The Effect of Storytelling on Psychological Safety

A Scoping Review
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This research aims to uncover the linkages between storytelling, psychological safety, and voice.

There is some support to indicate the relationship between storytelling, psychological safety, and voice, however, there is more research and study needed to understand how storytelling might be used to give rise to psychological safety and promote voice behavior.
This scoping review aimed to outline and summarize the studies that depict how storytelling and narrative are linked and explore if and how they used to give rise to psychological safety within organizations and teams.
Psychological Safety

Psychological safety has been touted as an important cultural pillar in high functioning teams and productive organizations for decades (Newman, A., Donohue, R., Nathan, E., 2017).

The Importance of Safety
Psychological safety implies that there is no fear or reservation within the human interaction. Instead, there is respect, comfort, and no fear of judgment or retribution when engaging with fellow team members and others within an organization.

What Does it Imply?
Stories are the water we swim in.

- David Foster Wallace
The protocol for this scoping review was created and submitted to PROSPERO. The eligibility criteria for this search were as follows:

**Inclusions:**
Organizations, managers, leaders, frontline workers, workers, employees, employers, psychological safety, storytelling narrative, trust, organizational structure, time, roles within organizations, modality of storytelling (in person, video, audio, written, virtual reality), implementation of psychological safety

**Exclusions:**
Non-working individuals and individuals under 18
Subject Matter Experts

Two subject matters were consulted on the subject of storytelling.

**Matt Lewis**
Core Leadership consultant for 3rd Conversation

3rd Conversation is an intervention that brings health professionals and patients together—outside the exam room—to connect and explore common human experiences in service of a better system that meets everyone’s needs. Matt specializes in storytelling as a relational activity for healing.

**Brian Sturm**
Associate Dean for Academic Affairs and Professor at the UNC School of Information and Library Science

Dr. Sturm specializes in storytelling as a tool and was consulted on the topic of using story for implementation to inform this systematic review process.
Review of Literature

Nine databases were searched for this study:

- Academic Search Premier
- PsychInfo
- ProQuest Central
- Scopus
- AnthroSource
- Business Source Premier
- Global Health
- PubMed
- Web of Science.

The search terms included:

- (Psychological Safety OR psychologically safe OR interpersonal risk) AND (storytelling OR “Story Telling” OR Narrative OR Enablers OR “Team Behaviors” OR “team behaviors” OR “team behavior” OR “team behaviors” OR “Organizational Behaviors” OR Crisis OR crises OR “Trust Building” OR Organizations OR “Trust Behaviors” OR “Learning of Safety” OR “leadership behavior” OR leadership behaviors OR leader behavior OR servant leadership OR “organizational climate” OR “organizational culture”) AND (“Implementation” OR “Implementing”) for some databases.
Documents Retrieved

- A total of 5,491 documents were aggregated based on the search terms above.
- The results of the abstract screening resulted in 44 documents for full-text review.
- 26 documents for inclusion in the overall systematic review, 20 intervention articles, and 6 reviews.

Data Extraction

- Two different data extraction documents were created, one for intervention studies and one for reviews.
- Data extraction elements centered on extracting elements centered on storytelling definitions, measures and interventions, psychological safety definitions, measures and interventions, and voice definitions, actions and outcomes.
Final Studies

- Once the data extraction and full-text review were completed on the 44 articles, 26 articles were extracted to use for the final review.
- 20 intervention articles and 6 review articles
Storytelling

