An Exploratory Study Evaluating Responses to the Disclosure of Stressful Life Experiences as They Occurred in Real Time

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Recovery from stressful life experiences, including traumas, frequently involves telling others what happened. While it has been previously demonstrated that supportive responses to disclosures of such experiences are important predictors of positive outcome, less is known about the constituents of supportive responses. This exploratory study was meant to help operationalize supportive responses to first-time disclosures. The sample comprised 53 dyads of university students and community members. One member of each pair was randomly selected to disclose an experience not previously disclosed to the other participant; this interaction was videotaped for subsequent coding and analyses. Participants completed pre- and postdisclosure self-report measures. Using the coders’ and disclosers’ ratings of listeners’ behaviors, we examined the impact of listeners’ verbal and nonverbal responses to disclosures and identified two modifiable behaviors (interruptions and posture) that contributed to conveying support. Results indicated that leaning backward was associated with coders’ ratings of negative responses to disclosure and moderate levels of interruption were associated with the most supportive responses to disclosure. Relaxation health was found to be a strong predictor of disclosers’ perceptions of support. Despite its limitations, this study represents an important preliminary step in research examining supportive responses to disclosure and identifying characteristics of supportive responses. Such information can be used to guide friends and family in responding more supportively to first-time disclosures of stressful life experiences.

Keywords: stressful life experiences, disclosure, supportive responses

Recovery from stressful life experiences frequently involves telling others what happened. However, research indicates that responses to disclosure, rather than the act of disclosure in and of itself, are strong predictors of postdisclosure outcomes (e.g., Ahrens, Campbell, Temon-Thames, Wasco, & Sefi, 2007; Ullman, 2007). Although this relationship has been well established empirically, less is known about what constitutes a supportive response. Accordingly, this has been acknowledged as an important direction for future research (e.g., Ahrens et al., 2007) and represents a main objective of the present study.

In addition, the majority of previous disclosure research consists of either retrospective report (e.g., Paine & Hansen, 2002; Smith et al., 2000), which is subject to recall bias, or disclosure to researchers or confederates (e.g., Lepore et al., 2000; Lepore et al., 2004), which compromises ecological validity. Thus, the fact that the current study examined disclosure in the context of real relationships makes it distinct from prior examinations of disclosure in more artificial contexts.

While traumatic events constitute one type of stressful life experience, there are a variety of stressful life experiences that are not only common in the general population (see Lantzius, House, Mero, & Williams, 2005) but also are considered highly distressing (e.g., bereavement, betrayal of trust, loss of an important relationship). Thus, we examined responses to disclosure of a variety of stressful life events that included, but was not limited to, the disclosure of traumatic experiences.

Other elements of the study design were also intended to address limitations of prior research. For instance, because recipients of disclosure are frequently friends, partners, or family members (e.g., Ahrens et al., 2007; Leaper, Carson, Baker, Holliday, & Myers, 1995), participants in the current study disclosed to people they identified as friends. To reduce the potential confounds associated with participants disclosing an experience they had shared previously with their friend, we limited the topics of disclosure to “first-time” disclosures, which have been highlighted as an important area for further research exploration (e.g., Ahrens, 2006). Because it is possible for listeners to have helpful intentions, but for these support attempts to be perceived as negative or harmful by disclosers (Campbell et al., 2001), we also made sure to include disclosers’ perceptions of interactions. Finally, in an attempt to address the limitations of prior research that focuses solely on
verbal reactions to disclosure (e.g., Leaper et al., 1995), we attended to both verbal and nonverbal responses to disclosure.

**Summary of Objectives**

In summary, we aimed to do the following:

1. Capture the processes underlying disclosing life events for the first time to close others, as the disclosures occur.

2. Examine the types of verbal and nonverbal responses given after disclosure and identify characteristics that constitute a supportive response.

3. Investigate the impact of factors such as relationship quality, trauma symptoms, and trauma history on disclosers’ perceptions of listeners’ responses to disclosure.

**Method**

**Participants**

The sample comprised 106 university students and community members (for the purposes of the study, distinctions were not made between the two). Recruitment began with the Department of Psychology’s Human Subjects Pool (HSP) at the University of Oregon and participants were given academic credit to partially fulfill a course requirement. Each HSP participant was required to find a friend, whom he or she had known for at least three months, who would also be willing to participate during the same time; this individual was compensated monetarily if he or she was not eligible for credit. Participants did not self-select into the study based on knowledge of the content but were instead selected for the study based on schedule and friend availability. Approval to run the study was granted by the University of Oregon’s Institutional Review Board.

Approximately 63% of the participants were female. In approximately 51% of the pairs both participants were female, approximately 26% were male–female, and approximately 22% were male–male. Ages ranged from 18 to 33, (M = 19.70, SD = 2.33), and the majority identified as European American only (76.9%). Approximately 97% were born in the United States, and approximately 81% reported that both of their parents were born in the United States.

