

driven ORIGINAL RESEARCH

2024 RFA

**Resilience First Aid improves peer support
and suicide prevention skills: Conceptual
design and pilot evaluation**

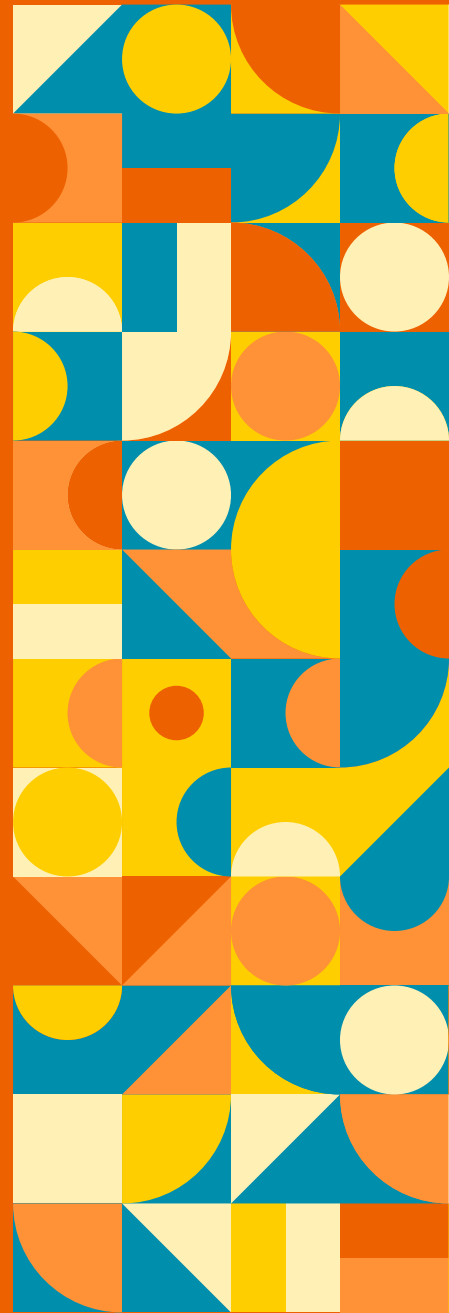
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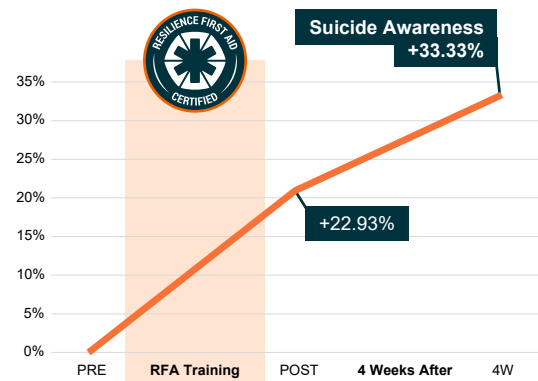
KEY TAKEAWAYS

We discuss **Resilience First Aid (RFA)** and its development as a primary preventative program designed to enhance peer support skills, aiming to mitigate the escalating global suicide rates through a strength-based approach. This approach introduces a proactive method to tackle the dire impacts of suicide on society and the economy, focusing on building interpersonal skills and understanding suicide warning signs among peers.

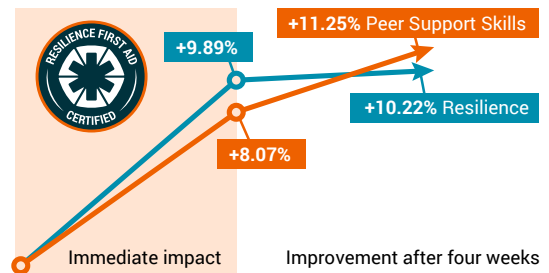
1. Primary Prevention Through the Neuroscience of Resilience - RFA builds on the neuroscience-based Predictive 6 Factor Resilience Model (PR6), equipping individuals with the knowledge and skills to support others effectively and recognize signs of distress early. This includes a memorable and practical conversational system called the ALL Protocol, including an effective self-care approach to maintain personal sustainability while supporting others. As a 2-day certification workshop, this pilot evaluation investigates its impact on participants.

2. RFA Increases Resilience and Peer Support Skills - A pilot evaluation study demonstrated that RFA training significantly increases both personal resilience (10.2% increase) and peer support skills (11.3% increase). Improvements were observed immediately following the training and persisted at the 4-week follow-up. The study utilized the PR6 scale, the New Helping Attitude Scale (NHAS), and the Mental Health Peer Support Questionnaire (MHPSQ) to measure changes in resilience and peer support capabilities.

3. Investigation of Impacts - The most substantial improvements were observed in Interpersonal Skills (21.9% increase), Composure (17.2% increase), and Tenacity (14.7% increase) at the 4-week follow-up. Notably, participants' ability to recognize suicide warning signs improved by 33.3%, highlighting RFA's potential as a vital tool in suicide prevention efforts. The training also enhanced participants' capacity to identify and reduce stigma (9.0% increase), further supporting its role in fostering mental wellness within communities.



RFA Certification improves resilience and peer support skills.



CONCLUSION

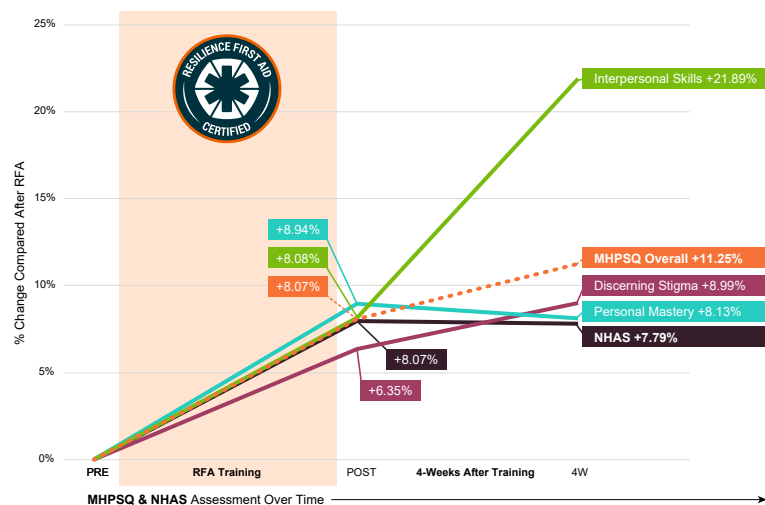
Resilience First Aid demonstrates significant promise as a proactive approach to building resilience, enhancing peer support skills, and contributing to suicide prevention efforts. Further research with larger and more diverse participant groups is warranted to explore the scalability and long-term impacts of this innovative training program.

