

# Research Citations Supporting Safety Planning Intervention

# **Systematic Reviews and Meta-Analysis:**

Marshall, C. A., Crowley, P., Carmichael, D., Goldszmidt, R., Aryobi, S., Holmes, J., Easton, C., Isard, R., & Murphy, S. (2023). Effectiveness of Suicide Safety Planning Interventions: A Systematic Review Informing Occupational Therapy. *Canadian journal of occupational therapy. Revue canadienne d'ergotherapie*, *90*(2), 208–236. <a href="https://doi.org/10.1177/00084174221132097">https://doi.org/10.1177/00084174221132097</a>

Abstract citation: "Evidence across a range of studies indicates that SSP (suicide safety planning) is effective for reducing suicide behavior (SB) and ideation (SI). While some studies have demonstrated effectiveness for reducing symptoms of mental illness, promoting resilience and service use, the number of studies exploring these outcomes is currently limited....Occupational therapists support individuals expressing SI, and SSP is a necessary skill for practice."

Ferguson M, Rhodes K, Loughhead M, McIntyre H, Procter N. The Effectiveness of the Safety Planning Intervention for Adults Experiencing Suicide-Related Distress: A Systematic Review. Arch Suicide Res. 2022 Jul-Sep;26(3):1022-1045. doi: 10.1080/13811118.2021.1915217. Epub 2021 Apr 29. PMID: 33913799.

Abstract citation: "The Safety Planning Intervention (SPI) is a valuable indicated intervention for general adult and veteran populations experiencing suicide-related distress, primarily in face-to-face, clinical settings. Quantitative findings indicate associations between the SPI and improvements in suicidal ideation and behavior, decreases in depression and hopelessness, along with reductions in hospitalizations and improvements in treatment attendance. Qualitative studies suggest the SPI is acceptable and feasible, with areas for development. SPIs have been shown to be adaptable to the clinical area in its modality (digital or paper-based), delivery (face-to-face or online), facilitation (clinician or self-administered) and multiplicity (as stand-alone or combined intervention)."

Nuij C, van Ballegooijen W, de Beurs D, Juniar D, Erlangsen A, Portzky G, O'Connor RC, Smit JH, Kerkhof A, Riper H. Safety planning-type interventions for suicide prevention: meta-analysis. Br J Psychiatry. 2021 Aug;219(2):419-426. doi: 10.1192/bjp.2021.50. PMID: 35048835.

Abstract citation: "To our knowledge, this is the first study to report a meta-analysis on SPTIs for suicide prevention. Results support the use of SPTIs to help preventing suicidal behaviour and the inclusion of SPTIs in clinical guidelines for suicide prevention. We found no evidence for an effect of SPTIs on suicidal ideation, and other interventions may be needed for this purpose."

# **Effectiveness Research:**

Stanley, B., Brown, G. K., Brenner, L. A., Galfalvy, H. C., Currier, G. W., Knox, K. L., Chaudhury, S. R., Bush, A. L., & Green, K. L. (2018). Comparison of the Safety Planning Intervention With Follow-up vs Usual Care of Suicidal Patients Treated in the Emergency Department. *JAMA psychiatry*, 75(9), 894–900. https://doi.org/10.1001/jamapsychiatry.2018.1776

Abstract citation: "This large-scale cohort comparison study found that SPI+ was associated with a reduction in suicidal behavior and increased treatment engagement among suicidal patients following ED discharge and may be a valuable clinical tool in health care settings."

Green, J. D., Kearns, J. C., Rosen, R. C., Keane, T. M., & Marx, B. P. (2018). Evaluating the Effectiveness of Safety Plans for Military Veterans: Do Safety Plans Tailored to Veteran Characteristics Decrease Suicide Risk?. *Behavior therapy*, *49*(6), 931–938. <a href="https://doi.org/10.1016/j.beth.2017.11.005">https://doi.org/10.1016/j.beth.2017.11.005</a>

Abstract citation: "Higher SP (safety plan) quality scores predicted a decreased likelihood of future suicide behavior reports. Higher scores on Step 3 (people and places that serve as distractions) predicted a decreased likelihood of future suicide behavior reports. More personally relevant SPs may reduce future suicide-related outcomes among veterans. Low SP quality scores highlight the need for training around SP implementation in the VA."

