



Using Veterans Socials to Build a Community: Feasibility of the VOICES Intervention

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Abstract

Increasing social connection and access to care has been found to decrease the rate of suicide in U.S. veterans. The Veteran Outreach Into the Community to Expand Social Support (VOICES) is an intervention developed by Department Veteran Affairs (VA) staff to improve social connection and provide information about services by implementing community-based Veterans Socials. Seventy veterans at eight locations completed an anonymous cross-sectional survey. This evaluation examined three domains, *acceptability* (i.e., perceived value), *demand* (i.e., estimated or actual use), and *expansion* (i.e., sustainability and increase of Veterans Socials across time and locations). Findings indicated considerable levels of acceptability, demand for, and expansion of this intervention. Additionally, data suggested this intervention may increase social connection and utilization of VA services among attendees.

Keywords Veterans · Social connectedness · Coffee socials · Suicide prevention · Community engagement

Introduction

Veteran suicide prevention continues to be a main priority of the U.S. government (Rubin, 2019). Since 2001, suicide rates among veterans who did not receive care from the U.S. Department of Veterans Affairs (VA) increased by a rate of more than four times of those connected to VA care (U.S. Department of Veterans Affairs, 2016). Only an estimated 35.5% of veterans with current suicidal ideation are engaged in mental health care, with VA users being much more likely

to be engaged than non-users (54.7% vs. 23.8%; Nichter et al., 2021). The absence or infrequent seeking of care presents a substantial challenge to suicide prevention efforts and connecting veterans to care for unmet health needs.

Both internal and external barriers limit access to mental health treatment. Internal barriers are perceptions of mental health, motivation, stigma, and attitudes for seeking treatment (Bovin et al., 2019; Pietrzak et al., 2010; Zinzow et al., 2012). External barriers include lack of awareness about eligibility, services and how to access them (Farmer et al., 2017), challenges scheduling appointments (Pietrzak et al., 2010), and lack of input from supportive others (Bovin et al., 2019). More outreach efforts are needed to overcome these obstacles and provide access to veterans living with mental health conditions (Tsai et al., 2020).

Veteran peer support is an underused intervention that can address both internal and external barriers. Establishing regular contact with knowledgeable peer specialists may increase opportunities for information about available healthcare resources and how to access them. Peer specialists can also help veterans challenge stigma, increase motivation for treatment while collaborating with healthcare providers to link veterans to needed services, and promote wellness (U.S. Department of Veterans Affairs, 2018a, 2018b).

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Theory-Driven Suicide Prevention

Interventions that can increase social connection and feelings of belongingness, promote access to care, and decrease feelings of being a burden may help to bolster suicide prevention efforts. Disrupted social connectedness is related to both suicidal thoughts and behaviors (You et al., 2011). According to You et al. (2011), one way to mitigate this disruption may be to focus efforts on perceived belonging, which is aligned with the interpersonal theory of suicide. The interpersonal theory of suicide posits that the desire for suicide emerges when someone experiences thwarted belongingness and feelings of burdensomeness (Joiner, 2005). The need to belong consists of the desire for frequent, affectively pleasant interactions with the same individuals over a long period of time (Baumeister & Leary, 1995). When this is thwarted, a person will feel alone and alienated from valued others, whereas perceived burdensomeness refers to the belief that one's existence is a burden on friends, family, and/or society (Van Orden et al., 2010). This framework suggests interventions build a sense of belonging and limit perceived burdensomeness can decrease suicide risk (Van Orden et al., 2008).

Relatedly, Hare-Duke et al. (2019) identified five dimensions of social connectedness. These include (1) closeness (the level individuals feel mutual dependence to specific people or a social group); (2) identity and common bond (the belief that one person shares an important characteristic of others who are part of a group); (3) valued relationships (the positive appraisal of the current relationship); (4) involvement (group engagement and the companionship of others, that is, the perceived availability of others to participate in shared activities); and (5) cared for and accepted (groups acceptance and support). Research consistently shows that individuals with higher levels of social connectedness are physically (Ashida & Heaney, 2008) and mentally (Schwartz & Litwin, 2019) healthier and have higher levels of knowledge, skills, and confidence to manage one's health when experiencing depressive symptoms (Teo et al., 2018). Social connectedness has been found to mitigate risk for a variety of mental health circumstances, such as moral injury (Kelley et al., 2019), posttraumatic stress disorder (Kintzle et al., 2018), feelings of hostility (Sippel et al., 2016), depressive symptoms (Chen et al., 2019), and feelings of loneliness (Hare-Duke et al., 2019).

Research that examines U.S. veteran populations suggests that interventions that limit perceived burdensomeness (Compton et al., 2021; Monteith et al., 2013) and enhance social connectedness (Smith et al., 2016) and belongingness (Rogers et al., 2017) may be protective against the onset of suicidal ideation. These findings

underscore the importance of upstream suicide prevention interventions that can act upon multiple social risk factors to better serve veterans.

