

Video-based Caring Contacts for veteran suicide prevention

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Background/Overview

- Veteran suicide rates remain elevated.(Wolfe-Clark & Bryan, 2017; Andreasson et al., 2016)
 - A brief, low-cost intervention may reduce these rates.
 - Caring Contacts (CC).
 - Effective in reducing SI/SA among military personnel.(Ougrin et al., 2015)
- Various types of contact:
 - handwritten letter, voice call, or text message.
 - Limitations?(Comtois et al., 2019; Bennewith et al., 2014)
- What proposed mechanism drives CC's effectiveness?(Milner et al., 2016)
- Is it possible to further refine CC and overcome its limitations?

Background/Overview (continued)

- Potential utility of sending personalized *video* messages?
 - Face-visible communication strengthens feeling of connectedness. (Sprecher, 2014)
 - Connectedness → Buffer against SI/SA. (Klonsky & May, 2015)
- Video modification of CC (i.e., ‘CC-V’) seems promising, but...
 - Video novelty presents unknowns.
- We sought to identify veteran preferences for video contact (descriptive).
 - **Hypothesis:** Veterans would perceive video contact as most ‘caring’.
 - Video message vs. Handwritten note vs. voice call vs. text message.
 - **Exp:** Veteran preferences for sender demographics and CC-V features.
 - Demographics: Medically aligned vs. not; veteran vs. not; matching gender/race vs. not.
 - CC-V features: morning vs. afternoon vs. evening contact; same vs. different sender

Method

- **Participants:** 155 U.S. Military Veterans.
 - Recruitment = Qualtrics Panel
 - Mean age = 43.97, SD = 13.35 years
 - 61.94% Male
 - 75.48% White, 12.26% Black/African American, or 4.52% Other
 - 50.97% Army
 - 94.84% own a smart phone
- **Measures**
 - *Self-Injurious Thoughts and Behaviors Interview* (SITBI; Nock et al., 2007)
 - *Veterans Media Preference Questionnaire (VMPQ)*

Method (continued)

- **Procedures**

- Inclusion criteria = 18+ age, US military Veteran status, history of SI/SA, ability to understand English language.
- Consented, completed questionnaires, provided with suicide prevention resources.

- **Analyses**

- Repeated measures analysis.
- Resulting data were significantly skewed, non-responsive transformations.
- Friedman test and posthoc Wilcoxon signed rank test (Bonferroni corrected).
- Exploratory analyses = chi square.

Results (Care)

- **Hypothesis:** Veterans would perceive video contact as most 'caring'.
 - Difference in perceived 'care' observed among the four contact modalities.
 - ($\chi^2[3] = 46.94, p < .001$)
 - Posthoc comparisons:
 - Handwritten note (75, IQR 52-89) > electronic text (53, IQR 43-78; $Z = -5.33, p < .001$)
 - Voice message (72, IQR 51-83) > electronic text (53, IQR 43-78; $Z = -5.49, p < .001$)
 - Video message (73, IQR 50-89) > electronic text (53, IQR 43-78; $Z = -4.29, p < .001$)
 - Handwritten note ~ Video message (75, IQR 52-89 vs 73, IQR 50-89; $Z = -1.68, p = .09$)

Results (Care, continued)

- **Exp:** Veteran preferences for sender demographics and CC-V features.
 - **Sender demographics**
 - Medical personnel > Non-medical personnel (76, IQR 53-92 vs 67, IQR 50-84; $Z = -3.51, p < .001$)
 - Difference observed in sender status for veteran (or not; $\chi^2[2] = 52.80, p < .001$)
 - Non-combat Veteran > Non-veteran (76, IQR 60-95 vs 53 IQR 47-81; $Z = -6.93, p < .001$)
 - Combat veteran > Non-veteran (80, IQR 62-99 vs 53 IQR 47-81; $Z = -7.31, p < .001$)
 - Combat veteran > Non-combat veteran (80, IQR 62-99 vs 76, IQR 60-95; $Z = -3.01, p = .003$)
 - No differences observed for sender matching veteran's gender or race.