Explore Resilience First Aid - driv.ai/rfa

Crisis Support:

Australia - Lifeline: 13 11 14

United States - Lifeline: 988



Resilience First Aid improves peer support and suicide prevention skills: Conceptual design and pilot evaluation

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Abstract

Background: Amidst rising global suicide rates and the significant societal and economic impacts associated with them, there is a growing recognition of the need for primary prevention strategies that focus on resilience and peer support as proactive measures. Resilience First Aid (RFA) offers a novel approach by enhancing resilience and peer support skills to prevent suicide.

Method: The RFA program was evaluated through a pilot study involving 16 participants with backgrounds in education. Utilizing a pre-assessment, post-assessment, and a 4-week follow-up design, the study measured changes in personal resilience, peer support skills, and the ability to recognize suicide warning signs. Instruments used included the Predictive 6 Factor Resilience Scale (PR6), the New Helping Attitude Scale (NHAS), and the Mental Health Peer Support Questionnaire (MHPSQ).

Results: Results showed a robust improvement in personal resilience and peer support skills immediately following the RFA training, which persisted at the 4-week follow-up. Notable increases were observed in Interpersonal Skills (21.9%), PR6 overall (10.2%) Composure (17.2%), and the ability to identify and reduce stigma (9.0%). Additionally, a significant improvement in recognizing suicide warning signs (33.3%) indicates RFA's potential as a vital tool in suicide prevention efforts.

Conclusion: The RFA program demonstrates significant promise in improving personal resilience and peer support skills, essential for early suicide intervention and prevention.

Keywords: resilience, suicide prevention, primary prevention, mental wellness, strength-based, peer support

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Introduction

Despite a high degree of investment in crisis intervention programs, suicide rates have continued to climb, reaching 50,000 annually in the United States (CDC, 2024), and Australia seeing a continuing increasing trend since 2004 (AIHW, 2024). The estimated ongoing cost of suicides in the USA is estimated to be US\$510 billion yearly (Peterson, Haileyesus, & Stone, 2024), with recent research pointing to institutional failures leading to higher suicide rates (Simon & Masters, 2024).

A growing consensus on the importance of resilience as primary prevention provides a more proactive and effective approach to reduce suicide rates (Xinlu, Zhongqiu, & Chaoqun, 2022; Sher, 2019). Primary prevention aims to intervene before the onset of suicidal behavior, focusing on mitigating risk factors and enhancing protective factors among general populations or specific at-risk groups.

With social support indicated as a key part of resilience and suicide prevention (Rossouw, Herlofson, Geldenhuys, & Eriau, 2024; Xinlu, Zhongqiu, & Chaoqun, 2022), we consider developing resilience peer support skills through a program called Resilience First Aid (RFA). RFA builds on the neuroscience-based framework of the Predictive 6 Factor Resilience Model (PR6) delineating six domains of resilience (Rossouw, Rossouw, Paynter, Ward, & Khnana, 2017).

By focusing on building peer support capabilities, RFA stands out by emphasizing a proactive conversational system named the ALL Protocol (Appreciate, Listen, Lift) designed to foster resilience-enhancing conversations and early risk detection through an understanding of the PR6 model's resilience domains. The ALL Protocol thereby focuses on everyday support and building of connected resilience, as opposed to others focused primarily on crisis intervention.

Functioning alongside the ALL protocol is a self-care process that protects and reduces risk against early vicarious

transmission. This concept functions so that those who activate and employ the ALL protocol can simultaneously prioritize their own psychological safety so that conversations are held in care for both participants.

This form of connected resilience therefore becomes a reciprocal process where co-regulation forms the neurological basis of the downregulation of the limbic activation system (Mikulincer & Shaver, 2010; Siegel, 2012).

RFA's foundation on the PR6 introduces an integrated approach to equip individuals with the knowledge and skills to support others effectively and recognize signs of distress early. The rationale behind focusing on resilience lies in its potential to explicitly identify the functional features of resilience and the behaviors that support the development of these assets. The application of these skills then helps empower individuals to navigate life's challenges proactively, thus reducing the likelihood of suicide ideation and protecting against mental illness.

This study explores the foundation of RFA and evaluates its impact on a pilot group. Through a comprehensive assessment using the PR6 scale, the New Helping Attitude Scale (NHAS) (Trzeciak, Mazzairelli, Roberts, & Roberts, 2022), and the Mental Health Peer Support Questionnaire (MHPSQ) (Ma, Gallo, Parisi, & Joo, 2022), we aim to measure impact on personal resilience and the enhancement of peer support skills.

Method

Development of Resilience First Aid

RFA builds on extensive application of the PR6 model to build resilience in individuals through various settings (Rossouw, Eriau, & Beeson, 2019), combined with feedback on programs and input from the broader PR6 practitioner community. Given broader low PR6 resilience values observed across Australia and the United States (Rossouw J. G., 2023), a community-focused program that enables training to build connected resilience was determined to be beneficial, focusing on a strength-based approach through a conversational protocol that can be applied in everyday life.

The ALL Protocol, which stands for Appreciate, Listen, and Lift, is a conversational system that can be used to proactively talk about mental health and resilience across many different situations. The protocol is a practical and applicable tool that encourages individuals to appreciate others, listen actively, and lift one another, all of which can help promote mental health, build stronger relationships, and foster resilience.