Community-Building in Action

Improving social risk factors at the community level is important for comprehensive upstream suicide prevention efforts (Caine et al., 2018). Various community-based interventions may impact social connectedness and perceived belonging for veterans. Veteran-centered non-governmental organizations can play an important role in enhancing veterans' social connection and perceived belonging. For example, Team Red, White, & Blue engage in social activities that increase physical activity and team building areas as part of an intervention to bring veterans out of isolation and reintegrate (Angel et al., 2018). Other efforts, such as filmmaking and storytelling, have been used to increase a sense of understanding and belonging between veterans and their communities (Mamon et al., 2020; Tuval-Mashiach et al., 2018). Other approaches have targeted efforts in specific communities, such as rural areas with large numbers of veterans. One approach (i.e., Together with Veterans) provides education in reducing mental health stigma, promoting help-seeking behaviors, and training community leaders to better support veterans and their families (Monteith et al., 2020). While these approaches impact veteran connections with others in their community, complementary efforts that seek to engage veterans without expectations of continued participation, may be attractive to veterans with varying levels of community involvement. An intervention that offers social connection and access to care, is inclusive of nonveterans and supportive others, and has a low barrier for participation (e.g., inclusive to all interested and no expectations of continued participation) may fill a gap in community-based approaches for veterans.

Veterans Coffee Socials (VCS) began in 2014 by peer specialists employed at a Veterans Affairs Medical Center and later evolved into other community activities (e.g., volunteer groups, bowling team, gaming club), collectively known as Veteran Outreach Into the Community to Expand Social Support (VOICES) events. The design of the intervention was to (1) improve social connection and support systems through community building that attract veterans with a wide variety of interests and preferences; (2) implement adaptive strategies to remove barriers for veterans to access information, resources, and care; (3) be low-cost and sustainable; and (4) increase community partnerships to improve the lives of veterans.

The purpose of this program evaluation was to explore the feasibility of Veterans Coffee Socials (VCS), one type of VOICES intervention, across three domains: acceptability, demand, and expansion. *Acceptability* examined how the

recipients valued and responded to the intervention, *demand* assessed the estimated use of the intervention, and *expansion* focused on the spread of the intervention across different locations (Bowen et al., 2009). This evaluation also explored variables important to access to care (i.e., number of veterans reached who were (a) not in VA care when first engaged in a VCS and (b) later accessed VA care) as well as increased social connection (i.e., if VCS attendees met someone new at these events and socialized with them at least monthly). Moreover, this program evaluation also examined acceptability, demand, and expansion to better understand process outcomes.

Method

Although VOICES can be implemented using multiple platforms (e.g., video gaming, volunteer groups), this evaluation focused only on VCS. The VCS examined were weekly 90-min events with informal agendas primarily based on spending time with others at a set location (Gorman et al., 2018). While a VCS can begin with a veteran host in the community, the VCS in this evaluation began with a peer specialist host (a VA employed veteran) who was responsible for reaching out to community stakeholders, veterans' organizations, veteran-friendly businesses, and local veterans to start the VCS. The VCS were inclusive to all nonveteran supporters (e.g., family, friends, and caregivers) who wanted to attend. During a VCS, hosts could refer veterans to needed services within the VA and implement patient navigation techniques if the opportunity arose (e.g., active listening and referral; DeGroff et al., 2019). After approximately six months, once attendance became stable, the peer specialist asked a group of regular veteran attendees to take ownership of the VCS and host it (i.e., ensure that the VCS continued to run within their community). This gradual transition to a new community host allowed the peer specialist to then begin VCS in other locales.

VCS is consistent with effective peer support models (Davidson et al., 1999) and seeks to use these strategies to increase community-based social support among veterans (Drebing et al., 2018). Moreover, the interactions during these events builds trust and friendships, which could be particularly helpful because the source of the social support matters; relationships with friends impact the association between stress and loneliness significantly more than any other support system (Lee & Goldstein, 2016). VCS attendees may experience this relaxed environment as less stigmatizing than traditional interventions because of the unofficial structure and use of peer hosts. Further, this open arrangement enables attendees of the VCS to make changes in format, structure, or activity as they see fit and can evolve

into other social, volunteer, virtual, or recreational events external to or in place of the original VCS platform.

Study Setting and Procedure

Participants of this cross-sectional analysis only included self-reported veterans. Data were collected from eight weekly VCS which met for approximately 90 min and had been meeting for at least two years. All but one VCS had transitioned to a community-based veteran host prior to collecting data with VA peer specialist staff attending at least monthly. All VCS locations were in the northeastern part of the United States. To be included in this evaluation, a VCS had to meet four criteria: (1) meet weekly and be operational for at least six months; (2) maintain multiple attendees who attended more than twice per month for multiple months; (3) be open to nonveteran supporters; and (4) allow for new attendees. VCS had at least three procedural components that include: (1) welcoming, in which the host informally introduced themselves and set expectations of the event to each new attendee; (2) engaging, which involved creating an atmosphere for attendees to connect interpersonally, whether through commonality, interests, or goals; and (3) building opportunities for future social interactions, by informing attendees of upcoming events in the community to connect outside the VCS on their own. Further, hosts have information about local resources readily available, they also have the contact information of VA peer specialists whom they have met multiple times and can reach out to when needed. Hosts' relationships with peer specialists allows hosts to guide or refer attendees to an approachable and knowledgeable veteran that can connect them to Veterans Affairs (VA) and community resources or services as needed. Once chosen, a peer specialist met with hosts of the VCS to review the data collection process and program quality improvement efforts and explained that participation was optional and that surveys were anonymous. Verbal consent was given, and the peer specialist was available to answer any further questions about the survey.

