Qualitatively Exploring Mental Health Attitude Changes among Emerging Adult Motivational Interviewing after One Motivational Enhanced Interview

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Abstract

Emerging adult military members and veterans (MMV) are experiencing many transitions (e.g., adulthood, military). The sum of these changes can cause stress, anxiety, and mental health challenges. Stigma of mental health and treatment exists, and military populations are often not seeking or engaging in appropriate care. Recent research emphasizes the need to uncover mental health attitudes and self-stigma barriers regarding help seeking. We evaluated the impact of a single motivational-interviewing enhanced interview with 26 MMV, all who reported high risk substance use. In 75-minute interviews with the primary focus of discussing their experiences regarding mental health, substance use, and identity development, the interviewer incorporated motivational interviewing strategies (e.g., affirmations, complex reflections). Participants shared their developmental experiences, stressors transitioning, and barriers and stigma around mental health treatment. Participants completed a survey which included a variety of standardized measures and open-ended questions two weeks before and after the interview. Qualitative follow-up data via open ended questions shows the session was well received by participants as they could share their stories, think critically about their military experiences, and brainstorm solutions for mental health care. We conclude that using individual, confidential interviews to discuss sensitive topics for data collection with MMV is an area to continue developing. Conducting qualitative research with motivational interviewing strategies has the potential to be twofold: advance scholarship and inform practitioners, but also serve as a therapeutic platform for some participants.

Supplementary Information

The online version contains supplementary material available at 10.1007/s10615-022-00837-z.

Keywords: Motivational interviewing, Emerging adults, Military/Veterans, Qualitative

Introduction

Military members and veterans (MMV) experience mental health tribulations and related consequences at high rates. Estimates state 17 to 22 veterans die by suicide each day in the United States (Department of Veterans Affairs, 2019; Kemp & Bossarte, 2013), and more soldiers die by suicide than from combat (Baier et al., 2019). Military populations underutilize mental health services (Bein et al., 2019; Ben-Zeev et al., 2012; Johnson et al., 2018; Kulesza et al., 2015; Michalopoulou et al., 2017). Barriers to seeking and engaging in help include lack of knowledge, stigma, and negative attitudes about mental health treatment, and concerns regarding confidentiality (Sayer at el., 2009; Mohatt et al., 2016), all that have been well-documented (Vogt et al., 2014). There is data to support these barriers continue even after leaving the military (Iversen et al., 2011), exemplifying the need to thoroughly understand and address these issues. These impediments continue to limit military members and veteran's involvement with appropriate mental health care, as some do not seek help (Hoge et al., 2004), as reasons for not seeking help may include fear of being perceived as weak (Stecker et al., 2007), among many others. The rejection of seeking help could have detrimental long-term outcomes such as substance misuse, depression, and suicide (Roscoe, 2020). Recent literature suggests mental health agencies including the Veterans Affairs (VA) Medical System, public agencies, and private sectors, need to do more to assist MMV mitigate mental health concerns (Hester, 2017). There is a need to more thoroughly decrease stigma and encourage help-seeking among MMV. Specifically, effective approaches or strategies could be improved and more appropriately tailored, specifically for young MMV, as the link between stigma and help-seeking is oftentimes overlooked and not fully understood (Blais & Renshaw, 2013). A recent study suggested examining *attitudes and beliefs* towards mental health therapy in addition to the commonly studied stigma aspect (Porcari et al., 2017).

Mental Health and Substance Use Problems

MMV are exposed to occupational and life stressors, including emotional and physical traumas that can leave them at risk to develop depression, Post-Traumatic Stress Disorder (PTSD), anxiety, hopelessness, sleep disorders, substance misuse, and isolative lifestyles, all of which can lead to increased suicide risk (Barnes et al., 2017; Joiner, 2007; Macdonald et al., 2009; Silva et al., 2017; Kaplan et al., 2007). Some military members enter the Armed Forces with mental health problems, and often these problems go unaddressed while serving, which may be exacerbated when transitioning back into the civilian sector (Hester, 2017). Additionally, 60% of veterans who complete suicide did not use Veterans Affairs (VA) services (Pak et al., 2019). Substance use disorders are also a significant concern among military populations (Teeters et al., 2017). Further, substance use, misuse, and addiction are stressed as major concerns for military populations, as a recent study, using a large representative sample of VA patients found substance use rates are higher than previously reported (Hoggatt et al., 2021). When we consider age range, research shows that for the general population, emerging

adults or 18 to 29 year olds, experience the highest rates of substance misuse when compared to other age groups, as approximately one in seven young adults meet criteria for a diagnosable substance use disorder (SAMHSA, 2018). Young MMV have also been found to have the highest rates of substance use disorders when compared across age groups. About half of young veterans have used alcohol in the past 12 months and this group was likely to report daily cannabis use rates similar to alcohol use (Hoggatt et al., 2021).