Gamarra, J. M., Luciano, M. T., Gradus, J. L., & Wiltsey Stirman, S. (2015). Assessing Variability and Implementation Fidelity of Suicide Prevention Safety Planning in a Regional VA Healthcare System. *Crisis*, *36*(6), 433–439. https://doi.org/10.1027/0227-5910/a000345

Abstract citation: "Variability in implementation fidelity and infrequent follow-up suggest a need for additional training and support regarding the use of safety plans for suicide prevention. Safety plans were mostly complete and of moderate quality, although variability existed, particularly in quality. Limited evidence of follow-up regarding safety planning was found in the medical charts. Higher quality was associated with fewer subsequent psychiatric hospitalizations."

# **Crisis Lines:**

Labouliere, C. D., Stanley, B., Lake, A. M., & Gould, M. S. (2020). Safety Planning on Crisis Lines: Feasibility, Acceptability, and Perceived Helpfulness of a Brief Intervention to Mitigate Future Suicide Risk. *Suicide & life-threatening behavior*, 50(1), 29–41. <a href="https://doi.org/10.1111/sltb.12554">https://doi.org/10.1111/sltb.12554</a>

Abstract citation: Counselors reported that SPI was feasible and helpful, and was used on both incoming and follow-up calls. Utilization and perceived effectiveness at time 2 were predicted by self-efficacy, feasibility, and helpfulness at time 1. The Safety Planning Intervention is a promising approach to reduce crisis callers' future suicide risk that hotline counselors report is both feasible and helpful.

#### **Adolescents and Children:**

May, A. M., Al-Dajani, N., Ballard, E. D., & Czyz, E. (2023). Safety plan use in the daily lives of adolescents after psychiatric hospitalization. *Suicide & life-threatening behavior*, *53*(5), 870–879. <a href="https://doi.org/10.1111/sltb.12989">https://doi.org/10.1111/sltb.12989</a>

Abstract citation: It is unclear if the study included the SPI, but over 90% of adolescents from the study reported having access to their safety plan during the month after discharge from hospitalization. Safety plan use and suicide ideation decreased over time. High risk adolescents retain and use their safety plans.

Abbott-Smith, S., Ring, N., Dougall, N., & Davey, J. (2023). Suicide prevention: What does the evidence show for the effectiveness of safety planning for children and young people? - A systematic scoping review. *Journal of psychiatric and mental health nursing*, *30*(5), 899–910. <a href="https://doi.org/10.1111/jpm.12928">https://doi.org/10.1111/jpm.12928</a>

Abstract citation: There is some research indicating that safety planning is effective for use with children/young people, but such evidence has primarily been obtained from females and there is need for more evidence from male study populations. Further research on its use is needed for certain groups of children/young people including those who are care experienced, or identify as lesbian, gay, bisexual and transgender. This review highlighted that healthcare professionals need specific training before they deliver safety planning for children/young people. It was identified that parents/carers have additional needs and should be involved in safety planning. An additional resource specifically for parents/carers should be developed.

Itzhaky, L., & Stanley, B. (2022). The Safety Planning Intervention for Children (C-SPI): rationale and case illustration. *Cognitive and Behavioral Practice*.

Abstract citation: In this paper, we describe the modifications made to the SPI to fit children ages 6–12 at risk of suicide and their caregivers' needs, as well as the steps of creating the child-SPI (C-SPI) in detail. The implementation of the C-SPI is illustrated through a case example, and potential challenges are identified.

Ewell Foster, C., Smith, T., Magness, C., Arango, A., Czyz, E., Finkelstein, S., ... & King, C. (2024). Collaborative Safety Planning with Youth during a Suicide-Related Emergency: Developmental and Family Considerations. *Evidence-Based Practice in Child and Adolescent Mental Health*, 1-16.