Surveys were collected only once at each location over 4 months in 2018–2019 to minimize disruption to the intervention. The survey was self-report and took approximately 15 min to complete. Completed surveys were placed in a sealed envelope by the participant. All participants completed the survey during their scheduled VCS meeting time, and no compensation was given. Some attendees participated in multiple VCS, so instructions were given for attendees to complete this survey on only one occasion.

In addition to the survey collected at the VCS, program-level data (e.g., number of VCS each year, start dates of each VCS, frequency of VCS) was also gathered to better frame this intervention over time.

Measures

Participants completed a 16-item survey that consisted of sociodemographic questions (e.g., age, gender), feelings of companionship, perception of the value of the VCS, length of participation and attendance, socializing interests and habits outside of the VCS, and utilization of VA services.

Three domains, acceptability, demand, and expansion were examined. *Acceptability* was measured by the value participants attached to the VCS (e.g., How valuable to you is this coffee social?). The estimated or actual use of an intervention, or *demand*, was investigated through questions about attendance (e.g., How many times have you attended this coffee social in the past three months?). *Expansion* focused on the proliferation of the intervention in different locations (program level-data) and the sustainability or continuity of VCS gatherings across time. Moreover, this evaluation explored evidence of social connection through attendee reports of socializing with one another outside of the VCS, and observations related to attendee introduction to VA care. See Table 1 for the full list of survey items.

These evaluation activities were reviewed by the VA Bedford Healthcare System Institutional Review Board and received exempt status. This work was supported by the United States (U.S.) Department of Veterans Affairs, Office of Mental Health and Suicide Prevention. All authors were employed at some point during this evaluation by the U.S. Department of Veterans Affairs. The content of this manuscript does not necessarily reflect the views of the employing agency, it reflects the views of the authors. The authors would like to state that there are no known conflicts of interest, and all certify responsibility for this manuscript.

Data Analysis

Frequencies were conducted for all variables, with the exception of age which is summarized through mean and standard deviation. Variation in gender was too small for further analysis. The reported value had limited variation, and a scatterplot indicated a violation of normality, leading to conducting Spearman's rank-order correlation (ρ), a non-parametric statistic.

Lastly, a multiple regression analysis was conducted to examine if attendees' length of time affiliated with the VCS and frequency of attendance in the past three months significantly predicted feelings of companionship. A test of the assumptions of a regression analysis found no evidence for violations. All analyses were conducted with SPSS v.26 (IBM Corp, 2019).

Results

Participants

A total of 70 veterans participated in this evaluation. Ages ranged from 26 to 93 years old ($M = 60.60$; $SD = 17.90$; $n = 67$), with a majority identified as male (80%, $n = 56$) followed by female (17%, $n = 12$), with two participants (3%) declining to answer.

Over half of the participants (61%, $n = 42$) had participated in VCS for at least one year. Of the 69 participants responding to how often they felt a lack of companionship over the prior six months, 13% ($n = 10$) reported that they "often" lacked companionship, and 20% ($n = 14$) reported they "sometimes" felt a lack of companionship. Of the 66 participants that reported their status on receiving VA care, 30% ($n = 20$) had never received healthcare at the VA.

Acceptability

Reported Value

Of the 68 participants that reported how valuable the VCS was to them, 76% ($n = 52$) indicated that they "extremely" or "very much" valued the weekly VCS. The remainder of participants reported that they "somewhat" (21%, $n = 14$) or "not so much" (3%, $n = 2$) considered the VCS valuable.

Because almost a quarter (24%, $n = 16$) of the participants reported value we deemed to be marginal (i.e., "somewhat" or "not so valuable"), Spearman's rank-order correlation (ρ) analyses were conducted to determine if there were patterns in demographics (i.e., age, companionship, length of affiliation, attendance) for perception of VCS value.

There was a statistically significant positive relationship with moderate strength between the length of time a respondent was affiliated with the VCS and the value they attached to the VCS ($\rho[68] = 0.41$, $p < 0.001$) (Table 2). That is, the longer the affiliation with the VCS, the more value respondents attached to it. Further, a similar relationship was found with the frequency of attendance in the past three months and the perceived value of the intervention ($\rho[68] = 0.36$, $p = 0.002$).

Demand

Demand Represented Through Recent Attendance

Sixty-nine participants reported their VCS attendance during the previous three months. Of the 59 attendees who have attended for at least three months, almost half (46%, $n = 27$) indicated attending a VCS more than 10 times, followed by

Table 1 Items on survey by domains

Item	Response options	Domain
How valuable to you is this coffee social?	Not at all valuable Not so Somewhat Very Extremely valuable	Acceptability
When did you first attend this coffee social?	Within the past month 1 to 3 months 3 to 6 months 6 months to 1 year 1 to 1.5 years 1.5 to 2 years 2+ years	Acceptability, Demand
How many times have you attended this coffee social in the past 3 months?	1 or 2 3 or 4 5 or 6 7 or 8 9 or 10 More than ten	Acceptability, Demand
Over the last 6 months, how often have you felt that you lack companionship?	Often Some of the time Hardly ever	Exploratory
Have you attended other coffee socials?	Yes No	Demand
Would you like to participate in any of the following activities with members of this coffee social?	Bowling Attend a sports event Play a sport Participate in a gaming night Go to a movie Go out for a meal Have a co-ed activity Other	Demand
Have you ever received health care at the VA?	Yes No	Access to care
<i>(If yes to receiving VA health care)</i> Did you ever receive health care from the VA prior to joining this coffee social?	Yes No	Access to care
Do you see any members of this coffee social outside of this group meeting?	Yes No	Demand
<i>(If yes to seeing members outside of VCS)</i> Are any of the people you see outside of this group, people that you didn't know before you joined this coffee social?	Yes No	Demand
<i>(If 1. seeing others outside of VCS and 2. first attended VCS more than 2 months ago)</i> Approximately how many times per month, on average, do you see others from this coffee social outside this group meeting?	Once Twice Three Four Five or more times	Demand
Are there barriers to getting together with other members of this coffee social outside of this meeting?	Live too far Don't have transportation Too many other demands Travel costs Don't find it easy to ask others to get together Other	Demand