Barriers

Barriers to accessing care among military populations are varied and vast. A systematic review summarized common themes across 111 studies which included factors such as stigma, structural barriers, and negative treatment beliefs, among numerous others (Hom et al., 2017). Stigma regarding mental health issues is recognized as a global health problem (Griffiths et al., 2014). It is a prominent barrier among MMV populations which prevents help seeking and decreases the overall quality of life (Gould et al., 2007).

Brief Interventions

As defined by SAMHSA (2015), a brief intervention or a brief conversation (SBIRT Colorado, 2008), is an evidence-based practice designed to increase motivation in individuals that have high risk substance use behaviors, that may further cause or exacerbate additional health problems. Brief interventions can last anywhere from 5 to 60 minutes and can occur in one or more sessions (Babor et al., 2007). The approach is theory driven (i.e., self-determination theory) and predicts new and uncovered motivation will cause individuals to positively change behaviors due to information learned about the impact of substance use, or other unhealthy behavior(s, is having on their health (Babor et al., 2007). During brief intervention sessions, the counselor establishes rapport, provides empathy, supports the client's perceptions and thoughts, discusses the client's risk behaviors, offers advice to change, lists ways to alter behavior, and provides support and optimism about making said changes (Babor et al., 2007).

Brief interventions in the mental health and medical field, specifically those that focus on substance use concerns (Zorland et al., 2018), have become more commonly practiced and researched over time. However, research is now shifting their focus to mental health perceptions and quality of life. One quasi-experimental study found those who were involved in a brief intervention, had positive changes in mental health perceptions (Zorland et al., 2018). Further, the Veterans Affairs (VA) supports this evidence-based approach, as it is listed on the U.S. Department of Veterans Affairs website for supporting homelessness among veterans. It states,

"Motivational Interviewing (MI) is a brief evidence-based (meaning well researched), treatment used to draw out and strengthen one's motivation for change. These treatments offer Veterans acceptance and compassion as they consider making changes in their lives. They focus on the Veteran's reasons for changing problem behaviors and openly discuss the mixed feelings that are a normal part of making changes." (USDVA, 2020).

Not only does the VA support this approach for helping veterans who are experiencing homelessness, but also for treating individuals with alcohol and substance use issues, and those who might be characterized as "resistant". The Department of Defense (DoD) and VA specifically list motivational interviewing and/or motivation enhancement therapy as a treatment option for substance use issues (USDVA, 2021; VA/DoD, 2021). The Clinical Practice guideline for the Management of Substance Use Disorders shares,

> *"Motivational enhancement therapy (MET) is a less intensive form of specialized psychosocial intervention for patients with SUD. It uses principles of MI including an empathic, client-centered, but directive, approach intended to heighten awareness of ambivalence about change, promote commitment to change, and enhance self-efficacy. Motivational enhancement therapy differs from MI in that it is a more structured intervention that is based to a greater degree on systematic assessment with personalized feedback. The therapeutic style using MI elicits client reactions to assessment feedback, commitment to change, and collaboration on development of an individualized change plan. Involvement of a significant other is encouraged in at least one of the MET sessions."*

Other approved psychosocial interventions for substance use include behavioral couples therapy, cognitive behavioral therapy, community reinforcement approach, contingency management, individual drug counseling, and 12-step facilitation (VA/DoD, 2021).

Motivational Interviewing

Motivational interviewing (MI) is an evidenced-based intervention designed to help clients explore and resolve their ambivalence toward changing their substance use (Miller & Rollnick, 2013). MI consists of two distinct parts that work in concert to help the resolution of ambivalence. The technical component of MI comprises specific provider behaviors that are intended to evoke and reinforce client language, and the relational component is intended to engage the client by fostering a collaborative relationship, supporting client autonomy, and facilitating rather than prescribing client motivation to change, within a context of provider empathy and acceptance (Moyers, 2014). Conceptually, Miller and Rollnick (2013) outline that provider level of empathy and acceptance toward the client are critical components of adherence to MI spirit.

