# Assessing Dissemination and Implementation Science Outcomes for Three Session Interpersonal Counseling (IPC-3) for Student Veterans Experiencing Psychological Distress

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### **ABSTRACT**

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Student Veterans experience a range of health and mental health challenges that may impact their social and academic functioning as they transition from military to student life. Of those in need of treatment, some do not receive support for successful integration into collegiate life. Recognizing the barriers to care faced by this population, a brief, non-stigmatizing psychosocial support intervention was developed to address the mental health needs of Student Veterans experiencing psychological distress. The intervention, called IPC-3, was adapted to be sensitive and inclusive of Veteran culture, norms, and values. It was delivered by peer providers and offered on campuses instead of at medical treatment facilities. IPC-3 trained and provided clinical supervision for peers through the Department of Veterans Affairs, Veterans Integration to Academic Leadership program, to leverage and expand capacity through an existing, caredelivery pathway.

This study examined specific Dissemination and Implementation (D&I) science outcomes for IPC-3, assessing the intervention's readiness for transitioning from a research setting to routine, clinical practice, utilizing a mixed-methods research design. Specifically, the D&I outcome measures of Adoption, Acceptability, Appropriateness, Feasibility, Reach, and Sustainability were explored across three groups. Participants included the Student Veteran consumers who received the intervention, the Peer Mentor providers who delivered IPC-3, and the Site Supervisors who provided clinical case supervision. Attitudes regarding each construct were evaluated at the pre- and post-intervention timepoints via surveys and key informant

interviews. Results were assessed to identify potential barriers that, if removed, may bridge the research-to-practice gap for IPC-3. As the first study to assess D&I outcomes for a psychosocial support intervention developed specifically for Student Veterans, findings offer insights for treatment developers and implementors serving Student Veterans experiencing psychological distress and suggest ways that IPC-3 may be implemented in routine-care settings.

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# **ABBREVIATIONS**

C-SSRS: Columbia Suicide Severity Rating Scale

D&I: Dissemination and Implementation

DoD: Department of Defense

GAD-7: General Anxiety Disorder-7

IPC: Interpersonal Counseling

IPC-3: Three Session Interpersonal Counseling for Student Veterans Experiencing

**Psychological Distress** 

IPT: Interpersonal Therapy

IRB: Institutional Review Board

K6: Kessler-6

M2C: Military to Civilian Questionnaire

PHQ-9: Patient Health Questionnaire-9

PCL-5: Posttraumatic Stress Disorder Checklist-5

PM: Peer Mentor

PTSD: Post-Traumatic Stress Disorder

SS: Site Supervisor

SV: Student Veteran

SVA: Student Veterans of America

VA: Veterans Affairs

VAMC: Veterans Affairs Medical Center

VITAL: Veterans Integration to Academic Leadership

## **ACKNOWLEDGEMENTS**

The main study, assessing IPC-3 as a symptom management and treatment engagement strategy, was conducted in the Global Mental Health Lab of Teachers College, Columbia University under the direction of Helen Verdeli, Ph.D. with the support of Bryan Cheng, Ph.D. The two-site, open clinical trial was implemented at the Department of Veterans Affairs, Veterans Integration to Academic Leadership Programs in New York and Utah with the support of Yvette Branson, Ph.D. and Aaron Ahern, Ph.D., Program Coordinators at each site, respectively. The delivery team consisted of clinical supervisors Yvette Branson, Ph.D. and Matthew Tkachuck, Ph.D., as well as Peer Mentors Nigel Casanova, Kymberly Helwig, Ricardo Rosado, Jake Babcock, Jennifer Brown, Amy Ellington, Ken Williams, and Brittany Lambert. The qualitative work was conducted by a dedicated and talented team of coders who assisted on the project for two years. The team included Lihi Ferber, M.A. (Lead Research Assistant), Riley Hughes, M.A., Jamie Lee, M.A., Andi Zhu, M.A., and Lily Wang M.A.

#### **DEDICATION**

This study is a culmination of my lived experiences, clinical interests, and academic passions. I was a junior in high school when I watched planes fly into the Twin Towers, the Pentagon, and a field in Pennsylvania. While I was an undergraduate, my peers were serving overseas, engaged in multiple deployments. Grappling with world events, I changed majors from pre-med to political science. Following graduation, I went to work at the Department of Defense. For roughly a decade, I saw firsthand the mental health challenges Service members encountered while on duty and following their transition to civilian life. In part, I came back to school to be better equipped to serve the mental health needs of this population, whom I grew to love.

In the Global Mental Health Lab, I was fortunate to find an intersection of my interests in Veteran populations, evidence-based psychotherapies, and work to bridge the research-to-practice gap, bringing effective treatments to routine care pathways and serving those in need of support. For six years, I have supported two clinical trials assessing brief, evidence-based interventions for Student Veterans. In this dissertation, I was able to expand on that work to explore potential barriers that might keep this effective treatment from reaching the people who need it, in settings where they live and work.

Collecting data over the past two years, I have had the privilege of listening to Veterans as they selflessly offered me a glimpse into their rich and deep lived experiences. Standing witness to their stories, I was often reminded of what Dr. Judith Herman said in her book, *Trauma and Recovery*: "The conflict between the will to deny horrible events and the will to proclaim them aloud is the central dialectic of psychological trauma." This dissertation is dedicated to the those who felt silenced and invisible and yet still choose to courageously speak

out loud about painful experiences. My chief desire is that they feel seen, heard, and valued through this work.