There are several psychological theories and models that the ALL Protocol aligns with, including: Process-Based Therapy (PBT), Acceptance and Commitment Therapy (ACT), Motivational Interviewing (MI), and Cognitive Behavioral Therapy (CBT). By developing peer support skills, RFA is set apart through a proactive stance towards mental health, emphasizing everyday resilience and early risk detection through understanding the PR6 model's resilience domains.

The ALL Protocol, central to RFA, is a conversational system designed to proactively enhance mental health and resilience, facilitating appreciation, active listening, and uplifting interactions. Practicality of the All Protocol is founded in well-established psychological theories, offering a comprehensive approach to fostering mental wellness and resilience in various settings:

- **PBT's** integrative framework, combining elements from diverse therapeutic modalities, mirrors RFA's goal of promoting mental wellness and resilience by addressing underlying processes driving psychological distress (Hofmann & Hayes, 2019).
- **ACT's** focus on mindfulness and value-driven action complements RFA's proactive mental health approach, encouraging acceptance and psychological flexibility (Hayes, Strosahl, & Wilson, 2011).
- **MI's** focus on empathetic, collaborative communication aligns with RFA's ALL Protocol, fostering meaningful connections and resilience through strength-based conversations (Hetttema, Steele, & Miller, 2005).
- **CBT's** structured approach to modifying maladaptive thought patterns and behaviors underscores the importance of understanding and addressing the cognitive aspects of resilience and mental health (Butler, Chapman, Forman, & Beck, 2005).

Through the lens of these psychotherapeutic theories, the RFA program and its ALL Protocol is established as a multifaceted approach to mental health, blending the strengths of established therapies to proactively build resilience and support mental wellbeing. This research paper underscores the importance of such integrative and proactive mental health initiatives, leading towards evaluating the potential of RFA to make a significant impact on mental health and resilience on a community level.

The RFA training program was developed incorporating the ALL Protocol as the central approach to teach conversation skills in relation to the six PR6 resilience domains. This includes identifying signs of high and low resilience, as well as suicide risk factors for each domain.

An integrated 2-day package was designed for course delivery, including workshop presentation materials, a physical Resilience First Aid Responder Kit with course materials, and addition of the Driven Resilience App as an ongoing training platform for the PR6 domains (Rossouw, Eriau, & Beeson, 2019). For quality control, the course was submitted and received full accreditation from Suicide Prevention Australia as a best practice suicide prevention training course. This enables further safety embedded for participants through external review of training practices and methodology (Driven, 2022). The contents of the RFA training course are set out in Table 1.

Participants

Following positive feedback from previous implementations of RFA, a formal pilot evaluation study was constructed to measure the impact of the program on personal resilience alongside peer support skills.

The pilot sample size represents a typical RFA workshop participant group, normally between 12 and 20 participants. Therefore, this pilot study aims at assessing the impact for an average group who completes RFA training.

Participants were provided with an opportunity to opt into the research project prior to joining the workshop. Out of the full cohort 94% (n=16/17) opted in to the research project. Informed consent was obtained in writing from participants opting in. Participants' ages ranged from 30 to 50 (M = 39, SD = 6.2) were 69% female (n=11), occupations in education, with 94% having a master's degree as the highest qualification level. A description of demographics is provided in Table 2.

TABLE 1: RFA Certification Curriculum

Module	Content & Skills Training	Neuroscience Focus
1 – Primer (2 hours)	Introductory module explains the concept of resilience and its importance in preventing mental illness. Participants learn about the Predictive 6 Factor Resilience Model (Rossouw & Rossouw, 2016; Rossouw J. G., Rossouw, Paynter, Ward, & Khnana, 2017), the neuroscience basis of resilience, and the ALL Protocol for engaging in impactful, connective conversations.	Limbic brain and prefrontal cortex regulation overview (Rossouw, Herlofson, Geldenhuys, & Eriean, 2024)
2 – Composure (2 hours)	Focusing on emotional regulation and awareness (Iwakabe, Nakamura, & Thomas, 2023), this module teaches the neuroscience behind managing stress responses, reappraisal skills (Uusberg, Taxer, Yih, Uusberg, & Gross, 2019), such as the fight-or-flight and limbic brain responses. It equips participants with practical skills for maintaining composure in tense situations, alongside strategies for recognizing and responding to emotional distress in others. Self-harm and suicide risks are discussed for this and each subsequent domain below, aligning with recent views of trauma-informed care and neuroscience models (Champine, Hoffman, & Matlin, 2022; Perry & Hambrick, 2008).	Insula to Hypothalamic-Pituitary-Adrenal (HPA) axis (Li, et al., 2021), preBötzing complex (Yackle, 2023)
3 – Collaboration (2 hours)	Highlighting the importance of social connections, this module covers the neuroscience of social bonding and coregulation (Siegel, 2012; Mikulincer & Shaver, 2010). It explores social skills for strengthening relationships and communication, offering practical conversation examples to build confidence in engaging in supportive peer support interactions (Gilbert, 2015).	Orbitofrontal cortex, fusiform gyrus (Oesch, 2024)
4 – Vision (1 hour)	Vision includes finding purpose and meaning in life, a crucial component of resilience (Jonah, Wong, & McDermott, 2021). It teaches skills for developing a sense of purpose, including setting goals and prioritizing, and provides insights into recognizing and exploring purpose with others through conversational examples and skills.	Hippocampus, Prefrontal cortex, Ventral striatum (Holz, Tost, & Meyer-Lindenberg, 2020)
5 – Reasoning (2 hours)	This module emphasizes planning and critical thinking as foundational to resilience (Fazey, 2010). Participants learn about the neuroscience of proactive skill-building and cognitive strategies for resourcefulness and adapting to change. It includes guidance on recognizing reasoning strengths and needs in others, complemented by practical case study discussions.	Left and right prefrontal cortex, anterior cingulate cortex (Domic-Siede, Irani, Valdés, Perrone-Bertolotti, & Ossandón, 2020)
6 – Health (2 hours)	Focusing on the link between physical well-being and resilience, this module explores neuroplasticity, health goals, and habits like nutrition and exercise (Cassilhas, et al., 2012). Participants learn to identify signs of healthy and unhealthy patterns, with practical advice on supporting good health practices in themselves and others.	Neuroplasticity facilitated through BDNF, hippocampus (Leal, Afonso, Salazar, & Duarte, 2015)
7 – Tenacity (1 hour)	Tenacity covers the perseverance aspect of resilience, teaching skills for realistic optimism (de Meza & Dawson, 2021), self-motivation, learning from mistakes, and effective time management. It provides insights into recognizing tenacity in others and includes practical exercises for enhancing communication skills in challenging situations.	Prefrontal cortex regulate HPA activation (Arnsten, 2009)
8 – Closing (2 hours)	The concluding module wraps up the training with a review of key concepts and the application of learned skills through case studies and the ALL Protocol. Participants develop a personal action plan for promoting resilience and complete a certification assessment to solidify their understanding and commitment to resilience support.	Review of concepts