> Abstract citation: Suicide is a leading cause of death among youth, yet many risk reduction interventions have been designed for and tested with adults. The Safety Planning Intervention (SPI) is widely used by child-serving clinicians; however, little formal guidance exists about how to conduct the SPI in a developmentally tailored or family centered manner. This study aimed to 1) describe the content of youth safety plans to elucidate the range of strategies that youth find helpful in managing suicide risk, 2) apply operational definitions of SPI fidelity (completeness, personalization, consistency) developed with adults to SPI fidelity measurement with youth, and 3) explore the extent to which quality SPI implementation, including collaboration with parents, was related to parents' perceived readiness and behavioral engagement in supportive behaviors following a psychiatric emergency. A mixed methods approach was used to examine safety plans completed by 54 youth ages 12-17 (79.6% female; 88.9% White) during a psychiatric emergency department visit. Common preferred coping strategies included listening to music, spending time with supportive individuals, creating art/music, and exercise. Youth safety plans were of moderate quality (M = 3.09, SD = 1.34, range = 0–5), with 61% demonstrating evidence of personalization and 35% mostly personalized. Parent ratings of developmentally appropriate and family centered care were associated with both perceived readiness ( $\beta = .67$ , p < .001) and behavioral engagement ( $\beta$  = .51, p = .003) with safety plan recommendations in the days following ED discharge. Implications of these findings for clinical practice are discussed.

#### Refugees:

Cross, A. R. (2022). Staff perspectives of safety planning as a suicide prevention intervention for people of refugee and asylum-seeker background: A qualitative investigation. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 43(4), 331-338.

➤ **Abstract citation:** Background: Safety planning involves the co-development of a personalized list of coping strategies to prevent a suicide crisis. Aims: We explored the perspectives of workers regarding safety planning as a suicide prevention strategy for people of refugee background and those seeking asylum in Australia. Method: Participants attended suicide prevention training, specific to refugees and asylum seekers, at which safety planning was a key component. Semistructured, posttraining interviews (n = 12) were analyzed thematically. Results: Four key themes were identified: safety planning as a cocreated, personalized activity for the client; therapeutic benefits of developing a safety plan; barriers to

engaging in safety planning; strategies to enhance safety planning engagement. *Limitations:* First-hand refugee and asylum-seeker experiences were not included. *Conclusion:* As a relatively low-cost, flexible intervention, safety planning may be valuable and effective for these groups.

# **Peer delivery of Safety Planning Intervention:**

Pfeiffer, P. N., King, C., Ilgen, M., Ganoczy, D., Clive, R., Garlick, J., ... & Valenstein, M. (2019). Development and pilot study of a suicide prevention intervention delivered by peer support specialists. *Psychological services*, *16*(3), 360.

Abstract citation: Suicide rates in the United States have been increasing in recent years, and the period after an inpatient psychiatric hospitalization is one of especially high risk for death by suicide. Peer support specialists may play an important role in addressing recommendations that suicide prevention activities focus on protective factors by improving hope and connectedness. The present study developed a peer specialist intervention titled Peers for Valued Living (PREVAIL) to reduce suicide risk, incorporating components of motivational interviewing and psychotherapies targeting suicide risk into recovery-based peer support. A randomized controlled pilot study was conducted to assess the acceptability, feasibility, and fidelity of the intervention. A total of 70 adult psychiatric inpatients at high risk for suicide were enrolled into the study. Participants were randomized to usual care (n= 36) or to the 12-week PREVAIL peer support intervention (n= 34). Those in the PREVAIL arm completed an average of 6.1 (SD= 5.0) peer sessions over the course of 12 weeks. Fidelity was rated for 20 peer support sessions, and 85% of the peer specialist sessions demonstrated adequate fidelity to administering a conversation tool regarding hope, belongingness, or safety, and 72.5% of general support skills (eg, validation) were performed with adequate fidelity. Participants' qualitative responses (n= 23) were highly positive regarding peer specialists' ability to relate, listen, and advise and to provide support specifically during discussions about suicide. Findings demonstrate that a peer support specialist suicide prevention intervention is feasible and acceptable for patients at high risk for suicide.

Wilson, M. P., Waliski, A., & Thompson, R. G., Jr (2022). Feasibility of Peer-Delivered Suicide Safety Planning in the Emergency Department: Results From a Pilot Trial. *Psychiatric services (Washington, D.C.)*, 73(10), 1087–1093. https://doi.org/10.1176/appi.ps.202100561

Abstract citation: Data from 31 participants were available for analysis. Compared with participants with provider-delivered safety planning, participants with peer-delivered safety planning had similar ED lengths of stay, higher safety plan completeness, and higher safety plan quality. Acceptability of the safety planning process was similar for the two groups. Compared with participants receiving provider-delivered safety planning, participants receiving peer-delivered planning had significantly fewer ED visits during the subsequent 3 months than during the 3 months preceding the ED visit.