Two items from the survey were not examined for this evaluation and are not listed

5 to 10 (34%, $n = 20$), with the remaining participants going to a VCS 1 to 4 times (20%, $n = 12$). Additionally, out of 67 responses, a third (33%, $n = 22$) of participants attended a VCS at more than one location.

Demand Represented Through Sustained Participation Over Time

Out of 69 attendees, most (61%, $n = 42$) participated in

Table 2 Spearman's rank-order correlation of relationships between value of VCS and age, companionship, length of affiliation, and attendance

	n	ρ	p
Age	65	0.04	0.77
Companionship	68	-0.06	0.60
Affiliation	68	0.41	0.001
Attendance	68	0.36	0.002

weekly VCS for over one year. Among those who have participated for at least a year, a majority (71%, $n=30$) attended nine or more VCS in the preceding three months. Further, attendees' frequency of participation in VCS was significantly related to length of affiliation ($\rho[69]=0.43, p=0.01$).

Demand Represented Through Interest in Other Social Activities

Most attendees (71%, $n=50$) expressed interest in participating in other activities. Attendees reported most interest in going out for meals, followed by attending sports events, and going to the movies (Table 3).

Demand for Social Interaction Outside of a VCS

Of the 67 participants who responded on their socializing habits, most (75%, $n=50$) reported meeting with other attendees for social activities outside of the weekly VCS. More than half (55%, $n=37$) reported seeing attendees outside of the VCS that they had not known before attending a VCS.

Of the 44 attendees who participated in extra-meetups outside of the weekly VCS, more than half (55%, $n=24$) met four or more times per month, a quarter (25%, $n=11$) met three times per month, followed by two times per month (11%, $n=5$) and once per month (9%, $n=4$). Twenty-nine

Table 3 Types of activities VCS attendees are interested in doing with other VCS attendees ($n=50$)

Activities	n
Go out for a meal	28
Attend sports event	21
Go to a movie	20
Have a co-ed activity	20
Participate in a game night	19
Bowling	14
Play a sport	13
Other (e.g., outdoor activity, activism)	5

Categories are not exclusive

participants reported barriers in getting together with other VCS attendees, with the most common being lack of time (Table 4).

Expansion

Growth Across Years

Of the 32 VCS from 2014 to 2019, more than half (66%, $n=21$) met weekly, with the remaining (34%, $n=11$) meeting once per month (Fig. 1). The number VCS tripled from three to nine by 2016. By 2019, there were 20 weekly and eight monthly VCSs. Of the 21 weekly VCS, most (86%, $n=18$) sustained across the 2014 to 2019 time period, whereas almost half (45%, $n=5$) of the 11 monthly VCS remained in the community serving veterans.

Access to Care

Using VA Services

More than 40% (41%, $n=27$) reported receiving no care from the VA prior to attending a VCS, and of those, more than a quarter (26%, $n=7$) first sought VA services after attending a VCS.

Feelings of Companionship

Feelings of Companionship and VCS Attendance

A multiple regression analysis examined whether attendees' length of time affiliated with the VCS and frequency of attendance in the past three months significantly predicted feelings of companionship. This model explained 13% of the variance and was a significant predictor of feelings of companionship, ($F(2, 50)=3.66, p=0.03$). While frequency of attendance in the past three months significantly predicted companionship ($\beta=-0.038, t(50)=-2.69, p<0.01$), length of affiliation did not ($\beta=-0.355, t(50)=-0.29, p=0.77$).

Table 4 Barriers to attendees socializing outside a VCS ($n=29$)

Barriers	n
Too many other demands on time	17
Do not have transportation	6
Do not find it easy to ask others to get together	4
Live too far from others	3
Other	2