Study Design

The study protocol consists of a pre-assessment (PRE), followed by the RFA workshop as the intervention, post-assessment administered directly on workshop completion (POST), followed by an additional survey administered four weeks after workshop completion (4W). The 4W assessment was administered via email invitation to opted-in participants, and therefore was subject to availability of participants to complete. Figure 1 diagrammatically sets out the study protocol.

TABLE 2: Demographics

Gender	Male	11
	Female	5
Age	Min=30, Max=50	Mean=39 St-Dev=6.19
Education	Master's Degree	15
	Bachelor's Degree	1
Vocation	Principal	9
	Teacher/Education	4
	Education Consultant	3

Measures

An assessment battery was constructed combining the PR6, NHAS, and MHPSQ, alongside demographic questions in the PRE assessment, and qualitative survey questions in the POST assessment.

The PR6 consists of assessing six domains of resilience, which function together to enable personal resilience capacity. The scale consists of 16 5-point Likert scale items. Domains measured are:

- **Vision** – Evaluating sense of purpose and the clarity of personal objectives.
- **Composure** – The capacity to handle stress and regulate emotional responses.
- **Reasoning** – Skills in problem-solving, resourcefulness, and preparing for potential future challenges.
- **Tenacity** – The strength to persist, stay motivated, and recover from setbacks.
- **Collaboration** – The development and upkeep of supportive networks and interpersonal connections.
- **Health** – Physical well-being, encompassing proper nutrition, restful sleep, and consistent physical activity.

The NHAS is a psychometrically validated tool designed to assess individuals' inherent motivation to assist others and the emotional gratification they derive from such activities. The 12-item scale measures a singular factor that encapsulates an individual's propensity towards altruistic behavior, alongside

the emotional outcomes associated with these actions (Trzeciak, Mazzarelli, Roberts, & Roberts, 2022).

The MHPSQ was developed and validated to assess perceived knowledge and skills in mental health peer support (Ma, Gallo, Parisi, & Joo, 2022). This is a 16-item self-report instrument provides a three-factor structure:

- **Discerning Stigma** - The ability to recognize and challenge mental health stigma.
- **Personal Mastery** - Confidence in one's peer support abilities and judgment.
- **Interpersonal Skills** - Competency in addressing difficult interpersonal dynamics through effective communication skills.

Intervention

Participants joined an in-person RFA workshop group facilitated by a certified RFA instructor and completed training over the course of two days. Participants completed the PRE assessment prior to joining the workshop, and on completion of the workshop, the POST assessment was completed prior to participants vacating. After four weeks, participants were invited to complete the 4W assessment.

Analysis

Primary interest is in the impact of the intervention on peer support skills measured through the NHAS and the MHPSQ, both immediately on completion of the intervention. Secondary interest is in any impacts made to personal resilience as reported through the PR6.

Of further interest is impact survivability at 4 weeks post intervention, indicating an ongoing development of skills that can be beneficial to broader community resilience development and ongoing suicide prevention efforts.

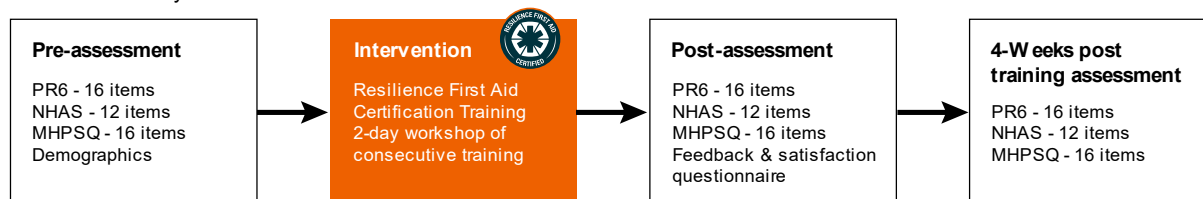
Qualitative analysis is performed through review of POST survey results for further insight into what was found to be of benefit in the course, alongside avenues for future advancement.

Results

Full completion was obtained for the PRE & POST assessments, providing 100% completion rates of n=16. This represents a standard workshop size sample for the purposes of this as a pilot study to inform further investigation regarding pilot study sizes (Kunselman, 2024).

At PRE assessment, overall participant PR6 resilience results were 0.6947 (St-dev = 0.1319), falling within the standard deviation of the original PR6 validation study (Rossouw & Rossouw, 2016). NHAS was noted at 0.7747 (St-dev = 0.1194), and overall MHPSQ measurement at 0.7359 (St-dev = 0.0879).