Relevant MI Research with MMV

MI strategies have been used with MMV in different settings for many years. One study published in 1993 evaluated strategies with 32 veterans who were enrolled in a VA outpatient substance abuse program (Bein et al., 1993), exemplifying the long-standing use and evaluation of brief interventions in VA settings. A recent study conducted in 2013 (Walton et al., 2013) analyzed the marketing campaign of Warriors Checkup, a phone-based brief intervention to reach active military members with untreated substance use disorders and subsequently found their marketing strategies to be successful. Their advertisements focused on a no pressure strategy of changing behaviors or seeking treatment. However, this interaction served as an opportunity to engage in future treatment if they felt the need to do so, while actively serving in the military. Soldiers in this study were concerned with nonjudgmental attitudes as well as the ability to keep their information safe. Another study (Koenig et al., 2016) sought to decrease stigma around mental health treatment with engaged military members using three phone calls which incorporated MI spirit. The intervention Coaching to Enhance Mental Health Engagement in Rural Veterans (COACH) used veteran peers to conduct phone calls. The veteran peers had *limited* clinical experience, which could impact the outcomes if MI spirit is not upheld with integrity (Koenig et al., 2016).

Study Rationale

MMV populations are not seeking or engaging in appropriate care for mental health and substance use challenges. Randomized controlled trials and post evaluations of brief interventions have been conducted providing promising results for an array of health outcomes, symptoms, and behaviors (Rubak et al., 2005; Lundahl et al., 2010; 2013; VanBuskirk & Wetherell, 2014; Magill et al., 2014; Gayes & Steele, 2014). There is a lack of knowledge of *why* and *how* brief MI sessions are effective for a population that is hesitant to seek mental health assistance. We know that MI techniques and strategies have been evaluated for their efficacy when they are implemented in online modalities, individual therapy, and group therapy. However, to our knowledge, there are no efficacy studies which evaluate one MI session with emerging adult MMV who have high risk substance use behaviors. The present study is not for examining the MI therapy effectiveness but rather for qualitatively exploring how to make MI more acceptable to military and veteran communities. Understanding how and why a brief MI session works, through qualitative feedback, will help to create tailored approaches for this population, specifically what topics to discuss during one visit, and what techniques the clinician/therapist could focus on.

Current Study

In this exploratory study, we qualitatively evaluated the experiences of our participants who participated in a single motivational-interviewing enhanced interview. The semi-structured interview protocol included an array of topics including: past and current mental health treatment, perceived barriers around seeking and engaging in mental health treatment, ways to improve and encourage help seeking among emerging adult MMV populations, transitional and developmental age stressors, and military substance use culture. This current article was part of a large multi-method qualitative dissertation study (Clary, 2020) which focused on the correlations between the Emerging Adulthood Theory (Arnett, 2000) and substance use behaviors. Additional topics were included after consulting the literature and recognizing a need to uncover additional details regarding sensitive topics including mental health, stigma, help-seeking and substance use and culture among this population. Additional data from the dissertation is published in other manuscripts (Clary, 2021; 2021; 2021). This study's aims were to qualitatively explore (1) perceptions of the one MI enhanced interview and (2) the participants' mental health attitudes, with three open-ended survey questions two weeks following the MI enhanced interview. We hypothesize that conducting qualitative interviews which discuss challenging military experiences, identity development, and barriers regarding mental health and substance use treatment could produce positive attitudes about mental health.

Methods

Data Collection

This study received full approval by the lead Author's Institution and a National Institutes of Health (NIH) Certificate of Confidentiality. All data were collected between February and August 2019. Participants were eligible to participate in the study if they were (1) actively serving in the military or identified as a veteran, (2) 18–29 years old, (3) living in the United States, (4) spoke English proficiently, and (5) and met the threshold for high-risk substance use behaviors assessed by the Alcohol Use Disorders Identification Tool-C (AUDIT-C) and Drug Abuse Screening Tool-10 (DAST-10). We used 18 to 29 years old as an age range inclusion criteria due to the Society of the Study on Emerging Adulthood's guidelines (SSEA, 2014) and researchers proposing that adulthood begins around age 30 (Mehta et al., 2020). Interested participants were assessed for eligibility via phone. Those who met criteria were instructed to virtually sign an informed consent before beginning the online Qualtrics survey. Participants completed a pre-test Qualtrics survey (m = 20 min, SD = 7 min) two weeks before completing the interview. Most participants utilized Zoom to complete the interview (n = 22, 85%), while a few were in-town and able to complete the interview in-person (n = 4, 15%). Interviews ranged from 46 to 117 minutes, with an

average of 74 minutes. All participants (n = 26, 100%) completed the post-test survey, two weeks after the interview, which took 6 to 30 minutes (m = 12.6 minutes). Participants received a $30 Amazon e-gift card directly after the interview. **Interview Protocol**.

