



Different methods of single-session disclosure: What works for whom?

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Objective. Examine distress, emotional approach coping, and attachment as moderators of effects of written (WED) versus interpersonal (IED) emotional disclosure and written time management (WTM).

Design/Methods. Fifty-seven undergraduates with stressful experiences randomized to a single session of WED, IED, or WTM. Assessment of immediate reaction (NA) and 6-week follow-up (intrusions/avoidance).

Results. Those with higher baseline distress had increased NA, avoidance and intrusions when engaged in WED or IED (vs. WTM). For emotional processors, WED (vs. IED) produced less NA, avoidance, and intrusions. Attachment predicted increased NA in WTM.

Conclusions. Baseline distress and personality characteristics form boundary conditions for written disclosure.

Individual differences and method of disclosure may explain variability in the effects of emotional disclosure interventions. We evaluated boundary conditions for written emotional disclosure (WED) by examining baseline distress, emotional approach coping, and attachment quality as moderators of the effects of single-session WED, compared to either interpersonal emotional disclosure (difference in method), or written time management (difference in content). To distinguish process from outcome, we examined immediate engagement in the disclosure process (increased NA) as well as long-term stress responses (reduced thought intrusions and avoidance).

Method

Participants and procedures

We recruited 57 undergraduates (81% female; 44% Caucasian, 26% African-American, 8.8% Asian, 1.8% Hispanic; Age $M = 22.5$, $SD = 7.04$) reporting stressful/traumatic

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experiences that continue to bother them ‘moderately’ or ‘very much’. At visit 1, participants provided consent and completed baseline questionnaires. At visit 2, participants were randomized, and conducted a 30-minute session either writing alone in a journal or speaking to a facilitator. Participants rated their NA before and after the session. At visit 3 (6 weeks later), participants completed follow-up questionnaires.

For written emotional disclosure (WED), participants wrote the facts and deepest feelings about a personally stressful experience and for interpersonal emotional disclosure (IED), they spoke about the same topic to an empathic yet nondirective, listening facilitator. For written time management (WTM), participants wrote about their plans for the next 24 hours, next month, and next year.

Measures

Potential moderators were baseline global distress (Brief Symptom Inventory; Derogatis & Melisaratos, 1983; $\alpha = .97$), secure attachment (Relationship Scales Questionnaire; Griffin & Bartholomew, 1994; $\alpha = .78$), and emotional processing and expression (Emotional Approach Coping Scale; Stanton, Kirk, Cameron, & Danoff-Burg, 2000; $\alpha = .80$ and $.81$, respectively).

Process (NA) was measured with the Positive and Negative Affect Scale-Expanded (Watson & Clark, 1994; $\alpha = .74$ and $.84$ pre- and post-session). Outcomes (Avoidance; baseline $\alpha = .68$; follow-up $\alpha = .78$ and Intrusions; baseline $\alpha = .91$; follow-up $\alpha = .92$) were measured with the Impact of Events Scale-Revised (Weiss & Marmar, 1997).

Results

As a manipulation check of session engagement, groups were compared on NA change (post- minus pre-session). As expected, WED ($M = 0.55$, $SD = 1.53$) led to greater increase in NA than WTM ($M = -0.22$, $SD = 0.39$; $p = .03$). Change in NA for the IED group ($M = 0.09$, $SD = 0.58$) did not differ from either WED or WTM.

To test moderators, we calculated intrusion and avoidance change scores (follow-up minus baseline) and compared WED with IED and then with WTM, by entering group, moderator (after centring), and interaction term in regressions predicting outcome change scores. Table 1 presents standardized betas of the relationship between moderator and outcome for each group by itself, and the interaction terms for group comparisons. Results of analyses predicting the process measure (NA change) also are presented.

Regarding outcomes, baseline distress predicted a trend towards increased avoidance (but not intrusions) for WED, with significant decreases in both for WTM. Group differences in these patterns were confirmed by significant interactions predicting both avoidance and intrusions. Emotional processing predicted increased avoidance and intrusions for IED only, and significant interactions confirmed that emotional processing moderated the effects of WED versus IED on avoidance and intrusions. Emotional expression predicted a significant increase in intrusions and a trend for increased avoidance in IED. The difference between WED and IED was marginally significant for intrusions. Finally, attachment style predicted a trend towards increased avoidance for WTM, but no significant interactions.