FIGURE 1: Study Protocol

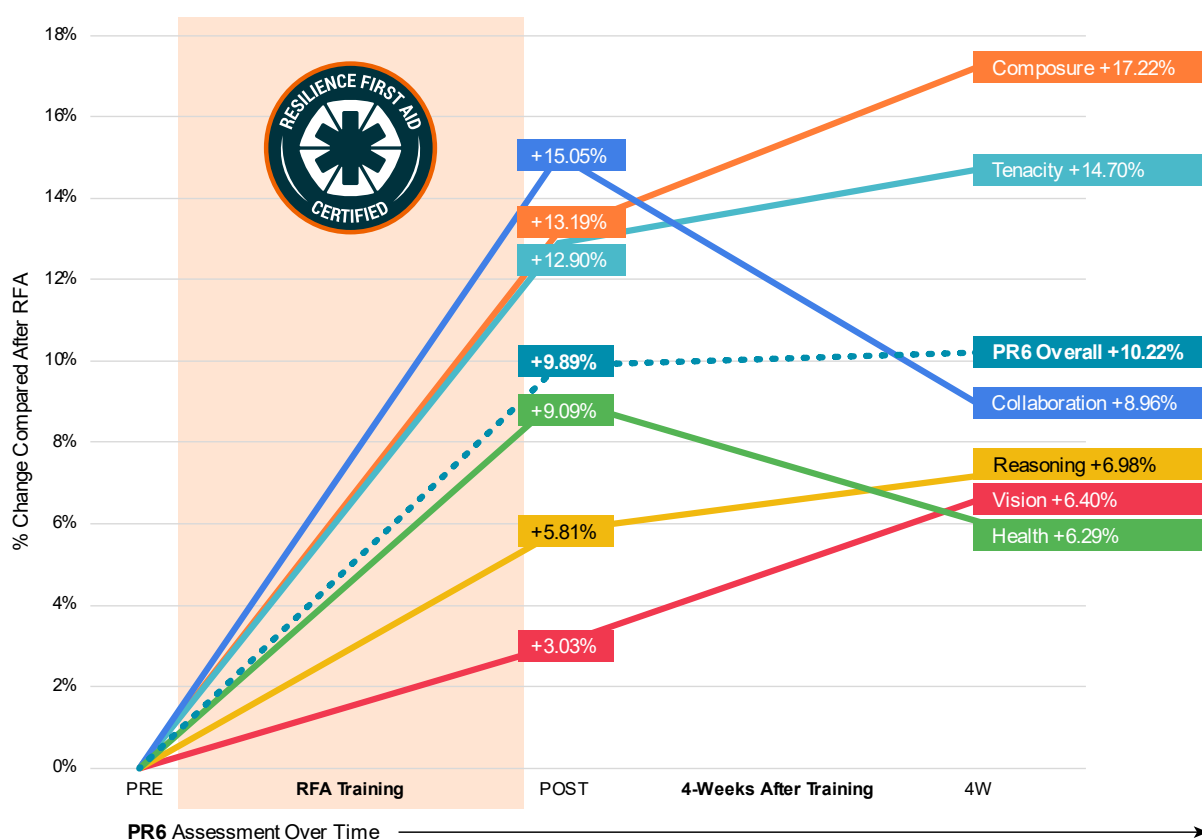


PR6 = Predictive 6 Factor Resilience Scale, NHAS = New Helping Attitude Scale, MHPSQ = Mental Health Peer Support Questionnaire

TABLE 2: RFA Intervention Measurements and Impacts

Assessment	Domain	PRE	POST	4W	POST-Change	4W-Change
PR6 Domains	Vision	0.7734	0.7969	0.8229	3.0%	6.4%
	Composure	0.7109	0.8047	0.8333	13.2%	17.2%
	Reasoning	0.6719	0.7109	0.7188	5.8%	7.0%
	Tenacity	0.7266	0.8203	0.8333	12.9%	14.7%
	Collaboration	0.7266	0.8359	0.7917	15.1%	9.0%
	Health	0.5586	0.6094	0.5938	9.1%	6.3%
	PR6 Overall	0.6947	0.7634	0.7656	9.9%	10.2%
NHAS	NHAS	0.7747	0.8372	0.8351	8.1%	7.8%
MHPSQ Domains	Discerning Stigma	0.7875	0.8375	0.8583	6.4%	9.0%
	Personal Mastery	0.7688	0.8375	0.8313	8.9%	8.1%
	Interpersonal Skills	0.6188	0.6688	0.7542	8.1%	21.9%
	MHPSQ Overall	0.7359	0.7953	0.8188	8.1%	11.3%

PR6 = Predictive 6 Factor Resilience Scale, NHAS = New Helping Attitude Scale, MHPSQ = Mental Health Peer Support Questionnaire, PRE = Pre-assessment, POST = Post-assessment, 4W = Assessment after 4 weeks, POST-Change = % change at POST compared to PRE, 4W-Change = % change at 4W compared to PRE

FIGURE 2: RFA Intervention Impact on Resilience

RFA = Resilience First Aid, PR6 = Predictive 6 Factor Resilience Scale. RFA Training resulted in an immediate increase in all resilience domains following the workshop. Impact persisted over the 4-week post assessment period.

An increase in overall resilience and peer support skills were observed at POST assessment. PR6 overall resilience increased by 9.9% (0.763, St-dev = 0.1065), NHAS increased by 8.1% (0.8372, St-dev = 0.0914), and MHPSQ similarly increased by 8.1% (0.7953, St-dev = 0.1059).

Primary increases in PR6 domains were observed in the Collaboration domain, increasing by 15.1% (0.8359, St-dev = 0.1348) at POST, followed by Composure at a 13.2% (0.8047, St-dev = 0.1935) increase, and Tenacity at a 12.9% (0.8203, St-dev = 0.1512) increase. For the MHPSQ, the main increase was in Personal Mastery at 8.9% (0.8375, St-dev = 0.1095), followed by Interpersonal Skills at 8.1% (0.6687, St-dev = 0.1721), and finally Discerning Stigma at 6.4% (0.8375, St-dev = 0.1041).

POST assessment included qualitative feedback on the training which included the following insights summarized and anonymized:

- **What Participants Liked Most** - Participants appreciated the interactive and well-organized nature of RFA, including its comprehensive content that combined theoretical understanding of resilience, brain functions, and science with practical applications like the ALL Protocol. The engagement was further enhanced through exercises that promoted self-care and practical resilience strategies.
- **Suggestions for Improvement** - Feedback on areas for improvement suggested an appetite for additional practical case studies and structured time for reflection and discussion to consolidate learning.
- **Additional Feedback** - Further feedback was positive, reflecting participants' gratitude for the skills and confidence gained in handling personal and others'

challenges, underscoring its practical relevance in professional and personal contexts.