The first author conducted all 26 interviews from February to August 2019. This social work researcher has four years of training and experiencing in motivational interviewing. During semi-structured interviews, participants were asked a variety of questions (Supplementary Material 1). The interviewer asked scripted questions, and elicited complex reflections, affirmations, and created a collaborative-like relationship with empathic responses, following MI strategies (Miller & Rollnick, 2009). *The interviewer never suggested or encouraged any participant to change their behavior or seek therapy. Instead, the interviewer engaged in a genuine, nonjudgmental conversation regarding the participants' experiences, struggles, and triumphs.*

Qualitative Data Analysis

The written responses for the three open ended survey questions were analyzed using content analysis (Mayring, 2004), following six steps of thematic analysis (Braun & Clarke, 2012), a widely used qualitative method (Boyatzis, 1998; Roulston, 2001; Javadi & Zarea, 2016). The lead author read through all the open-ended responses and made notes of commonalities. Then, commonalities were grouped together into specific codes. The lead author then generated a code book with initial codes. The codebook was then applied to each of the responses. After, a debriefing with a colleague to discuss the various topics transpired. Final codes were then grouped to form overarching themes within and across each question. Direct written responses are used to support each theme. A short description is included in the results section, and three tables which exemplify all the verbatim written responses can be found in Tables 1, 2, 3 and 4.We have added citation for Table 1 here to maintain sequencial order.This is inaccurate. Instead, these tables should be in the 'results' section, not in the data analysis section. The tables should appear throughout the Results section at noted, OR at the end of the paper. Thank you.

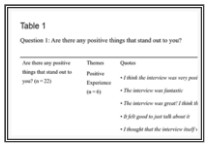
Table 1

Question 1: Are there any positive things that stand out to you?

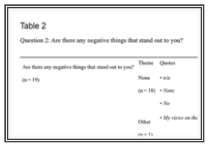
Table 2

Question 2: Are there any negative things that stand out to you?

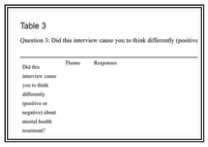
Table 3

Question 3: Did this interview cause you to think differently (positive or negative) about mental health treatment?

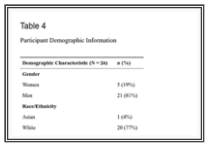
Table 4

Participant Demographic Information

Adherence Coding

All interview sessions were audio recorded and were fully coded with the MITI 4.1, a reliable treatment integrity measure designed to assess a practitioner's adherence to MI (Moyers et al., 2014). The two coders used for this study both have extensive experience coding MI sessions in clinical research. One coder (main author) coded all tapes. These codes were compared with randomized coding of complete tapes of 6/26 (23%) tapes by a Motivational Interviewing Network of Trainers (MINT) trained Licensed Clinical Social Worker (LCSW) with extensive experience coding MI sessions using the MITI 4.1 manual. The two code sets were compared for inter-rater reliability (Ƙ=0.96). This yielded five summary scores: (1) a global spirit rating, which was an average of the Evocation, Collaboration, and Autonomy– Support scores; (2) the percentage of complex reflections

out of all reflections; (3) the percentage of open-ended questions out of all questions asked; (4) the ratio of reflections to questions; and (5) the percentage of practitioner statements that were MI adherent (Moyers et al., 2014). The six tapes showed good levels of MI adherence on multiple MITI subscales. Competence levels for MI adherence according to MITI is 3.5 out of 5 for Relational areas. The average Relational score was (P = 4.67 M SD 0.516, E = 4.83 M SD 0.408), respectively. The focus of coding was the relational aspect of the MI sessions. The reflection to question ratio was 1: 1.5, and 15% of all reflections were coded as complex reflections.

Results

Participant Demographics

A total of 26 eligible participants, with a mean age of 24.9 (SD = 2.08, Range = 20–29) were included in the study. Demographic information can be found in Table 4.

Qualitative Responses

The following section includes qualitative findings from three open ended questions on the post-test survey. Results are shared by each question with themes and interpretations.