# **Telephonic Safety Planning Intervention:**

O'Connor, R. C., Smillie, S., McClelland, H., Lundy, J. M., Stewart, C., Syrett, S., Gavigan, M., McConnachie, A., Stanley, B., Smith, M., Brown, G. K., Stanley, B., & Simpson, S. A. (2022). SAFETEL: a pilot randomised controlled trial to assess the feasibility and acceptability of a safety planning and telephone follow-up intervention to reduce suicidal behaviour. *Pilot and feasibility studies*, *8*(1), 156. <a href="https://doi.org/10.1186/s40814-022-01081-5">https://doi.org/10.1186/s40814-022-01081-5</a>

Abstract citation: Findings indicated that SAFETEL was both acceptable and feasible. Hospital staff reported the intervention fitted and complemented existing services, and patients reported that they favoured the simplicity and person-centred approach of the safety planning intervention.

# **Group Safety Planning Research: Project Life Force**

Marin, L., Sullivan, S., Spears, A. P., & Goodman, M. (2019). "PROJECT LIFE FORCE-GERIATRIC": A NOVEL SUICIDE SAFETY PLANNING GROUP TREATMENT. *The American Journal of Geriatric Psychiatry*, *27*(3), S213-S214.

The initial PLF decreased suicidality in a non-geriatric Veteran population. During this preliminary treatment, the 80-page manual was finalized, the program yielded encouraging results, it was well tolerated, feasible, and effective in reducing suicidal ideations and behaviors. One significant limitation to the pilot study was the lack of representation of high-risk geriatric patients; therefore, a new pilot study titled PLF-G will be conducted within the geriatric population beginning in January 2019. The results of which will be included in final presentation.

Goodman, M., Brown, G. K., Galfalvy, H. C., Spears, A. P., Sullivan, S. R., Kapil-Pair, K. N., ... & Stanley, B. (2020). Group ("Project Life Force") versus individual suicide safety planning: A randomized clinical trial. *Contemporary clinical trials communications*, *17*, 100520.

Veterans Health Administration (VHA), twenty Veterans die by suicide each day. One component of the VHA's coordinated effort to treat high-risk suicidal Veterans, and diminish suicide risk, is the use of the safety plan. The current study aims to examine a novel intervention integrating skills training and social support with safety planning for Veterans at high-risk for suicide, "Project Life Force" (PLF). A randomized clinical trial (RCT) will be conducted examining if Veterans who are at high-risk for suicide will benefit from the novel group intervention, PLF, compared to Veterans who receive treatment as usual (TAU). We plan to randomize 265 Veterans over the course of the study. The primary outcome variable is the incidence of suicidal behavior, during follow-up, established using a rigorous, multimethod assessment. Secondary outcomes include depression, hopelessness, suicide coping and treatment utilization. Exploratory analyses include safety plan quality and belongingness for those in both arms as well as group cohesion for those in the PLF intervention. Strengths and limitations of this protocol are discussed.

Goodman, M., Sullivan, S. R., Spears, A. P., Dixon, L., Sokol, Y., Kapil-Pair, K. N., ... & Stanley, B. (2021). An open trial of a suicide safety planning group treatment: "Project Life Force". *Archives of suicide research*, *25*(3), 690-703.

Abstract citation: In 2008, the Department of Veterans Affairs mandated that clinicians oversee the construction of a Suicide Safety Plan for every patient who is identified as "high risk" for suicide. While the Suicide Safety Plan is a mandated "best practice," there are currently no recommended guidelines for its augmentation in a group setting. To address this gap, a novel group intervention, "Project Life Force," (PLF; a 10-session manualized psychotherapy), was developed and piloted. Results indicate high feasibility and acceptability. Exploratory analysis revealed statistically significant decreases in suicidal thoughts/behaviors, depression, and hopelessness. Feedback from Veterans and PLF therapists is also discussed. Despite some limitations (e.g. small sample size) exploratory results suggest that PLF may be a promising treatment for Veterans with suicidal symptomology.