Feedback included a 5-point Likert scale of satisfaction with various training aspects, ranging from 'Very unsatisfied' (0) to 'Very satisfied' (5)

- 100% were 'Very satisfied' with the RFA training overall
- 93.8% were 'Very satisfied' with the course materials, with one response being 'Somewhat satisfied'

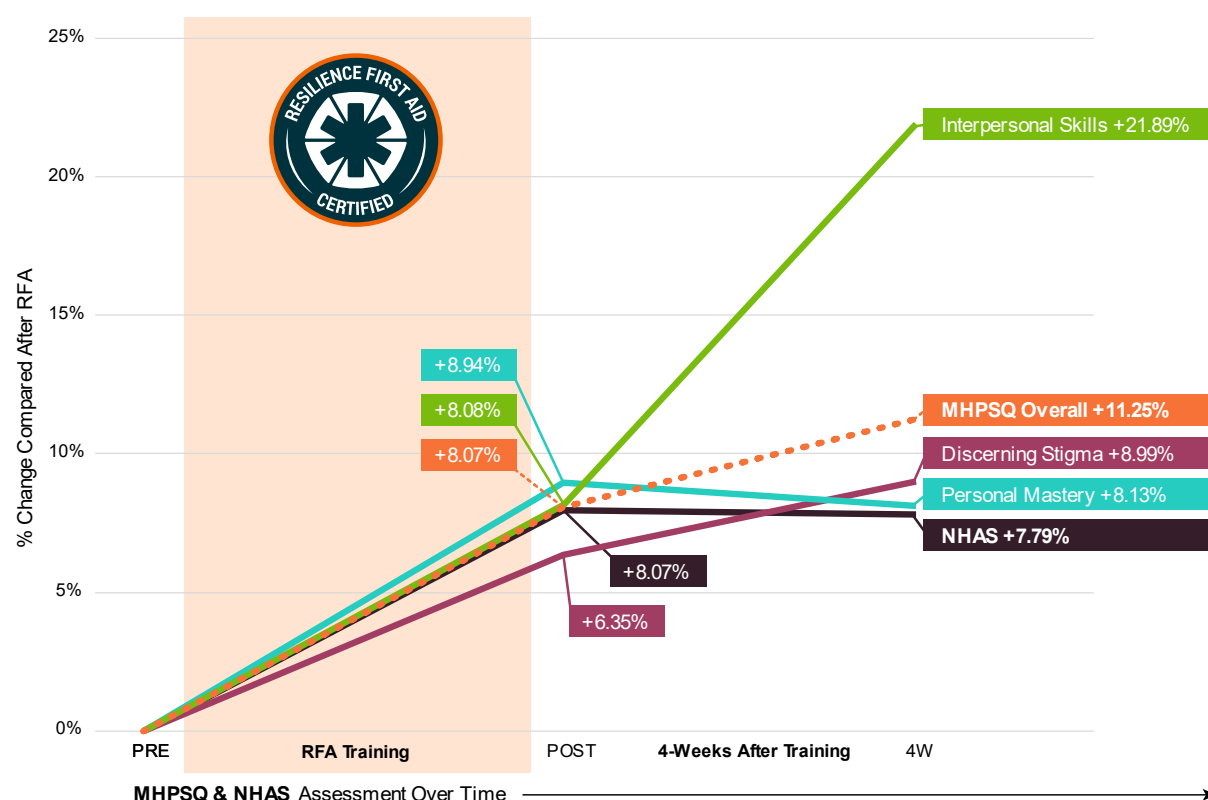
The subjective extent to which participants felt their skills improved in various areas were assessed on a 5-point Likert scale ranging from 'Much worse' (0) to 'Much better' (5)

- 81.2% responded as 'Much better' and 12.5% responded as 'Somewhat better' to this item: "To what extent has your knowledge of resilience concepts changed, from before the program to now?"
- 56.3% responded as 'Much better' and 43.8% responded as 'Somewhat better' to this item: "To what extent have your skills in building resilience in others changed, from before the program to now?"
- 50% responded as 'Much better' and 50% responded as 'Somewhat better' to this item: "To what extent has your confidence in supporting the mental health of others changed, from before the program to now?"

These measures reflect a broad agreement in subjective feelings of confidence increasing in peer support skills.

Final assessment follow-ups were conducted through emails at the 4-week point after intervention. Repeated follow-ups were

FIGURE 3: RFA Intervention Impact on Resilience



RFA = Resilience First Aid, NHAS = New Helping Attitude Scale, MHPSQ = Mental Health Peer Support Questionnaire. RFA Training resulted in an immediate impact on altruism (NHAS) and peer support skills (MHPSQ) following the training, further increasing over the 4-week post assessment period.

conducted as necessary over a 1-week period to gain completion. At the end of the follow-up period, 15 responses were gained, with 3 careless responses excluded due to a combination of factors (Meade & Craig, 2012), including unusually high speed of completion (less than 3 minute completion time compared to average of 8 minutes for other respondents), combined with inconsistent results, found to reduce Cronbach's alpha for each measure. All responses vs cleaned (careless responses removed) ratios were found as follows: PR6 $\alpha = 0.8139$ vs 0.8170 cleaned, NHAS $\alpha = 0.8490$ vs 0.8558 cleaned, MHPSQ $\alpha = 0.8097$ vs 0.8175 cleaned.

1-Month Follow-up Results

PR6 overall results remained consistent on follow-up, rising slightly to 10.2% (0.7656 , St-dev = 0.0873). NHAS stayed similar at 7.8% (0.8351 , St-dev = 0.0991), while the MHPSQ rose to 11.3% (0.8187 , St-dev = 0.1085) at 4W.

The PR6 saw differences in domains, with Composure rising to 17.2% (0.8333 , St-dev = 0.1341), Tenacity rising to 14.7% (0.8203 , St-dev = 0.1628), and Collaboration returning to 9.0% (0.7917 , St-dev = 0.1539) above PRE.

MHPSQ saw a strong increase in Interpersonal Skills, rising 21.9% (0.7542 , St-Dev = 0.1573), followed by an increase in Discerning Stigma by 9.0% (0.8583 , St-Dev = 0.0949), and a slight return in Personal Mastery ending 8.1% (0.8313 , St-Dev = 0.1378) above PRE.