Are there any positive things that stand out to you after the research study? (Table 2**)**

Twenty-two participants (85%) responded to the first open-ended question in their post-test survey, “Thinking back to the interview that you participated in about twoweeks ago, are there any positive things that stand out to you?”. Overall, participants felt as if this interview was a Positive Experience (Theme 1), because they perceived the social worker (i.e., the interviewer) and others to care about their experiences, challenges, feelings, and ideas. Six participants shared the study was positive, fantastic, or good. One participant shared:

I thought that the interview itself was very positive and almost therapeutic in a way. It was a good experience.

Not only did it make most feel optimistic, but it served as an outlet for some to share what has been on their mind, their own stories, and their suggestions for promoting well-being. It was evident that participants felt Others Cared About Them [Me] (Theme 2). Further, many felt as if they could navigate three things during the interview: Tell My Story (Theme 3), Assess My Military Experience (Theme 4), and Brainstorm Solutions for Care (Theme 5). A detailed description of each theme is shared below.

Others Care About Me

One reason why participants shared this was a positive experience is because they were reminded others care about them (i.e., MMV). Due to this positive research interaction, participants were reassured that researchers are concerned about military members’ and veterans’ mental health, and overall well-being. Five participants (19%) explained they felt cared about. Two participants mentioned how they recognize that helping professionals not only care, but also want to more importantly *help* this population. These participants wrote:

I liked that there are studies being conducted concerning mental health in the military community.

The interview made me feel like there are still people out there who care about us [MMV] and want to help us out.

Tell My Story

Another way participants used this interview platform was to tell their story. Three (12%) participants exemplified the ability to tell their story. Participants may have felt comfortable sharing their stories because they knew others, specifically the interviewer, cared about their experiences, and further confidentiality was guaranteed with the informed consent and the NIH Certificate of Confidentiality. Moreover, participants recognized that by sharing their story, they had the potential to assist future military members, their brothers and sisters. One participant shared this was the first time they had talked to anyone about their military experiences, exemplifying the therapeutic alliance and trust that was built in a short amount of time. This person wrote:

Being able to talk about all of my past experiences (both good and bad) brought up a lot of good times. It was the first time talking to someone about all of my past experiences in the military.

Another mentioned how they believed it is important for veterans to share their views and appreciated the space to do so. This participant wrote:

I was very impressed and really enjoyed sharing my story.

Assess My Military Experience

A small number of participants recognized the interview platform as an opportunity to not only share their experiences via storytelling, but also to critically assess their military experiences. Two participants (8%) expressed their self-reflection journey after participating in the study. One mentioned how they could critically think and speak without being judged, exemplifying the nonjudgmental and confrontational attitude of the interviewer:

I enjoyed being able to critically think and speak openly.

Another grappled with avoiding thinking about their military experiences, and this opportunity allowed them to more fully address their military time. This person's response:

I also had a chance to look back on my military career and reassess situations I have experienced that I've been avoiding thinking about.

Brainstorm Solutions for Care

Participants also had the opportunity to make suggestions for appropriate health and mental health care, programs, and preventative measures for MMV. Five participants (19%) shared that this conversation was the beginning to invoking change within the broader military and veteran communities. Participants expressed the interview as a positive activity. It was evident that they recognized their participation in the interview had the potential to impact the kind of care made available to emerging adult MMV. A participant provides their positive attitude about the study:

I'm really glad this study is being done because we [MMV] need a lot of help dealing with all the things discussed during the interview.

Further, this could be therapeutic as participants may view this interview an opportunity to give back to their brothers and sisters. One mentions:

I have had 3 military friends commit suicide, and it has bothered me that more hasn't been done concerning this epidemic.

This person reiterates how the interview was a positive step in the right direction to helping veterans. Another confirms these sentiments:

The interviewer had many great questions and I believe we got somewhere when it comes to community or veteran's mental health.

Are there any negative things that stand out to you after the research study? (Table 3**)**

Participants responded to a second open-ended question, "Thinking back to the interview that you participated in about two weeks ago, are there any negative things that stand out to you?". Most all participants answered this question (n = 19, 73%) with "n/a", "No" or "None". One participant responded, "My views on the military".

Did this interview cause you to think differently (positive or negative) about mental health treatment? (Table 4)

Participants responded to a third open-ended question, "Thinking back to the interview that you participated in about two weeks ago, did this cause you to think differently (positive or negative) about mental health treatment? (If yes, please explain why. If no, please explain why). Most all participants answered this question (n = 23, 88%), and the majority (n = 15, 65%), expressed a positive change in their thoughts or have engaged in constructive actions involving mental health issues and/or treatment. Positive change is reported by Thoughts (Theme 1) or Actions (Theme 2). The two other themes include No change (Theme 3), and Critically Assess Things Indirectly Related to Mental Health (Theme 4).