Patel, S. R., Sullivan, S. R., Mitchell, E. L., Jager-Hyman, S., Stanley, B., & Goodman, M. (2023). Qualitative Study of Telehealth Delivery of Suicide-Specific Group Treatment "Project Life Force". *Journal of technology in behavioral science*, 8(3), 272-281.

Minimal evidence exists for suicide-specific group treatment for high-risk patients offered over telehealth. This qualitative study assessed the acceptability, feasibility, and impact of a telehealth suicide safety planning intervention (SPI) multi-session group. High-risk suicidal Veterans (n = 17) participating in "Project Life Force-telehealth" (PLF-T); a manualized, 10-session SPI video group completed semi-structured qualitative interviews including measures of acceptability, appropriateness,

and feasibility. We also interviewed the PLF-T coordinator and PLF-T group facilitators to identify adaptations to deliver PLF-T and learn about barriers and facilitators to implementation. A summary template and matrix analysis approach was used to analyze qualitative data. Veteran group participants were mostly male (88%), age 50 (SD = 15.6), ethnically diverse, and either divorced or separated (54%). Suicide symptoms upon study entry included past month ideation with methods (100%); and past year aborted, interrupted, or actual suicide attempt (59%). Participant interviews revealed an overall positive endorsement of PLF-telehealth with enhanced suicidal disclosure, and improved ability to manage urges and mitigate loneliness. On scales from 1 to 20, PLF-T was rated as highly acceptable (M = 17.50; SD = 2.92), appropriate (M = 17.25; SD = 3.59), and feasible (M = 18; SD = 2.45) by participants. Adaptations to deliver PLF-T included using a communications coordinator to conduct assertive outreach and engagement, adding a telehealth orientation session, restructuring sessions to review suicide severity, and screen-sharing safety plans to maximize learning. PLF-T enhanced convenience and access without compromising safety. Concerns included privacy and technological limitations including connectivity. Project Life Force-telehealth is acceptable and feasible to deliver via telehealth. This opens the possibility of delivery to hard-to-reach high-risk populations. ClinicalTrials.gov Identifier: NCT0365363.

Raciborski, R. A., Hamerling-Potts, K. K., Mitchell, E. L., Sullivan, S. R., Kapil-Pair, N., Landes, S. J., ... & Goodman, M. (2023). Cost comparison of in-person and telehealth modalities for a suicide safety planning group intervention: interim results from the "Project Life Force" randomized clinical trial. *Frontiers in psychiatry*, *14*, 1215247.

Suicide prevention is a clinical priority for the US Veterans Health Administration. Evidence-based interventions, including developing a suicide safety plan, are recommended practices and are becoming more widespread. Adaptations to further augment safety planning include a manualized group intervention (Project Life Force, PLF) that combines safety planning with the teaching of skills to maximize use of the plan. A multi-year randomized controlled trial to test efficacy of PLF compared to treatment as usual is currently in progress. However, approximately a year into the study, in-person groups were converted to telehealth groups due to the COVID-19 pandemic. This study compares the per-veteran cost of PLF when delivered in-person versus by telehealth using preliminary trial data from the first 2.5 years of the trial. Cost to deliver PLF was obtained from the Veterans Health Administration's Managerial Cost Accounting data, which relies on activity-based costing. We found no significant differences in the average number of sessions or average group size between in-person and telehealth. However, the cost per group session was lower for the telehealth modality and this led to significant overall per-veteran savings. While efficacy data comparing from the two arms is still underway and we await the ongoing RCT results, our interim cost analysis highlights potential savings with the telehealth modality.

# **Safety Planning and APP Development:**

Gryglewicz, K., Orr, V. L., McNeil, M. J., Taliaferro, L. A., Hines, S., Duffy, T. L., & Wisniewski, P. J. (2024). Translating suicide safety planning components into the design of mHealth app features: systematic review. *JMIR mental health*, *11*(1), e52763.

# **Electronic Health Records and Safety Planning:**

Boggs, J. M., Yarborough, B. J. H., Clarke, G., Aguirre-Miyamoto, E. M., Barton, L. J., Beck, A., ... & Ahmedani, B. K. (2024). Development and Validation of Electronic Health Record Measures of Safety Planning Practices as Part of Zero Suicide Implementation. *Archives of Suicide Research*, 1-14.