Categories are not exclusive

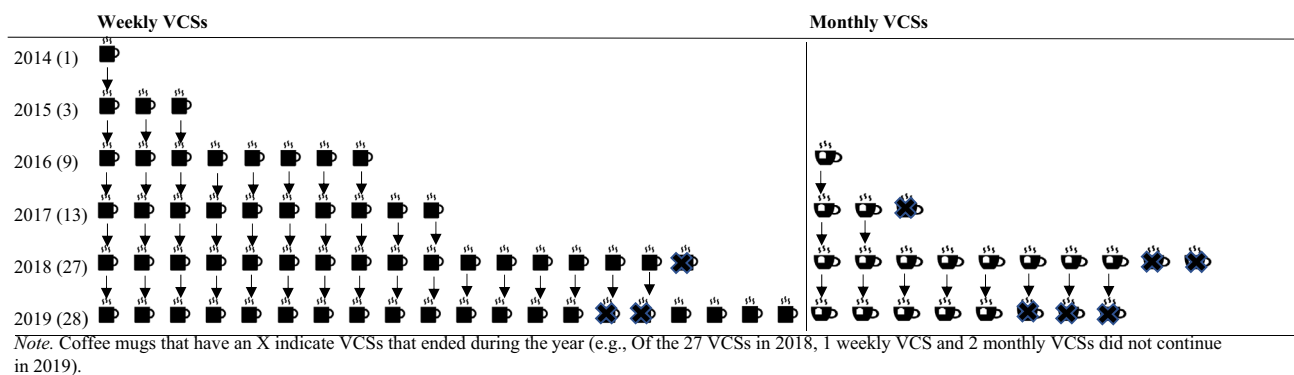


Fig. 1 Expansion of VCS from 2014 to 2019

Discussion

The findings provide evidence of acceptability, demand, and expansion of the Veterans Coffee Socials (VCS), thus supporting future research inquiry into the effectiveness of this intervention. Moreover, findings highlight relevant outcomes of interest on social connection, engagement in healthcare services, and level of community integration. Future studies might explore the impact of the intervention across different ethnic, racial, and cultural groups as well as targeted programming aimed at reaching vulnerable and disconnected subpopulations of veterans. Exploring the long-term benefit of participating in a VCS intervention, specifically on social support systems, healthcare utilization, and clinical outcomes, would better direct implementation efforts. Most veterans currently experiencing suicidal ideation are not engaged in mental health care (Nichter et al., 2021), so community-based interventions that can engage veterans could bolster suicide prevention efforts.

This is the first feasibility evaluation of the Veterans Coffee Socials (VCS) an innovative, community-based suicide prevention program targeting elements of suicide prevention among veterans, specifically delayed access to needed healthcare and social connectedness. The primary aim of this evaluation was to examine the feasibility of VCS. Findings from our evaluation suggest that VCS are feasible with respect to acceptability (most attendees surveyed described the VCS as a valued activity in their lives), demand (frequency of attendance, sustained participation over time, attendees participating in multiple locations, and reported interest in growing the intervention's type and content), and expansion (growth of VCS over time to new geographic locations). In addition to demonstrating the feasibility of VCS, this evaluation found initial evidence that the intervention helps facilitate veterans' access to VA healthcare in addition to facilitating social connection.

Impact of the Intervention: Connection to Care

Further, this intervention appears to be reaching attendees who are not connected to VA services (41%), a major barrier to suicide prevention in the veteran population (Nichter et al., 2021). Moreover, it appears that VCS have the potential to increase veteran access to services for unmet healthcare needs as approximately 1 in 4 (26%) not engaged in VA care chose to, after attending VCS. Although the direct cause of choosing to connect to VA care is unknown, these preliminary findings are suggestive that VCS provide a pathway to care for veterans in the community. This is a particularly salient finding as veterans who are not connected to care may not respond to traditional VA outreach. VCS could play a role in engaging veterans who are not currently being engaged. Veterans report numerous barriers to accessing VA care (Elnitsky et al., 2013). Unfortunately, the rate of suicide is far higher in veterans who do not use VA services than those veterans in VA care (U.S. Department of Veterans Affairs, 2019). Connecting veterans through interventions with low-barrier models of participation, where the only requirements is attending with no obligation to attend regularly, can play an important role in upstream suicide prevention strategies.

Impact of the Intervention: Social Connection

Most attendees met a new person at the VCS and later had regular social contact (at least monthly) outside of the scheduled VCS. Although more research needs to be done, attendees are potentially building friendships and adding to their social support system, suggesting this intervention offers some protective benefits from social isolation. Alternatively, it could suggest that participants in this evaluation perceived themselves as more socially connected than the general population prior to joining the VCS. The interpersonal theory of suicide suggests that increasing frequent

positive interactions can increase sense of belongingness (Van Orden et al., 2008). Potentially, the frequency of VCS events and subsequent contacts could increase the number of positive interactions overall and decrease attendees' suicide risk.

Results showed that 13% of respondents reported 'often' feeling that they lacked companionship over the previous six months; in context, 20% of the U.S. population reported they "rarely or never feel close to people" (Cigna, 2018). Although more evidence is needed, VCS may offer benefits of increased feelings of companionship, a component of belongingness (Lee & Robbins, 1995), and a key construct in the interpersonal theory of suicide (Van Orden et al., 2008).

Community Partnerships

Engaging community leaders who have shared missions will be important in advancing veteran health (Carroll et al., 2020). Specifically, combining community and VA-initiated interventions that help build social connections could multiply support systems for veterans across the country. These types of partnerships are being prioritized through policy in both the National Strategy for Preventing Veteran Suicide 2018–2028 (U.S. Department of Veterans Affairs, 2018a) and Department of Veterans Affairs Strategic Plan 2018–2024 (U.S. Department of Veterans Affairs, 2018b) as well as through programming in rural communities (Monteith et al., 2020). Further, this intervention addresses upstream risk and protective factors, one of the five priorities for reducing military and veteran suicide set by the Biden administration (United States, 2021). Specifically, VCS may complement these efforts through building social support systems with few barriers to participation, consequently facilitating the growth of other community interventions, partnerships, and stakeholder organizations.