**Materials**

**Initial Self-Report Measures**

**Demographics questionnaire**. This questionnaire was based on a standard collection of demographic items used in our laboratory and included questions about age, gender, ethnic identification, birthplace of participant and participant’s parents, language fluency, disability, highest level of education completed, number of hours of sleep the night prior, and mood and anxiety levels.

**Relational Health Index-Peer version (RHI-P)**. The RHI-P (Liang, Tracy, Taylor, Williams et al., 2002) is a 12-item measure used to assess three dimensions of relational health: engagement, authenticity, empowerment/ zest. Internal consistency for each subscale, as well as the composite score, has been shown to be adequately high (ranges from $\alpha = .73$ to $\alpha = .85$) (Liang et al., 2002). Moderate convergent validity with similar measures and their subscales has been established (e.g., Genero, Miller, Surrey, & Baldwin, 1992).

**Betrayal Trauma Inventory (BTI)**. A shortened version of the BTI (Freyd, DePrince, & Zurbriggen, 2001) was used to assess physical, emotional, and sexual abuse perpetrated by both very close others (traumas with high betrayal – HiBTs) and not very close others (traumas with low betrayal – LoBTs) via behaviorally defined items. The BTI has been used in several other studies (e.g., Freyd, Kleist, & Allard, 2005) and adheres to previous recommendations of screening for multiple types of trauma and multiple events within those types (e.g., Green et al., 2000). Prior research also indicates a high level of agreement (62–77%) between the BTI and another trauma inventory, the Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006).

**Trauma Symptom Checklist (TSC-40)**. The TSC-40 (Elliott & Briere, 1992) is a 40-item instrument measuring the frequency with which posttraumatic symptoms are experienced. The measure has been shown to have adequate internal consistency (Elliott & Briere, 1992), as well as good confirmatory (Gleaves & Eberenz, 1995) and convergent validity (e.g., Gold & Cardeña, 1998).

**Postdisclosure Questionnaire**

**Social Reactions Questionnaire (SRQ)**. The SRQ (Ullman, 2000) is a 48-item self-report measure used to assess both positive and negative reactions a person receives from others after the disclosure of sexual assault. Although this questionnaire was originally created for sexual assault disclosures, the reactions described in the items are not specific to sexual assault and therefore could theoretically be exhibited in response to disclosure of a wide variety of experiences. Both the disclosers and listeners used the SRQ to rate the listeners’ responses to disclosure (LRD). High internal consistency (ranging from $\alpha = .77$ to $\alpha = .93$) and adequate test–retest reliability (ranging from $\alpha = .64$ to $\alpha = .81$) have been demonstrated (Ullman, 2000).

**Coding System Development & Evaluation**

A coding system and accompanying brief instructions document were created so that the videotaped disclosure interactions could be quantified. The final coding system included 12 items that were used to assess the first 6 min of each disclosure interaction. Both participants’ postures (leaning left, right, backward, and forward, and sitting upright) were assessed at the beginning, middle, and toward the end of the interaction (when the researcher left, 3 minutes into the disclosure, and 6 minutes into the disclosure). A frequency count of the listeners’ nonverbal and verbal interruptions was also generated. Nonverbal and verbal behaviors were judged to be interruptions based on their effect on the discloser. For instance, if a listener made a utterance (e.g., “hmm,” asked a question) or moved (e.g., nodded, fidgeted) in a way that did not appear to derail or distract the discloser, it was not considered an interruption. If, however, such behaviors appeared to discourage the discloser from continuing, forced him or her to change the topic, or otherwise appeared disruptive or distracting in some way, they were coded as interruptions. Finally, LRD were rated by
coders via a five-item "global assessment” measure (GAC), with higher scores representing more negative LRD. The GAC items, rated on a Likert scale, were as follows: (1) explicitly and implicitly promoted disclosure; (2) conveyed support (e.g., warmth, validation, respect, openness); (3) seemed to really listen to the other person (e.g., body posture, eye contact); (4) asked questions and made comments that seemed to derail/disturb the discloser from talking about the chosen topic; (5) was moving in a way that seemed distracting to the discloser (e.g., fidgeting, tapping, playing with cell phone). To generate an index that reflected both coders' ratings, an average was taken for each item, resulting in one final set of coder ratings for each pair.

Two undergraduate coders with prior research experience assisted with this project for academic credit and underwent several iterations of an extensive training process before they began coding videotapes. Reliability analyses were conducted throughout the coding process to determine whether coders remained reliable. A final reliability analysis conducted after both coders had coded all videotapes revealed high interrater reliability (global assessment ICC = .950; interruptions ICC = .978; for posture, ω = .893, all ps < .001).