Abstract citation: Safety planning for suicide prevention is an important quality metric for Zero Suicide implementation. We describe the development, validation, and application of electronic health record

(EHR) programs to measure uptake of safety planning practices across six integrated healthcare systems as part of a Zero Suicide evaluation study.

Safety planning was documented in narrative notes and structured EHR templates using the Stanley Brown Safety Planning Intervention (SBSPI) in response to a high-risk cutoff score on the Columbia Suicide Severity Rating Scale (CSSRS). Natural Language Processing (NLP) metrics were developed and validated using chart review to characterize practices documented in narrative notes. We applied NLP to measure frequency of documentation in the narrative text and standard programming methods to examine structured SBSPI templates from 2010–2022.

Chart reviews found three safety planning practices documented in narrative notes that were delivered to at least half of patients at risk: professional contacts, lethal means counseling for firearms, and lethal means counseling for medication access/storage. NLP methods were developed to identify these practices in clinical text with high levels of accuracy (Sensitivity, Specificity, & PPV  $\geq$  82%). Among visits with a high-risk CSSRS, 40% (Range 2–73% by health system) had an SBSPI template within 1 year of implementation. This is one of the first reports describing development of measures that leverage electronic health records to track use of suicide prevention safety plans. There are opportunities to use the methods developed here in future evaluations of safety planning.

# **Coping and Distraction:**

Stanley, B., Martínez-Alés, G., Gratch, I., Rizk, M., Galfalvy, H., Choo, T. H., & Mann, J. J. (2021). Coping strategies that reduce suicidal ideation: An ecological momentary assessment study. *Journal of psychiatric research*, *133*, 32–37. https://doi.org/10.1016/j.jpsychires.2020.12.012

Abstract citation: Distraction/positive activity based strategies are helpful in decreasing suicidal ideation in the short-term. These findings can help clinicians advise patients about strategies to use to cope with suicidal thoughts to prevent acting on them in a crisis and they also have the potential to inform development of psychosocial interventions to prevent suicide.

Daglas, Z., Lu, S., Gresham, D., Tatnell, R., Stanley, B. H., & Melvin, G. A. (2024). Classifying coping strategies from suicide prevention safety plans. *Suicide & life-threatening behavior*, 10.1111/sltb.13039. Advance online publication. <a href="https://doi.org/10.1111/sltb.13039">https://doi.org/10.1111/sltb.13039</a>

Abstract citation: A wide range of coping strategies were entered into safety plans, with activities that aim to either distract or provide reductions in emotional arousal common. Future research is needed to evaluate the efficacy of the coping strategies listed in safety plans.

Kasahara-Kiritani, M., Hadlaczky, G., Westerlund, M., Carli, V., Wasserman, C., Apter, A., Balazs, J., Bobes, J., Brunner, R., McMahon, E. M., Cosman, D., Farkas, L., Haring, C., Kaess, M., Kahn, J. P., Keeley, H., Nemes, B., Mars Bitenc, U., Postuvan, V., Saiz, P., ... Wasserman, D. (2015). Reading Books and Watching Films as a Protective Factor against Suicidal Ideation. *International journal of environmental research and public health*, *12*(12), 15937–15942. https://doi.org/10.3390/ijerph121215032

Abstract citation: Reading books and watching films were investigated as protective factors for serious suicidal ideation (SSI) in young people with low perceived social belonging. Cross-sectional and longitudinal (12-month) analyses were performed using data from a representative European sample of 3256 students from the "Saving and Empowering Young Lives in Europe" study. Low social belonging was associated to SSI. However, reading books and watching films moderated this association, especially for those with lowest levels of belonging. This was true both at baseline and at 12 months of follow-up analyses. These media may act as sources of social support or mental health literacy and thus reduce the suicide risk constituted by low sense of belonging.