Limitations and Future Directions

This evaluation was designed to be unobtrusive. The length of the survey, the depth of the questions and demographic variables were limited. Although it is known how long participants have been involved in the VCS or attended in the past three months, the exact number of total events attended is unknown prior to completing the survey, which could impact the variables examined (e.g., feelings of companionship). Participants who completed the survey after six events may have different perceptions of the VCS compared to participants who completed the survey after 20 events. Further, since the study is cross-sectional, it is uncertain if ratings for some individuals could be stable over time regardless of how many events they attended. In addition, the VCS surveyed were held

on different days, had different hosts, and it is possible that some groups had overlapping members, even though explicit instructions were given to only complete the survey for a single VCS. As a result, group equivalency across multiple characteristics is unknown.

Using a self-report survey to collect declared information rather than more observable data increases the risk of the data being affected by participant error. Further, VCS chosen for this evaluation were established; they had been active for at least two years. It is unclear if newer or less established VCS would have elicited different results. In this study, data on dropout rates were unavailable, so it is unknown if the dropout rate was a significant concern for this intervention. Although embedding peer specialists within a VCS will likely impact retention (Minick et al., 2016), it remains unknown if a VCS without any peer specialist involvement will lead to results comparable to our findings.

With these limitations in mind, the findings provide evidence of the feasibility of VCS, thus supporting future research inquiry into the effectiveness of this intervention (Bowen et al., 2009). Moreover, preliminary findings suggest that VCSs play a role in facilitating access to healthcare services and social connection. Future studies might explore the impact of the intervention across different ethnic, racial, and cultural groups and targeted programming aimed at reaching vulnerable and disconnected subpopulations of veterans. Exploring the long-term benefit of participating in a VCS intervention, specifically on social support systems, healthcare utilization, and clinical outcomes, would better direct implementation efforts. In general, studies focusing on the effectiveness of the intervention would bolster this promising community-building intervention. It may be beneficial to inquire more around perceived burdensomeness, a significant challenge in suicide prevention efforts (Compton et al., 2021; Monteith et al., 2013), because the flexibility in the structure of a VCS allows for attendees who may have once needed help, to then take on the role of helping others (e.g., hosting or information sharing).

Further, since the COVID-19 pandemic has affected this typically in-person intervention, efforts to transition and evaluate VCS to a virtual setting are currently in progress. Examining different platforms (e.g., gaming club or volunteer group) to engage veterans in the community may have the added effect of facilitating social connection for veterans who have different interests, goals, and concerns. Finally, more research and implementation related to seeking partnerships and collaborating with pre-existing veteran community networks will be critical to more efficiently support veterans. Overall, developing and working with the social systems veterans already trust can help to build capacity

in their communities, create a space for veterans help one another, and better serve their needs.

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Declarations

Conflict of interest The authors have no financial or non-financial interests to disclose that are relevant to the content of this article.

Ethical Approval This evaluation was reviewed by the VA Bedford Healthcare System Institutional Review Board and received exempt status.

Consent to Participate Verbal informed consent was obtained prior to the survey.

Consent to Publish Consent to publish was not obtained at the time of data collection. However, this was an anonymous survey which did not include personally identifiable information (PII).