Table I. Relationship between moderators and outcome variables for three experimental conditions

Dependent variable moderator	Written emotional disclosure (WED) ^a	Interpersonal emotional disclosure (IED) ^a	Written time management (WTM) ^a	WED vs. IED ^b	WED vs. WTM ^b	IED vs. WTM ^b
Negative Affect						
BSIGSI	.43 [†]	.36	-.45 [†]	.50	-1.52 [†]	-.77*
EAC-EXP	-.41 [†]	.10	-.07	-1.06 [†]	1.36	-.16
EAC-PRO	-.54*	.37	-.46 [†]	-1.44**	1.52 [†]	-.79*
GLOBATT	-.43 [†]	-.17	.70**	-.74	2.03*	.82*
Avoidance						
BSIGSI	.41 [†]	.06	-.68**	.32	-2.91**	-.62 [†]
EAC-EXP	.01	.47 [†]	.23	-.91	.65	-.30
EAC-PRO	-.07	.69**	-.11	-1.30**	-.14	-.88*
GLOBATT	-.07	.01	.52 [†]	-.10	1.46	.39
Intrusions						
BSIGSI	-.02	.19	-.56*	-.44	-1.94*	-.74 [†]
EAC-EXP	-.06	.50*	.40	-1.05 [†]	1.45	-.10
EAC-PRO	-.17	.58*	.29	-1.21*	1.32	-.33
GLOBATT	-.06	-.25	.35	.40	1.09	.67

Note. [†] $p < .10$; * $p < .05$; ** $p < .01$.

^a Standardized betas between baseline (moderator) variables and DVs, separately for written emotional disclosure (WED), interpersonal emotional disclosure (IED), and written time management (WTM). DVs were change betas for (post minus pre) for Negative Affect, Avoidance, and Intrusions.

^b Standardized betas for the interaction terms. BSIGSI, Brief Symptom Inventory Global Severity Index; EAC-EXP, Emotional Approach Coping Emotional Expression subscale; EAC-PRO, Emotional Approach Coping Emotional Processing subscale; GLOBATT, Global Attachment Style.

Discussion

Individual differences moderated the effects of different disclosure interventions for undergraduates with stressful/traumatic experiences. In a single 30-minute WED session, distressed individuals demonstrated increases in both post-session negative affect and 6-week follow-up avoidance relative to the relief experienced by similar persons in the WTM condition. Conversely, attachment style predicted substantially increased NA in the time management condition relative to WED. Finally, emotional processing and expression predicted poorer outcomes in the interpersonal disclosure (vs. WED).

This study has limitations. First, to mimic brief disclosure experiences that commonly occur, we studied a single disclosure session rather than multiple sessions. Second, to mirror the WED condition (where there is no feedback), IED facilitators engaged only in nondirective support; thus, IED findings may not generalize to more interactive interpersonal disclosures (e.g. supportive therapies). Third, the WTM condition may have an active component (providing structure and order to one's life), and a no-writing control condition may clarify findings.

Disclosure may operate differently for different individuals and as a function of method of disclosure. In this study, those with high baseline distress appear activated by

the 30-minute session and have poorer outcomes. Highly distressed individuals may need multiple sessions, or perhaps WED may be beneficial only to those with less distress. Despite research suggesting that they would most likely benefit (Stanton *et al.*, 2000), emotionally sophisticated individuals engaging in IED had poorer outcomes. Securely attached persons showed similar patterns in the WTM condition. Perhaps such individuals are prepared for, expecting to engage in, and would benefit from a more active intervention. Additional research with larger samples, other potential moderators, and experimental manipulation of interpersonal disclosure is needed to replicate these findings and further our understanding of the boundary conditions of disclosure.

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References

- Derogatis, L. R., & Melisaratos, M. (1983). The brief symptom inventory: An introductory report. *Psychological Medicine*, *13*, 595–605.
- Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, *67*(3), 430–445.
- Stanton, A. L., Kirk, S. B., Cameron, C. L., & Danoff-Burg, S. (2000). Coping through emotional approach: Scale construction and validation. *Journal of Personality and Social Psychology*, *78*(6), 1150–1169.
- Watson, D., & Clark, L. A. (1994). *The PANAS-X: Manual for the positive and negative affect schedule-expanded form*. Ames, IA: University of Iowa.
- Weiss, D. S., & Marmar, C. R. (1997). The Impact of Event Scale - Revised. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A handbook for practitioners* (pp. 399–411). New York: Guilford.

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