Results (Care, continued)

- **Exp:** Veteran preferences for sender demographics and CC-V features.
 - **CC-V features**
 - Difference observed in message timing ($\chi^2[2] = 18.16, p < .001$).
 - Evening contact > morning (73, IQR 50-87 vs 62, IQR 50-82; $Z = -3.57, p < .001$)
 - Evening contact > afternoon (73, IQR 50-87 vs 66, IQR 50-79; $Z = -2.59, p = .01$)
 - Veterans preferred continued contact from the same sender (76, IQR 53-93) compared to different senders (53, IQR 43-77; $Z = -5.79, p < .001$).

Discussion

- **We sought to identify veterans' preferences for CC-V.**
 - Comparing contact modalities.
 - Demographics of video message sender.
 - Timing/continuity.
- **Implications**
 - Generally, participants viewed CC favorably.
 - Observed equivalence between handwritten letter and video message.
 - With enough refinement, CC-V...
 - Could maintain effectiveness of CC, but overcome limitations of mechanical/impersonal.
 - Reduce SI/SA rates among veterans.

Discussion (continued)

- **Limitations**

- Online sample recruitment.
- Video message?
- Sample demographics may not generalize broadly.

- **Future directions**

- Further refinement, replication.
- Quantify the mechanism driving CC's effectiveness.
- Examine how the effects of CC (or CC-V) unfold temporally.
- Clinical trial.

References

- Andreasson, K., Krogh, J., Wenneberg, C., Jessen, H. K., Krakauer, K., Gluud, ... Nordentoft, M. (2016). Effectiveness of Dialectical Behavior Therapy versus Collaborative Assessment and management of suicidality treatment for reduction of self-harm in adults with borderline personality traits and disorder: A randomized observer-blinded clinical trial. *Depression and Anxiety*, 33, 520-530.
- Bennewith, O., Evans, J., Donovan, J., Paramasivan, S., Owen-Smith, A., Hollingworth, W., ... Gunnell, D. (2014). A contact-based intervention for people recently discharged from inpatient psychiatric care: A pilot study. *Archives of Suicide Research*, 18(2), 131-143. doi:10.1080/13811118.2013.838196
- Comtois, K. A., Kerbrat, A. H., DeCou, C. R., Atkins, D. C., Majeres, J. J. Baker, J. C., & Ries, R. K. (2019). Effect of augmenting standard care for military personnel with brief caring text messages for suicide prevention. *Journal of the American Medical Association*, 76, 474-483.
- Klonsky, E. D., & May, A. M. (2015). The three-step theory (3ST): A new theory of suicide rooted in the “ideation-to-action” framework. *International Journal of Cognitive Therapy*, 8(2), 114-129.
- Milner, A., Spittal, M. J., Kapur, N., Witt, K., Pirkis, J., & Carter, G. (2016). Mechanisms of brief contact interventions in clinical populations: a systematic review. *BMC psychiatry*, 16, 194. <https://doi.org/10.1186/s12888-016-0896-4>
- Nock, M. K., Holmberg, E. B., Photos, V. I., & Michel, B. D. (2007). Self-Injurious Thoughts and Behaviors Interview: Development, reliability, and validity in an adolescent sample. *Psychological assessment*, 19(3), 309–317. <https://doi.org/10.1037/1040-3590.19.3.309>
- Ougrin, D., Tranah, T., Stahl, D., Moran, P., & Asarnow, J. R. (2015). Therapeutic interventions for suicide attempts and self-harm in adolescents: Systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*, 54, 97-107.
- Reger, M. A., Gebhardt, H. M., Lee, J. M., Ammerman, B. A., Tucker, R. P., Matarazzo, B. B.,... Ruskin D. A. (2019). Veteran preferences for the Caring Contacts suicide prevention intervention. *Suicide and life-threatening behavior*, 49, 1439-1451. <https://doi.org/10.1111/sltb.12528>
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Newbury Park, CA: SAGE Publications, Incorporated.
- Sprecher, S. (2014). Initial interactions online-text, online-audio, online-video, or face-to-face: Effects of modality on liking, closeness, and other interpersonal outcomes. *Computers in Human Behavior*, 31, 190-197.
- Wolfe-Clark, Andrea & Bryan, Craig. (2017). Integrating Two Theoretical Models to Understand and Prevent Military and Veteran Suicide. *Armed Forces & Society*. 43. 10.1177/0095327X16646645.

Thank you for attending!

Stay safe!