for either gender.

Discussion

The large number of participants reporting high betrayal trauma is not surprising given that they were a highly physically symptomatic group, and many chronic pain disorders and chronic health problems have been found to be related to trauma (e.g., Felitti, 2002). That women reported experiencing more high betrayal trauma then men replicates previous findings (Goldberg & Freyd, under review).

The different types of traumas reported by the women and men of this study, and the differential results of the writing intervention for each gender, suggest it would be fruitful to consider the type of trauma experienced by an individual when considering intervention strategies for trauma.

Directing the writing process to include those components found to be related to better outcomes may enhance the effectiveness of a writing intervention. For example, it appears that positive outcomes are related to the use of emotional words, at least for women. Coherence, on the other hand, as measured through causation and insight words in this study, appears to have little bearing on writing outcome. However, it is debatable whether counting these words is sufficient in judging essay coherence.

Research is currently underway to attempt to assess coherence in a more meaningful way, and to replicate these findings in a larger and more heterogeneous population of community adults participating in a similar intervention study with a longer followup interval.