Procedure

The data in the present study were collected as part of a larger exploratory study. Sessions lasted for approximately 90 minutes. Participants first completed a series of predisclosure self-report questionnaires and were then randomly assigned to a “discloser” (n = 53) or “listener” (n = 53) condition. The discloser was asked to disclose an event or experience to the “listener” that he or she had never told this friend before; both participants were asked to respond as naturally as possible, as they would in everyday circumstances. The interaction was videotaped for 20 minutes for subsequent coding and analysis. After the disclosure interaction, participants completed postdisclosure questionnaires.

Results

Descriptives

Approximately 65% of the sample indicated that they experienced at least one type of traumatic event on the BTI, with 40.2% of the sample indicating that they experienced at least one form of emotional, physical, or sexual abuse. In addition, 32.3% indicated that they experienced at least one type of HiBT and 18.9% indicated that they experienced at least one type of LoBT. Correlations among variables of interest can be found in Table 1.

Analyses of LRD and Posture

Because a limited number of people were leaning forward or to the side (left or right) throughout the disclosure interaction, a narrower set of posture groupings was created to generate more equivalent cell sizes. Because a category combining leaning forward with other posture groupings did not seem to make sense conceptually, and because so few people were leaning forward (as ranged from 2 to 4 depending on the time point), these pairs were excluded from the posture analyses. We then created “backward” and “neutral” (i.e., sitting upright or leaning to the side) categories. An independent samples t test revealed that LRD, as rated by the coders, was not different between conditions, ω = .950, nor were the differences between listeners’ ratings (on the GAC), which were found to be significantly more negative when listeners were leaning backward (M = 3.55, SD = .33, n = 18) toward the end of the disclosure, compared to listeners sitting in neutral positions (M = 3.20, SD = .80, n = 28), t(38) = 0.282, p < .05, two-tailed, Cohen’s D = .572. Findings were not significant when examining disclosing’ assessments of listeners’ responses (as indicated by ratings on the SRQ), ps > .05. Posture ratings at the beginning and during the middle of the disclosure were not significantly related to LRD, as rated by coders or disclosers, ps > .05.

Analyses of LRD and Interruptions

Because the distribution of the average number of interruptions made by listeners was bimodal, a nonparametric curve estimation analysis was used to examine the relationship between LRD and level of interrupting so that the continuous nature of the variable could be maintained. Results indicated that the cubic model best captured this relationship, F(3, 49) = 2.984, p < .05, R² = .154, such that the most supportive LRDs were associated with moderate levels of interruption, whereas moderately unsupportive LRDs were associated with lower levels of interruption, and highly unsupportive LRDs were associated with higher levels of interruption (see Figure 1). Although the quadratic model was also significant, F(2, 50) = 3.573, p < .05, R² = .131, the cubic model accounted for a greater amount of variance. The linear model was not significant, p > .05. When using listeners’ ratings of LRDs, there was no significant relationship between level of interrupting and negative reactions to disclosure, p > .05.

Analyses of Disclosers’ Perceptions of LRD

A regression analysis was used to examine the relative impact of disclosers’ ratings of relational health, disclosers’ trauma history, disclosers’ level of trauma symptoms, and disclosers’ number of interruptions on disclosers’ perceptions of LRD. Although the full model was significant, F(5, 38) = 2.990, p < .05, R² = .312, the only significant predictor was disclosers’ ratings of relational health, p < .01. A model including only relational health was significant, F(1, 38) = 13.1, p < .01, R² = .261, Cohen’s f² = .353, with relational health accounting for 26.1% of the variance in LRD. (standardized β = −.511, p < .01) such that higher levels of
relational health were significantly associated with fewer unsupportive LRDs.

Discussion

When examining the association between the listeners' posture and LRD, we found that leaning backward toward the end of the disclosure was associated with significantly more negative LRD, as rated by coders. This suggests that listeners who were leaning backward toward the end of the disclosure may have conveyed a certain listening style that coders perceived as unsupportive or disengaged. When examining disclosers' ratings, there did not appear to be a significant effect of posture on disclosers' perceptions of LRD. Thus, it is unclear whether the disclosers did not consider posture as much as coders when assessing level of support, or whether they did not experience this posture as unsupportive. The possibility also exists that there are postural fluctuations throughout any given disclosure interaction, such that a listener's posture at crucial points (e.g., right after the discloser shares something he or she is ashamed of) is more indicative of level of support rather than a posture at the beginning, middle, or end of the disclosure. Given that the timing would be unique to different interactions, the methodology of the current study may not have adequately captured these nuances. It is also important to note that because coders and disclosers used different measures to assess LRD (GAC and SRQ, respectively), and the coders' measures were catered to the specific needs of the study, it is possible that the inconsistent findings are a function of differential sensitivity of the measures rather than actual differences.