Positive Thoughts

Reflecting on the interview conversation may have evoked a change in thinking and feelings related to various types of treatment including mental health and substance use. Ten participants (39%) expressed a positive change in their attitudes towards mental health. Some very profound quotes to illustrate participants' thoughts and feeling include thinking more positively and feeling inspired to seek help if they needed to. Two participants shared:

It [Interview] made me feel positive towards it [mental health]. Like I could actually use it [mental health treatment] one day.

It [Interview] caused me to think positively about mental health treatment.

A few others mentioned they felt the process of seeking help is easier knowing what type of therapist or helping professional (e.g., social worker) they could possibly work with. These participants share:

Yes, it made me think more positively about mental health treatment. Knowing that future therapists will be trained to specifically help military members is inspiring.

Yes. As someone who has never been to therapy, I would say I had a slight negative view about mental health treatment. After actually speaking to someone who is involved in mental health treatment, that view has changed. I think much more positively about it [mental health treatment] now.

Another mentioned how they are reassured they are not alone in facing mental health challenges, and there is no reason to feel ashamed for seeking help. This participant responded:

[It] Made me think positive, showed me that I'm not alone if I ever need help & that seeking help is nothing to be ashamed of.

Positive Actions

Some participants reported having used this research study as a platform to assist their own mental health needs by accessing some type of professional care. These five (19%) participants reported some type of action they initiated due to their change in attitudes and/or feelings around mental health treatment. For example, one mentioned they had set up an appointment with their spine specialist for the following week. This participant shared:

It did as well as physical help. As I said in the interview on my way out of the marine corps I was treated poorly by doctors, so I really avoid it. This week I have an appointment at [Name redacted] spine center and maybe I'll even go to the VA soon. Probably not though.

Even though they were still hesitant with seeking out help from Veterans Affairs (VA), they *still* pondered this thought. Another mentioned how telling their story and assessing their experiences encouraged them to make an appointment with their private psychiatrist. They shared:

Yes it did. I was struggling a little bit mentally before the interview. I decided to go to a private psychiatrist after I finished the study for help with some issues. I think communicating honestly in the interview helped me realized I needed more help than I thought I did.

Another reiterates how they are trying to proactively look for issues that may be occurring before it becomes a bigger problem. Their statement reads:

The interview made me think positively about mental health issues and I'm trying to do a better job to spot an issue before it turns into a problem.

Lastly, another recognized how this interview caused them to "face some fears" and think more positively about mental health treatment. Their full statement:

It [Interview] actually made me face some fears that I was having so yes it made me think about it in a positive way.

These actions could have stemmed from a positive attitude shift regarding mental health. The last participant sums it up:

Positive- made me feel confident that I was/am making the right choice with my mental health treatment.

No Change in Thinking

Not all participants reported that their thoughts on mental health treatment changed. Some participants (n = 6, 26%), expressed neutral attitudes towards mental health. One participant acknowledged they are aware mental health treatment is a viable and valuable option:

Not necessarily, I know it [mental health treatment] is a good option and I have witnessed the positive influences from this.

This interview could have further solidified this sentiment. Another mentions they have not altered their perspectives, but rather the conversations reiterated how difficult the issues surrounding mental health are. This person states:

It didn't really make me think more positively or negatively about mental health, but it did make me realize how difficult of an issue this is to tackle.

Critically Assess Things Indirectly Related to Mental Health

A small number of participants (n = 2, 9%) reported a change in other areas indirectly related to their attitudes about mental health. One individual reported feeling more encouraged to think critically about issues their peers may face after they transition out of the military:

I think it [Interview] caused me to think more about what may be affecting this age range of veterans. Knowing what could be the reason why some of my friends chose to go down bad ways after the military.

Another mentions how this interview caused them to reflect and assess how they previously treated their peers. This interview allowed for reflection and a shift in how they view others, which could have a positive impact on the mental health issues their peer's experience:

After finishing up the interview I was reminded that everyone is a human being. That may sound a little weird, but you lose the human touch in relationship with your peers when all you are focused on is completing a task, preparing for deployment, or maintaining a certain level of

performance and effectiveness of your unit. It's not that I was being unfair or unreasonable with my sailors, its that their problems were not the forefront of my to do list. You forget that people have other factors like a family to raise or take care of bills, depression, etc.