Psych Safety

Voice

Propels/Promotes

Encourages

Sustains

Gives rise to
<table>
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<tr>
<th>Psychological Safety</th>
<th>Measures</th>
<th>Model Component</th>
<th>Evidence of Storytelling</th>
<th>Notes</th>
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<tbody>
<tr>
<td>The effects of power, leadership and psychological safety on resident event reporting.</td>
<td>Appelbaum, Nitai P; Dow, Alan; Mazmanian, Paul; Jundi, Dustin; Appelbaum, Eric N</td>
<td>Psychological Safety measure (as a mediator) other measures: Power Distance, leadership Inclusiveness, Adverse events</td>
<td>Leadership and Psychological Safety (leading to adverse reporting/vocie)</td>
<td>Psych Safety moderates increase in vocie and adverse event reporting * Here we are assuming that adverse event reporting itself is a form of story telling</td>
</tr>
<tr>
<td>Learning behaviours in the workplace: The role of high-quality interpersonal relationships and psychological safety</td>
<td>Carmeli, Abraham; Brueller, Daphna; Dutton, Jane E</td>
<td>Psychological safety measure (as a mediator). Other measures: Perceived learning behaviors, High quality relationships</td>
<td>Psychological Safety moderating high quality relationships leading to impact learning behaviors and voice</td>
<td>Psych safety moderating high quality relationships, high quality relationships leading to voice Voice link is tangential</td>
</tr>
<tr>
<td>High-quality relationships, psychological safety, and learning from failures in work organizations</td>
<td>Carmeli, Abraham; Gittell, Jody Hoffer</td>
<td>Psychological Safety was measured (Edmonson’s measure) as well as ”High quality relationships”.</td>
<td>Psychological Safety mediates high quality relationships, resulting in ability to learn from work failures within organizations.</td>
<td>Tangentially, the way that high quality relationships is measured is through looking at alignment with shared goals, shared knowledge and mutual respect. The type of communication and voice that leads to high-quality relationships could include storytelling.</td>
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**High quality Relationships measure:** High quality relationships: To construct a measure of high-quality relationships, we drew on Gittell’s (2003) conceptualization. Gittell (2003) suggests three features of high-quality relationships that underly relational coordination. These features are: (1) shared goals, (2) shared knowledge, and (3) mutual respect. Drawing on this conceptualization, we developed a 10-item scale for measuring these three features of high-quality relationships: three items for shared goals, four items for shared knowledge, and three items for mutual respect.
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<td>Cultivating a culture of reflection among pharmacy students through storytelling.</td>
<td>Gilliam, Eric H; Brunner, Jason M; Bolan, Jay; Lee, Susie; Nuffer, Wesley; Franson, Kari L; Thompson, Megan E</td>
<td>The intervention was a story slam and the measures were qualitative student reflections</td>
<td>Storytelling as an intervention</td>
<td>N/a</td>
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<tr>
<td>'Looking like a bad person': vocabulary of motives and narrative analysis in a story of nursing collegiality.</td>
<td>Padgett, Stephen M</td>
<td>Narrative analysis on vocabulary</td>
<td></td>
<td>*Story Slam, a four-hour storytelling competition, was incorporated into the spring semester of the first professional year of a PharmD program. The event featured short first-person stories told by faculty members as well as students. Students were invited to participate in a pre- and post-intervention survey and focus group. An inductive qualitative analysis of the resulting data was conducted using textual and audio artifacts. *</td>
</tr>
<tr>
<td>Animated stories of medical error as a means of teaching undergraduates patient safety: an evaluation study.</td>
<td>Cooper, Kerri; Hatfield, Emma; Yeomans, James</td>
<td>Students watched videos of doctors describing serious or “near miss” events. They were then asked if viewing these videos impacted their perceptions or beliefs. Students overall felt these videos were impactful and increased their engagement.</td>
<td>Listening to stories of negative outcomes or near negative outcomes improved medical students engagement and overall learning about patient safety</td>
<td>Qualitative interviews from the students after watching the stories being told demonstrated that watching these stories helped encourage speaking up and many felt it was a good thing to encourage environments of speaking up behavior. This type of environment could be described as psychologically safe.</td>
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Storytelling
- Who tells the story
- What is the story
- How is the story told
- Why is the story told

Voice
- Expectations of the voice
- The voice at different levels
- Levels (individual, group, etc.)
- Reality check (the motivation behind the voice)
- What voice is improving (relationship, group, organization)
- Loops (exchanges)

Psych Safety
- Individual
- Team
- Climate/culture
- For what purpose
- How long does it take to get there?
- Reality check (trust; levels of trust and risk)
- Multilevel model

Propels/Promotes
Sustains
Encourages
Storytelling

Voice/reporting

Trust

Psychological Safety: Individual

- Propels/Promotes
- Builds
- Sustains

- Gives rise to
- Enhances
- Reinforces
Storytelling

Propels/Promotes

Voice/reporting

Gives rise to

Psychological Safety: Individual

Sustains

Sustains

Gives rise to

Safety Culture

Promotes

Learning from failures

Encourages

Enhances

Team Performance
Storytelling

Voice/reporting

Psychological Safety: Individual

Leadership

Safety Culture

Learning from failures

- Propels/Promotes
- Gives rise to
- Sustains
- Encourages
- Enables
- Promotes
- Gives rise to
- Enables
Current literature offers some support; there is further explanation to be done.

For further research, it will be important to uncover the constructs that make storytelling a useful intervention tool (e.g., trust, leadership, safety culture, etc.).
Next Steps

- Finalize the manuscript detailing these findings
- Make clear recommendations for future research based on the final models
Conclusion

- There is some evidence to suggest that storytelling could be a useful tool in creating and sustaining psychological safety and encouraging voice.
- The use of storytelling as an intervention requires further investigation.
- There are other constructs to consider as this model becomes more researched and robust.


Gilliam, Eric H; Brunner, Jason M; Bolan, Jay; Lee, Susie; Nuffer, Wesley; Franson, Kari L; Thompson, Megan E., Cultivating a culture of reflection among pharmacy students through storytelling. American Journal of Pharmaceutical Education Apr 2020, 84 (4) 7633; DOI: 10.5688/ajpe7633