A reverse-scored item in the MHPSQ related to suicide awareness is as follows: "I find it difficult to identify warning signs of suicide." This item is of interest as it related directly to the concept of suicide prevention, forming part of the Interpersonal Skills domain of the MHPSQ. Analysis shows this item increasing by 33.33% from PRE = 0.5375 to 4W = 0.7167 . Immediately after the workshop was noted to see a 20.93% improvement in this item (POST = 0.65). See Figure 5.

Regression Analysis

The PR6 and MHPSQ regression analysis indicates a strong correlation with R-squared = 49.89% and a strong positive correlation $r = 0.71$ at $p < 0.001$. The MHPSQ had a similarly strong correlation to NHAS with R-squared = 49.90% and a similar strong positive correlation $r = 0.71$ at $p < 0.001$. The PR6 was also correlated to NHAS with R-squared = 39.32% and correlation at $r = 0.63$ at $p < 0.001$ (Figure 4).

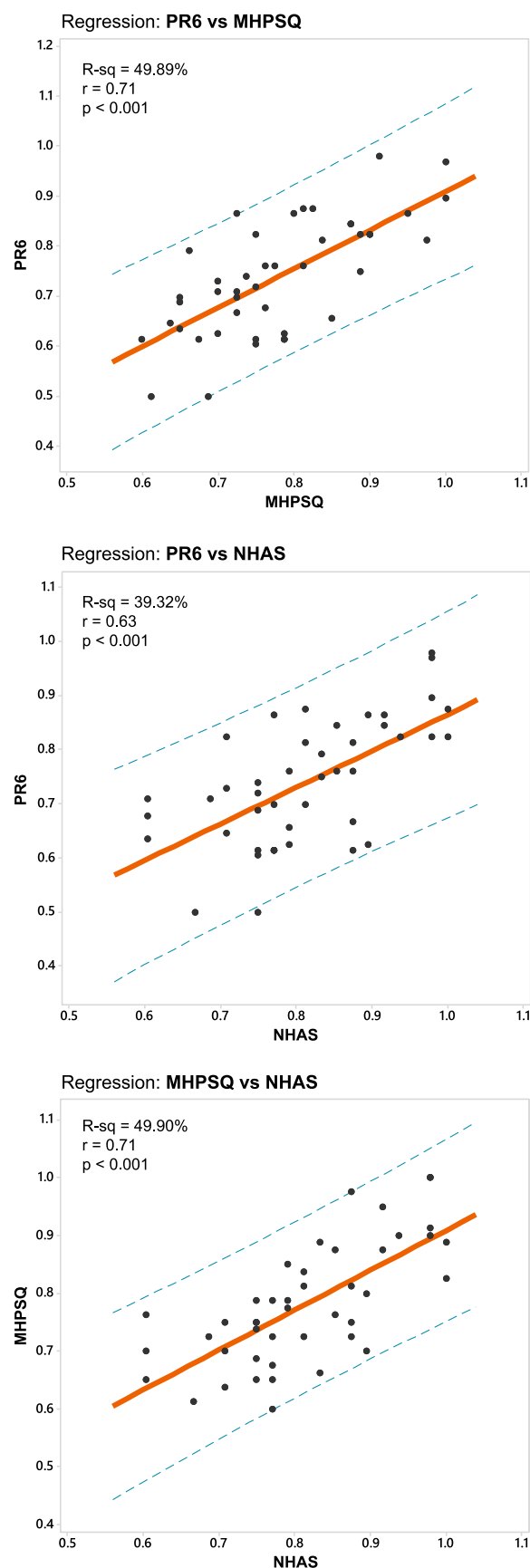
Discussion

RFA was applied to a pilot group of participants, with their resilience and peers support skills measured before the workshop, after, and again 4 weeks after the workshop. The pilot group saw a robust improvement both in personal resilience and peer support skills immediately following the RFA training, which persisted through to the 4-week follow-up.

Greatest improvement was present in Interpersonal Skills, rising to 21.9% above baseline after four weeks. We note a larger increase from POST to 4W, potentially indicating participants becoming more confident and comfortable with the ALL Protocol as a practical method to engage in connective conversations.

Another strong improvement was personal Composure skills, which is a key component of the co-regulation techniques taught through the ALL Protocol, increasing to 17.2% above baseline for the pilot group.

FIGURE 4: Regression Analysis of Measurements



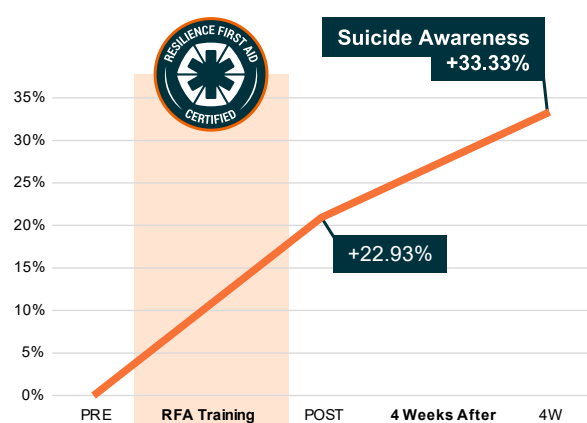
RFA = Resilience First Aid, NHAS = New Helping Attitude Scale, MHPSQ = Mental Health Peer Support Questionnaire. Strong correlations are noted between each measurement.

Noticing and reducing stigma saw an initial increase on POST of 6.4% while rising more strongly over 4 weeks to 9.0%, suggesting that absorbing the skills over time may help to gain greater insight and compassion regarding stigma in the workplace and community.

NHAS showed an initial increase of 8.1% at POST and holding stable after 4 weeks at 7.8% compared to PRE. This indicates an improved propensity for altruism and compassion towards others following training that maintains past the workshop itself.