Discussion

In our study, we qualitatively evaluated the experiences of 26 MMV with self-reported high risk substance use behaviors who participated in a single motivational-interviewing enhanced interview. This interview focused on understanding their attitudes towards mental health treatment, their identity development, and their military experiences related to substance use and mental health. This was not an *intervention* study, but rather an opportunity to integrate therapeutic aspects, specifically MI strategies, to explore the perceived acceptability and consider if there were any changes in mental health attitudes two weeks post interview. Overall, qualitative follow-up data shows the research interviews were well received by participants as they could share their stories, think critically about their military experiences, and brainstorm solutions for care. Further, participants shared some positive changes regarding their mental health attitudes.

All participants (n = 26, 100%) completed the pre-test survey, engaged in the interview, and completed the post-test survey two weeks following the interview. This 100% follow-up may relate to the guaranteed confidentiality, therapeutic alliance and trust that was established before and during the interview. This therapeutic alliance was built utilizing MI strategies which are aimed at helping people find their own motivation to make a change (Miller & Moyers, 2006). As research states, utilizing this strategy could be an effective way to assist military members with reaching and making their decisions regarding change, and decreasing high risk behaviors such as substance use (Walker et al., 2017), increasing treatment initiation, and decreasing treatment drop out (Dworkin et al., 2018).

The overall positive qualitative feedback exemplified how participants felt genuinely listened to and enjoyed the opportunity to discuss their time in the military. Some of these interviews were the first time they had talked to anyone outside of the military about their own experiences. Some participants even admitted to seeking help from a doctor, psychiatrist, or mental health professional following the interview, which aligns with other research stating that MI strategies can encourage participants to engage in health care treatment (Walker et al., 2017; Inoue et al., 2021). This is remarkable as not one time did the interviewer address or encourage that they should consider or enroll in any type of mental health or substance use treatment. However, it is consistent with results from a meta-analysis and systematic review of 14 studies shares, "Individuals not seeking treatment for mental health issues benefited the most from MI" (Lawrence et al., 2017, p. 700). Another recent study which used motivational coaching with rural veterans engaged in outpatient primary care found that their strategy did *not* enhance participants' engagement in mental health treatment, but instead positively influenced quality of life and self-care strategies, and decreased mental health symptoms (Seal et al., 2021). Training healthcare professionals, specifically mental health therapists, and researchers who work with MMV, on how to use MI strategies, specifically utilizing a collaborative approach and offering genuine affirmations, could have lasting impacts on those they encounter.

Notably, the present study found potential reasons of why one-session MI could be effective, acceptable, and life-changing for this specific population. This group had a chance to reflect on their military and veteran life and changes with a person (i.e., interviewer) who was actively listening without judgment and provided positive regards. It brought them the feeling of being secure and a human being. With the military training and military culture, this group has been trained to protect others, care for others, be strong, and often be silent when facing or struggling with mental health, suicide, or other challenges. Through MI with a trained professional, this seems as if it was often the first time they learned that others appreciated their services and were cared for by a professional just like other human beings without military experience. Professionalism, positive regards, and self-justifications may contribute to reducing stigma and the feelings of potential weakness. Further, MI's positive approach may facilitate action planning, such as actively looking for mental health or health-related services.

In sum, our findings recommend that utilizing MI *not a defined and titled intervention* may mitigate the connotations among 'the broken', stigma, and mental illness, and more significantly may bring an opportunity of re-learning about receiving mental health help and adjusting personal identity and self-value post-military services. Helping professionals may consider applying our findings to approach more military-related members as soon as they are aware of an individual at risk of mental health or substance use issues.

Limitations

Due to the structure of this exploratory qualitative study, conservative generalizations should be taken considering its limitations. Since recruitment utilized snowball and convenience sampling, selection bias exists. Participants may have felt more comfortable sharing their experiences because the interviewer was a nonveteran, or they may have felt less inclined to share their experiences. Next, most participants (n = 13, 50%) were enlisted with the United States Marine Corps. Our study included a range of active and no longer serving MMV. This study only collected qualitative responses at post-test, it did not have open ended questions pre- interview, thus we are not able to compare pre-and post attitudes towards mental health treatment. This study was conducted in the United States; therefore, it is U.S. Centric. Participants were scattered across the United States, and geographic differences must be taken into consideration. Since this was exploratory, there was not a control group; we did not have the opportunity to compare

similar interviews that did *not* integrate MI strategies to determine if there were any differences. Most interviews were conducted via Zoom rather than in person. This is important to note as comfortability with either platform may have varied and influenced the interview, the conversations, and the outcomes shared in the post-test survey. Lastly, our study used a qualitative method by way of open-ended questions in an online survey, meaning that there is a lack of detail and rich data from some responses, compared to collecting data via interviews or focus groups.