References

- Angel, C. M., Smith, B. P., Pinter, J. M., Young, B. B., Armstrong, N. J., Quinn, J. P., et al. (2018). Team Red, White & Blue: A community-based model for harnessing positive social networks to enhance enrichment outcomes in military veterans reintegrating to civilian life. *Translational Behavioral Medicine*, 8(4), 554–564. <https://doi.org/10.1093/tbm/iby050>
- Ashida, S., & Heaney, C. A. (2008). Differential associations of social support and social connectedness with structural features of social networks and the health status of older adults. *Journal of Aging and Health*, 20(7), 872–893. <https://doi.org/10.1177/0898264308324626>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529.
- Bovin, M. J., Miller, C. J., Koenig, C. J., Lipschitz, J. M., Zamora, K. A., Wright, P. B., et al. (2019). Veterans' experiences initiating VA-based mental health care. *Psychological Services*, 16(4), 612–620. <https://doi.org/10.1037/ser0000233>
- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., et al. (2009). How we design feasibility studies. *American Journal of Preventive Medicine*, 36(5), 452–457. <https://doi.org/10.1016/j.amepre.2009.02.002>
- Caine, E. D., Reed, J., Hindman, J., & Quinlan, K. (2018). Comprehensive, integrated approaches to suicide prevention: Practical guidance. *Injury Prevention*, 24(Suppl 1), i38–i45. <https://doi.org/10.1136/injuryprev-2017-042366>
- Carroll, D., Kearney, L. K., & Miller, M. A. (2020). Addressing suicide in the veteran population: Engaging a public health approach. *Frontiers in Psychiatry*, 11, 569069. <https://doi.org/10.3389/fpsy.2020.569069>
- Chen, J. I., Hooker, E. R., Niederhausen, M., Marsh, H. E., Saha, S., Dobscha, S. K., et al. (2019). Social connectedness, depression symptoms, and health service utilization: A longitudinal study of Veterans Health Administration patients. *Social Psychiatry and Psychiatric Epidemiology*, 55(5), 589–597. <https://doi.org/10.1007/s00127-019-01785-9>
- Cigna, U. S. Loneliness Index, 2018.
- Compton, S. E., Houtsma, C., Boffa, J. W., Parkin, S. L., Carroll, M., Constans, J. I., et al. (2021). Suicide risk among rural veterans: Application of the interpersonal theory of suicide. *Journal of Rural Mental Health*, 45(4), 281–287. <https://doi.org/10.1037/rmh0000189>
- Davidson, L., Chinman, M., Kloos, B., Weingarten, R., Stayner, D., & Tebes, J. K. (1999). Peer support among individuals with severe mental illness: A review of the evidence. *Clinical Psychology: Science and Practice*, 6(2), 165–187. <https://doi.org/10.1093/clipsy.6.2.165>
- DeGross, A., Gressard, L., Glover-Kudon, R., Rice, K., Tharpe, F. S., Escoffery, C., et al. (2019). Assessing the implementation of a patient navigation intervention for colonoscopy screening. *BMC Health Services Research*, 19(1), 1–11. <https://doi.org/10.1186/s12913-019-4601-4>
- Drebing, C. E., Reilly, E., Henze, K. T., Kelly, M., Russo, A., Smolinsky, J., et al. (2018). Using peer support groups to enhance community integration of veterans in transition. *Psychological Services*, 15(2), 135–145. <https://doi.org/10.1037/ser0000178>
- Elnitsky, C. A., Andresen, E. M., Clark, M. E., McGarity, S., Hall, C. G., & Kerns, R. D. (2013). Access to the US Department of Veterans Affairs health system: Self-reported barriers to care among returnees of Operations Enduring Freedom and Iraqi Freedom. *BMC Health Services Research*, 13(1), 1–10. <https://doi.org/10.1186/1472-6963-13-498>
- Farmer, C. M., Tanielian, T., Fischer, S. H., Duffy, E. L., Dellva, S., Butcher, E., et al. (2017). Supporting veterans in Massachusetts: An assessment of needs, well-being, and available resources. *Rand Health Quarterly*, 7(1), 1–115. <https://doi.org/10.7249/RR1698>
- Gorman, J. A., Scoglio, A. A. J., Smolinsky, J., Russo, A., & Drebing, C. E. (2018). Veteran coffee socials: A community-building strategy for enhancing community reintegration of veterans. *Community Mental Health Journal*, 54(8), 1189–1197. <https://doi.org/10.1007/s10597-018-0288-y>
- Hare-Duke, L., Denning, T., de Oliveira, D., Milner, K., & Slade, M. (2019). Conceptual framework for social connectedness in mental disorders: Systematic review and narrative synthesis. *Journal of Affective Disorders*, 245, 188–199. <https://doi.org/10.1016/j.jad.2018.10.359>
- IBM Corp. (2019). *IBM SPSS statistics for windows, version 26.0*. IBM Corp.
- Joiner, T. E. (2005). *Why people die by suicide*. Harvard University Press.
- Kelley, M. L., Bravo, A. J., Davies, R. L., Hamrick, H. C., Vinci, C., & Redman, J. C. (2019). Moral injury and suicidality among combat-wounded veterans: The moderating effects of social connectedness and self-compassion. *Psychological Trauma: Theory, Research, Practice, and Policy*, 11(6), 621–629. <https://doi.org/10.1037/tra0000447>
- Kintzle, S., Barr, N., Corletto, G., & Castro, C. A. (2018). PTSD in US veterans: The role of social connectedness, combat experience and discharge. *Healthcare*, 6(3), 102. <https://doi.org/10.3390/healthcare6030102>
- Lee, C. Y. S., & Goldstein, S. E. (2016). Loneliness, stress, and social support in young adulthood: Does the source of support matter? *Journal of Youth and Adolescence*, 45(3), 568–580. <https://doi.org/10.1007/s10964-015-0395-9>
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, 42(2), 232–241. <https://doi.org/10.1037/0022-0167.42.2.232>