A significant cubic relationship between interruptions and coders' ratings of LRD was also found. More specifically, the most supportive reactions were associated with moderate levels of interruption, whereas moderately unsupportive reactions were associated with lower levels of interruption, and highly unsupportive reactions were associated with higher levels of interruption. However, this pattern was not significant for disclosers' ratings of LRD, perhaps for the reasons mentioned above. Nonetheless, the findings that both posture and level of interruptions were significantly associated with coders' ratings of LRD are consistent with prior research indicating the importance of both verbal and nonverbal behaviors, as well as their interaction, in conveying empathy (Haase & Tepper, 1972).

The most significant predictor of disclosers' ratings of LRD was level of relational health, which accounted for approximately 26% of the variance in disclosers' ratings of listeners' responses. Perhaps the strong impact of relational health on the way in which support was provided by listeners and received by disclosers reflects similar processes to those that have been observed in therapeutic contexts (i.e., the importance of the therapeutic relationship in predicting treatment outcome) (e.g., Martin, Garske, & Davis, 2000).

This finding regarding the importance of relational health might also explain the discrepancies in ratings made by coders and disclosers discussed previously. In other words, because coders had no knowledge of the preexisting relationship between the discloser and listener, they based their assessment of support solely on observable verbal and nonverbal behaviors. Disclosers, on the
other hand, may have been more able to make these assessments contextually and interpret listeners' behaviors in light of the history of the relationship. Because disclosures may be quite accustomed to how listeners behave, for instance, certain unsupportive behaviors may have been less salient to disclosers compared to coders. It is also possible that for dyads with higher levels of relational health, disclosers were positively biased in evaluating listeners' level of support. Perhaps in the context of a relationship high in relational health, if a listener responds in an unsupportive manner, this may be forgiven or overlooked more than if the relationship were low in relational health. Alternatively, for dyads with a poor relationship history, it is possible that disclosers may be extremely sensitive to unsupportive reactions or even be primed to perceive reactions as unsupportive when there is ambiguity.

Given the differences between the coders' and disclosers' ratings of LRD observed in the current study, it is important that future longitudinal research designs examine whether coders' or disclosers' perceptions of interactions are more predictive of positive outcomes following disclosure. It is possible that both coders and disclosers attend to different, though equally important, aspects of these interactions, and that taking both perspectives into account would generate the most comprehensive information regarding the operationalization of supportive responses to disclosure.

Limitations

The current study is a preliminary step toward future research on supportive responses to first-time disclosures of stressful life experiences, particularly given the lack of research in this area. However, several limitations are of note. First, the low power and limited demographic variation in our sample made it difficult to examine the ways in which disclosure processes and responses to disclosure may vary as a function of gender, age, ethnicity, socioeconomic status, and relationship type. In light of the significant contributions of relational health to disclosers' perceptions of LRD, future research clarifying the ways in which the gender composition of dyads as well as various relationship types (e.g., romantic partners, acquaintances, strangers, long-term friendships) have an impact on the provision and perception of support would be useful. Because relational health is not the only measure of relationship quality, gathering additional information regarding the nature of participants' relationships would be another valuable direction for future research.

While our study arguably has improved ecological validity over prior research designs that utilize artificial relationships to study disclosure processes, a limitation inherent in such a method is the lack of control over variation in relationships between disclosers and listeners. Because distinctions were not made between community members and students, we also could not assess for demographic differences in the two samples.

Furthermore, there are several limitations related to the measures used in the present study. First, the possibility exists that inclusion of trauma-related measures may have influenced responses to the self-report measures and behaviors during the disclosure interaction. In addition, LRD were measured differently by disclosers and coders, which makes it difficult to make direct comparisons of ratings. Because of the lack of preexisting measures assessing responses to a wide range of types of disclosures, we created some new measures for the purposes of this study and used a measure that has been used mostly for assessing disclosure to sexual assault (e.g., Ullman, 2000). As such, these measures may not have sufficiently captured the dynamics of the disclosure interactions. Thus, future research should work to validate these measures for these purposes and identify additional measures with strong psychometric properties that would be informative in this context.

Conclusions

In summary, the findings from this exploratory study provide a foundation for future research identifying nonverbal and verbal characteristics of unsupportive and supportive responses to first-time disclosures of stressful life experiences. The fact that these results were derived from real disclosures between people in real relationships, and not into account disclosers' perceptions, is an important improvement upon prior research. The findings indicating that both posture and level of interrupting were shown to influence coders' perceptions of listeners' responses are encouraging, particularly because both of these behaviors are modifiable and related research demonstrates that supportive listening skills can be learned (e.g., Foyes & Freyd, 2011). Finally, the finding that relational health is such a strong predictor of disclosers' perceptions of support suggests that promoting relational health in both clinical and nonclinical contexts could help create a more supportive environment in which disclosure can occur.

References


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