Of particular interest to the development of RFA and its accreditation as a suicide prevention course is skills relating to suicide prevention. Here we note the specific reverse-scored item in the MHPSQ: "I find it difficult to identify warning signs of suicide." On the POST assessment, this item increased by 21% from baseline, and on 4W this further increased to 33.33%. This is a strong increase in an area that most directly relates to suicide prevention, and the application of RFA as a primary prevention approach to reduce suicide and suicidal ideation.

FIGURE 5: Change in MHPSQ Suicide Awareness Item



RFA Training resulted in improved suicide awareness skills, further increasing over the 4-week reassessment period.

Tenacity, while a smaller part of the course, also benefited strongly from RFA training, rising by 12.9% directly post-workshop, and further increasing to 14.7% after 4 weeks.

Notable is Collaboration which initially rose by 15.1% at POST, potentially influenced by the interactive nature of the workshop environment, then ending at 4W at 9.0% above baseline. While the end result is still a strong net positive, a potential impact here is the effect of the workshop combined to returning to a working environment where the majority of surrounding staff have not yet done the RFA training.

A contributing factor may also be the more senior nature of the audience which can result in greater feelings of isolation (Zumaeta, 2018). The shift in Collaboration from POST to 4W presents an opportunity to expand materials with additional 'Resilience Impact Community' resources to be used after the workshop to build on momentum gained during the workshop.

While RFA is not directly designed to build personal resilience, the indirect effect of teaching how to support resilience and wellbeing in others appear to result in a natural absorption of personal resilience skills, resulting both in an immediate 9.9% increase in personal resilience, holding stable at 10.2% after four weeks. This indicates that the RFA course in itself has value as

a resilience-building course, with particular benefits to Composure, Tenacity, and Collaboration domains.

Other domains like Vision, Reasoning, and Health still saw increases, though relatively smaller compared to the other domains. This indicates there is potential for overall value in participating in RFA training at a personal level, beyond the peer support skills gained as the primary purpose of RFA.

The strong positive correlation between the PR6 and the MHPSQ with an R-squared value of 49.89% and a correlation coefficient $r=0.71$ at $p < 0.001$ suggests that developing resilience in tandem with peer support skills work symbiotically. This may indicate that as individuals become more resilient, they are better equipped to support others facing mental health challenges, emphasizing the importance of resilience training in peer support roles.

Correlation between PR6, NHAS and MHPSQ suggests that efficiency in further assessment can be obtained through focusing on MHPSQ results, particularly in the additional three sub-factors to explore in more detail the peer support skills developed through the RFA training.

The findings from this pilot evaluation of the RFA program substantiate its efficacy in enhancing both peer support skills and personal resilience among participants. Notably, the persistence of these improvements four weeks post-intervention underscores RFA's sustained impact on individuals' mental wellness and their capacity for suicide prevention. The observed enhancements in Interpersonal Skills, Composure, and the ability to navigate and reduce stigma reflect a deepened understanding and application of the ALL Protocol, affirming its role in fostering connective conversations and empathetic interactions within communities.

The significant uplift in the ability to recognize warning signs of suicide, alongside improvements in Tenacity and Collaboration, points towards RFA's potential as a robust tool in the realm of primary suicide prevention. The training not only equips individuals with the necessary skills to support others but also secondarily improves their own resilience, particularly in the domains of Composure, Tenacity, and Collaboration. This dual impact suggests a broader applicability of RFA, extending its benefits beyond peer support to personal growth and resilience development.

Conclusion

The Resilience First Aid pilot study demonstrates the program's significant promise in enhancing both personal resilience and peer support skills. Participants exhibited substantial improvements in these areas immediately following the training, with the effects persisting and even growing at the 4-week follow-up.

The study found noteworthy gains in participants' Interpersonal Skills, Composure, and ability to recognize suicide warning signs. The substantial improvement of 33% in participants' ability to recognize the warning signs of suicide is of particular interest, highlighting the effectiveness of the RFA training as a crucial tool for early intervention. This capability is essential for the proactive mitigation of suicide risks, supporting the premise that RFA can serve as a vital component in a broader strategy aimed at reducing the incidence of suicide within communities.

The program's secondary benefits in boosting personal resilience, especially in the Composure, Tenacity, and Collaboration domains, suggest its broader applicability beyond peer support alone. To increase the impact on the Collaboration domain, we propose the development of additional materials to build communities following the workshops.

The strong correlations observed between resilience (PR6), altruism (NHAS), and peer support skills (MHPSQ) underscore the symbiotic relationship between personal growth and the capacity to support others effectively. As individuals build their own resilience, they become better equipped to aid others navigating mental health challenges, emphasizing the value of resilience training in peer support contexts.

Limitations

As a pilot study, the results herein provide preliminary insights into the impact of RFA training. The specific demographic characteristics of the study's participants, predominantly individuals in leadership positions with higher education levels, may have influenced outcomes, particularly in areas such as Discerning Stigma. This domain exhibited relatively high baseline scores, suggesting a limited scope for improvement through the training. Such demographic specifics could potentially skew the generalizability of the findings, highlighting the need for caution in interpreting the results as universally applicable.

Implications for Future Research

The findings from this pilot study suggest the RFA program's value in not only enhancing personal resilience and peer

support skills but also in its potential contribution to suicide prevention efforts. Future research should focus on expanding the participant pool to include larger groups and more diverse populations to explore the universality and scalability of the program's benefits. Investigating the long-term impacts of the training, as well as its effectiveness across different cultural and demographic groups, will be crucial in understanding the full potential of RFA as a preventative tool to protect against mental health crises.

RFA emphasizes a strength-based, preventive approach to mental health and suicide prevention. In this way, RFA serves to function as a complementary strength-based preventive program alongside existing crisis intervention and deficit-focused models, forming a comprehensive combined strategy for suicide prevention. This dual approach offers a more integrated framework for addressing the multifaceted nature of mental health and suicide prevention, underscoring the importance of both intervention and prevention in the broader mental health care continuum.

The Resilience First Aid program represents a promising addition to the field of mental health and suicide prevention, offering a novel approach that enhances individual resilience and the capacity for effective peer support. As we continue to explore and refine this training, it holds the potential to make a meaningful contribution to reducing the prevalence of suicide and improving mental wellness within communities worldwide.

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