Implications for Research, Clinical Practice, and Policy

Additional research is needed to evaluate other data collection strategies that do not utilize MI strategies. In addition, future research may build upon the integration of MI into web-based interventions, as Serowik and colleagues (2014) have done. Consideration of group MI with veterans (Santa Ana et al., 2021) and the use of telehealth practices which integrate MI strategies should continue to be developed and evaluated (Battaglia et al., 2016). Additionally, evaluating the use of this type of process with non-military and non-veteran clients who have substance use problems, as well as military and veteran clients who do not have high risk substance use behaviors are areas to consider.

Further, clinicians who do not practice with military members or veterans may still find the use of MI techniques and strategies beneficial in the work they do. For example, focusing on building rapport, offering genuine affirmations, and active listening through complex reflections can add great value to therapy sessions. More so, as telehealth is increasing in popularity in various settings due to the COVID-19 Global Pandemic, these types of strategies may become even more relevant, and especially emphasized when working towards building trust and a positive client-clinician relationship via a web or phone-based platform. Helping professional (e.g., social work, psychology, education, public health) education and training programs may consider implementing and/or improving a MI class/course, certificate program, or workshops to teach their students and interns these valuable and effective communication strategies.

Related to policy implications, as the VA and DoD do, social service agencies can work on modifying their approved list of treatment approaches and options based on their agency's values, mission and insurance protocols. This information should be made visible to their community and clients. The need for allocation of funding around evaluating the effectiveness and efficacy of brief interventions and among diverse clients who suffer from mental health issues, substance use disorders, and other high-risk health problems are a continued need. More specifically, mandated clients, such as those involved in Drug Court, Mental Health Court, Veterans Court, or those who are currently incarcerated deserve attention as they have added barriers and unique motivational characteristics compared to 'voluntarily' clients.

Conclusions

In our exploratory qualitative study, we assessed mental health attitudes after an enhanced interview discussing military stressors, stigma, and challenges regarding mental health and substance use treatment. Overall, participants expressed optimistic views about their research study experiences, and some even expressed positive mental health attitude and behavioral change following the interview. Conducting research has the potential to be twofold: advance scholarship and inform practitioners, but also serve as a *therapeutic platform* for some. Research should consider the integration of therapeutic practices, such as MI, while collecting data as it has the potential to positively impact our participants beyond the data's implications.

Supplementary Material 1: Interview guide.

1. Can you talk about your life experiences between the ages of 18 to 29?
2. Did anything change when you "officially" became an adult at age 18?
3. Can you talk to me about your adulthood status?
4. Why do you think mental health professionals focus their work on 18 to 29 year olds?
5. (If applicable), what have your experiences been transitioning out of the military?
6. What type of treatment (e.g., therapy, mental health, substance use) have you accessed ?
7. Have you faced any stigma?
8. What are your suggestions for improving mental health interventions for emerging adult veterans/military members?
9. Why do you believe 18 to 29 year olds use substances?
10. What are your thoughts on the five emerging adulthood theory dimensions and their relation to using substances (i.e., self-focus, exploring identities, feeling in between an adolescent and adult, feeling optimistic, instability)?

Electronic Supplementary Material

Below is the link to the electronic supplementary material.

Supplementary Material 1 (14K, docx)

Biography

Kelly Clary

is a Social Work Assistant Professor. Her research focuses on qualitatively understanding factors/causes and consequences of substance use, mental health, and stigma among marginalized populations, specifically emerging adult military members and veterans.

Footnotes

The development of this article was supported by the University of Illinois at Urbana-Champaign's Career Center's Robert P. Larsen Career Development Grant. The views, however, are those of the authors and do not reflect official positions of the UIUC Career Center.

Publisher's Note

Article information

Clin Soc Work J. 2022 Apr 22 : 1–13.

doi: 10.1007/s10615-022-00837-z [Epub ahead of print]

PMCID: PMC9028893

PMID: 35493776

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Accepted 2022 Feb 25.

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