- Mamon, D., Scoglio, A. A., Calixte, R. M., Tuval-Mashiach, R., Patton, B., & Drebing, C. E. (2020). Connecting veterans and their community through narrative: Pilot data on a community strengthening intervention. *Community Mental Health Journal*, 56(5), 804–813. <https://doi.org/10.1007/s10597-019-00540-3>
- Minick, S. G., Stafford, C. L., Kertz, B. L., Cully, J. A., Stanley, M. A., Davila, J. A., et al. (2016). Veterans' perspectives on interventions to improve retention in HIV care. *PLoS ONE*, 11(3), e0151011. <https://doi.org/10.1371/journal.pone.0148163>
- Monteith, L. L., Menefee, D. S., Pettit, J. W., Leopoulos, W. L., & Vincent, J. P. (2013). Examining the interpersonal–psychological theory of suicide in an inpatient veteran sample. *Suicide and Life-Threatening Behavior*, 43(4), 418–428. <https://doi.org/10.1111/sltb.12027>
- Monteith, L. L., Wendleton, L., Bahraini, N. H., Matarazzo, B. B., Brimmer, G., & Mohatt, N. V. (2020). Together with veterans: VA national strategy alignment and lessons learned from community-based suicide prevention for rural veterans. *Suicide and Life-Threatening Behavior*, 50(3), 588–600. <https://doi.org/10.1111/sltb.12613>
- Nichter, B., Stein, M. B., Norman, S. B., Hill, M. L., Straus, E., Haller, M., et al. (2021). Prevalence, correlates, and treatment of suicidal behavior in US military veterans: Results from the 2019–2020 National Health and Resilience in Veterans Study. *The Journal of Clinical Psychiatry*, 82(5), 20m13714. <https://doi.org/10.4088/JCP.20m13714>
- Pietrzak, R. H., Goldstein, M. B., Malley, J. C., Rivers, A. J., Johnson, D. C., & Southwick, S. M. (2010). Risk and protective factors associated with suicidal ideation in veterans of Operations Enduring Freedom and Iraqi Freedom. *Journal of Affective Disorders*, 123(1–3), 102–107. <https://doi.org/10.1016/j.jad.2009.08.001>
- Rogers, M. L., Kelliher-Rabon, J., Hagan, C. R., Hirsch, J. K., & Joiner, T. E. (2017). Negative emotions in veterans relate to suicide risk through feelings of perceived burdensomeness and thwarted belongingness. *Journal of Affective Disorders*, 208, 15–21. <https://doi.org/10.1016/j.jad.2016.09.038>
- Rubin, R. (2019). Task force to prevent veteran suicides. *JAMA*, 322(4), 295. <https://doi.org/10.1001/jama.2019.9854>
- Schwartz, E., & Litwin, H. (2019). The reciprocal relationship between social connectedness and mental health among older European adults: A share-based analysis. *The Journals of Gerontology: Series B*, 74(4), 694–702. <https://doi.org/10.1093/geronb/gbx131>
- Sippel, L. M., Mota, N. P., Kachadourian, L. K., Krystal, J. H., Southwick, S. M., Harpaz-Rotem, I., et al. (2016). The burden of hostility in US veterans: Results from the National Health and Resilience in Veterans Study. *Psychiatry Research*, 243, 421–430. <https://doi.org/10.1016/j.psychres.2016.06.040>
- Smith, N. B., Mota, N., Tsai, J., Monteith, L., Harpaz-Rotem, I., Southwick, S. M., et al. (2016). Nature and determinants of suicidal ideation among US veterans: Results from the National Health and Resilience in Veterans Study. *Journal of Affective Disorders*, 197, 66–73. <https://doi.org/10.1016/j.jad.2016.02.069>
- Teo, A. R., Marsh, H. E., Forsberg, C. W., Nicolaidis, C., Chen, J. I., Newsom, J., et al. (2018). Loneliness is closely associated with depression outcomes and suicidal ideation among military veterans in primary care. *Journal of Affective Disorders*, 230, 42–49. <https://doi.org/10.1016/j.jad.2018.01.003>
- Tsai, J., Snitkin, M., Trevisan, L., Kraus, S. W., & Pietrzak, R. H. (2020). Awareness of suicide prevention programs among US military veterans. *Administration and Policy in Mental Health and Mental Health Services Research*, 47(1), 115–125. <https://doi.org/10.1007/s10488-019-00975-6>
- Tuval-Mashiach, R., Patton, B. W., & Drebing, C. (2018). “When you make a movie, and you see your story there, you can hold it”: Qualitative exploration of collaborative filmmaking as a therapeutic tool for veterans. *Frontiers in Psychology*, 9, 1954. <https://doi.org/10.3389/fpsyg.2018.01954>
- U.S. Department of Veterans Affairs. (2016). VA conducts nation's largest analysis of veteran suicide. Vantage Point, July, 2016. Retrieved 21 August, 2021, from <https://www.blogs.va.gov/VAanta/ge/28983/va-conducts-nations-largest-analysis-veteran-suicide>
- U.S. Department of Veterans Affairs. (2018a). *National Strategy for Preventing Veteran Suicide, 2018–2028*. Department of Veterans Affairs.
- U.S. Department of Veterans Affairs. (2018b). *Department of Veterans Affairs FY2018–2024 Strategic Plan*. Department of Veterans Affairs.
- U.S. Department of Veterans Affairs. (2019). *National Veteran Suicide Prevention Annual Report*. Department of Veterans Affairs.
- United States, Office of the Press Secretary. “Fact Sheet: New Strategy Outlines Five Priorities for Reducing Military and Veteran Suicide.” *The White House*, 2 Nov. 2021, Retrieved from <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/02/fact-sheet-new-strategy-outlines-five-priorities-for-reducing-military-and-veteran-suicide>
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr. (2010). The interpersonal theory of suicide. *Psychological Review*, 117(2), 575. <https://doi.org/10.1037/a0018697>
- Van Orden, K. A., Witte, T. K., Gordon, K. H., Bender, T. W., & Joiner, T. E., Jr. (2008). Suicidal desire and the capability for suicide: Tests of the interpersonal-psychological theory of suicidal behavior among adults. *Journal of Consulting and Clinical Psychology*, 76(1), 72–83. <https://doi.org/10.1037/0022-006X.76.1.72>
- You, S., Van Orden, K. A., & Conner, K. R. (2011). Social connections and suicidal thoughts and behavior. *Psychology of Addictive Behaviors*, 25(1), 180–184. <https://doi.org/10.1037/a0020936>
- Zinzow, H. M., Britt, T. W., McFadden, A. C., Burnette, C. M., & Gillispie, S. (2012). Connecting active duty and returning veterans to mental health treatment: Interventions and treatment adaptations that may reduce barriers to care. *Clinical Psychology Review*, 32(8), 741–753. <https://doi.org/10.1016/j.cpr.2012.09.002>

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