Janson, J., & Rohleder, N. (2017). Distraction coping predicts better cortisol recovery after acute psychosocial stress. *Biological psychology*, *128*, 117–124. https://doi.org/10.1016/j.biopsycho.2017.07.014

➤ **Abstract citation:** The aim of this study was to explore whether different manifestations of state coping predict cortisol response and recovery in an acute stress situation. Fifty-nine healthy adults (59.3% female) were exposed to the Trier Social Stress Test (TSST), and salivary cortisol was measured repeatedly before and after stress. Hierarchical linear modeling was used to test for relationships between factor-analytically derived measures of state coping and cortisol response and recovery. Independent of sex, age, BMI, chronic stress and depression, denial coping was related with higher peak levels of cortisol (β=0.0798, SE=0.0381, p=0.041) while distraction coping predicted steeper recovery after TSST (linear effect: β=-0.0430, SE=0.0184, p=0.023) and less pronounced curvature (quadratic effect: β=0.0043, SE=0.0017, p=0.016). Our results demonstrate the stress-buffering effect of distraction coping on hypothalamic-pituitary-adrenal (HPA) axis activity in situations without sufficient control.

Hemming, L., Taylor, P., Haddock, G., Shaw, J., & Pratt, D. (2019). A systematic review and meta-analysis of the association between alexithymia and suicide ideation and behaviour. *Journal of affective disorders*, *254*, 34–48. https://doi.org/10.1016/j.jad.2019.05.013

Abstract citation: A positive association was found between alexithymia and suicide ideation and, to a lesser extent, behaviour across a range of clinical and general population samples. This review has potentially important clinical implications, and promotes the need for suicide prevention to focus on emotion regulation skills.

# **Social Support and Suicide Prevention:**

Rogers, M. L., Gai, A. R., Lieberman, A., Musacchio Schafer, K., & Joiner, T. E. (2022). Why does safety planning prevent suicidal behavior?. *Professional Psychology: Research and Practice*, *53*(1), 33.

Abstract citation: Safety planning interventions have demonstrated efficacy in reducing suicidal ideation, suicide attempts, and death by suicide. Less is known, however, about potential mechanisms underlying the effectiveness of safety plans. The present manuscript provides an overview of the steps involved in safety planning, reviews literature demonstrating its efficacy, and proposes seven potential factors that may explain why safety planning works: providing distraction, increasing connection, promoting autonomy, building competence, reducing engagement in impulsive urges, hindering engagement in suicidal behavior, and reducing cognitive load. By improving our understanding of why safety planning is effective, future work may be able to enhance, or augment, safety planning to further increase its efficacy and, ultimately, to save lives.

Hou, X., Wang, J., Guo, J., Zhang, X., Liu, J., Qi, L., & Zhou, L. (2022). Methods and efficacy of social support interventions in preventing suicide: a systematic review and meta-analysis. *Evidence-based mental health*, *25*(1), 29–35. https://doi.org/10.1136/ebmental-2021-300318

➤ In total, 22 656 records and 185 clinical trials were identified. We reviewed 77 studies in terms of intervention methods, settings, support providers and support recipients. There was a total of 18 799 person-years among the ten studies measuring suicide. The number of suicides was significantly reduced in the intervention group (risk ratio (RR)=0.48, 95% CI 0.27 to 0.85). In 14 studies with a total of 14 469 person-years, there was no significant reduction of suicide attempts in the overall pooled RR of 0.88 (95% CI 0.73 to 1.07).

Hu, F. H., Zhao, D. Y., Fu, X. L., Zhang, W. Q., Tang, W., Hu, S. Q., Shen, W. Q., & Chen, H. L. (2023). Effects of social support on suicide-related behaviors in patients with severe mental illness: A systematic review and meta-analysis. *Journal of affective disorders*, 328, 324–333. https://doi.org/10.1016/j.jad.2023.02.070

➤ Out of 4241 identified studies, 16 were identified in this review (6 for meta-analysis, 10 for qualitative analysis). The meta-analysis presented that the pooled correlation coefficients (r) were - 0.163 (95%CI = -0.243, -0.080, P < 0.001), suggesting a negative correlation between social support and suicidal ideation. The subgroup analysis showed that this effect works in all bipolar disorder, major depression, and schizophrenia. Concerning qualitative analysis, social support presented positive effects on reducing suicidal ideation, suicide attempts, and suicide death. The effects were consistently reported in female patients. However, there existed some unaffected results in males.