## **CHAPTER I: INTRODUCTION**

The goal of this study was to assess specific Dissemination and Implementation (D&I) science outcomes for Three-Session Interpersonal Counseling for Student Veterans Experiencing Psychological Distress (IPC-3). IPC-3 is a brief, psychosocial support intervention that focuses on interpersonal triggers of distress to address problems Student Veterans (SVs) experience in daily living. Specifically, the intervention was assessed based on the D&I science outcome measures of Adoption, Acceptability, Appropriateness, Feasibility, Reach, and Sustainability across three populations, including those who received the intervention (i.e., SVs), those who delivered it (i.e., Peer Mentors [PMs]), and those providing clinical supervision (i.e., Site Supervisors [SSs]).

SVs experience a range of psychological challenges that may impact their social and academic functioning. Specifically, they report symptoms of mental health disorders—such as post-traumatic stress disorder (PTSD)—chronic physical pain, and transition stress (Barry et al., 2014; Elnitsky et al., 2018). Of the SVs in need of support and treatment, some do not receive the care they require due to barriers, including stigma and privacy concerns (Bonar et al., 2015; Fortney et al., 2016). Furthermore, as non-traditional students, Veterans have different demographics and lived experiences than their student peers, making social connections difficult in the collegiate space (Wurster et al., 2013).

Recognizing several barriers to care, IPC-3 was developed as a brief, non-stigmatizing psychosocial support intervention for SVs experiencing psychological distress (Verdeli et al., 2021). Specifically, IPC-3 is delivered by peers, which is a promising mental health treatment strategy as well as an effective strategy for college adjustment for SVs (Kees et al., 2017; Swenson et al., 2008; Zinzow et al., 2012). Understanding that peer support is a protective factor

for mental health, IPC-3 may be uniquely positioned to foster connections between SVs and providers who share common lived experiences.

Also, IPC-3 is delivered on campuses instead of in medical treatment facilities. Cheney et al. (2018) found that Veterans face specific barriers to care in Department of Veterans Affairs Medical Centers (VAMCs), including stigma, lack of confidence in the VA system, privacy concerns, and obstacles in navigating VA services. By changing the avenue of delivery, IPC-3 seeks to meet SVs where they are, potentially reducing the barriers associated with seeking care through traditional healthcare settings, such as in VAMCs.

Additionally, given the shortage of mental health providers in the United States, IPC-3 promotes capacity building and access to care for SVs by utilizing non-mental health specialists (U.S. Department of Health and Human Services, 2016). The VA has long utilized peer-support specialists in mental health settings (Shepardson et al., 2018). With this in mind, IPC-3 leverages existing infrastructure, recruiting PMs from a trained and supervised cadre of peer volunteers and work-study students through the VA's Veterans Integration to Academic Leadership (VITAL) Program.

Furthermore, D&I science allows for the examination of potential barriers that, if removed, will help bridge the research-to-practice gap for IPC-3 (Proctor & Brownson, 2012). However, based on the available literature to date, D&I outcomes have not been used to assess psychosocial support interventions for SVs. Thus, measuring and monitoring key performance outcomes—Adoption, Acceptability, Appropriateness, Feasibility, Reach, and Sustainability—allows IPC-3 treatment implementors to increase the likelihood that this novel, evidence-based intervention has utility in practice, assessing readiness for implementation outside of the lab into routine care settings. The data collection for the present study was approved with an exempt

status by the Teachers College, Columbia University Institutional Review Board (IRB) in January 2022 (IRB #22-061).

To fill the existing gap in knowledge, the present study occurred in the context of the aforementioned, ongoing two-site, open clinical trial to assess IPC-3 as a brief psychosocial intervention for SVs experiencing psychological distress. The intervention was administered by trained and clinically supervised peers via telehealth (i.e., Zoom). The aims of this ongoing study are to evaluate IPC-3 as a short-term symptom reduction strategy and to assess IPC-3 as a non-stigmatizing engagement strategy for SVs in need of additional support. The ongoing study protocol was reviewed and provided an expedited approval status by the Teachers College, Columbia University IRB in August 2020 (IRB #20-394).

# CHAPTER II: BACKGROUND AND LITERATURE REVIEW

# **Student Veterans**

The Servicemen's Readjustment Act (i.e., GI Bill) was legislated in 1944 to assist

Veterans and their families in obtaining financial support to attend educational and training
programs. Today, the 2009 Post-9/11 GI Bill provides supplemental support to Veterans seeking
additional levels of education, including up to 36 months of scholastic benefits. This federally
funded support has made it possible for more Veterans than ever to return to collegiate settings.

Specifically, the number of SVs utilizing educational benefits has increased from approximately
500,000 in 2009 to nearly 1,000,000 in 2017 (U.S. Department of Veterans Affairs, 2019).

Currently, they account for nearly 6% of all undergraduates (U.S. Department of Veterans

Affairs, 2020).

While there is no federal or national database of SVs, the non-profit Student Veterans of America (SVA) conducts an annual census of its members. According to the 2020 Census, 91% of SVs were 25 years of age or older, with 69% identifying as men and 31% identifying as women (SVA, 2021). As a group, 55% were White, 18% were Hispanic, 13% were African American, 6% were Asian, 3% were Alaska Natives, 2% were Pacific Islander, 2% were Other, and 1% were Middle Eastern (SVA, 2021). Ninety-one percent (91%) of SVs identified as heterosexual, with 9% identifying as lesbian, gay, bisexual, and transgender (SVA, 2021). Fifty-three percent (53%) were married, 31% single, and 12% engaged or in a committed relationship, 3% separated, and 1% preferred not to say (SVA, 2021). Of the group, 53% of SVs had children, and 46% did not, with the remaining participants preferring not to say (SVA, 2021).

Ninety percent (90%) of SVs were members of the enlisted ranks, with the rest including those who served as non-commissioned officers, warrant officers, and commissioned officers

(SVA, 2021). As the largest of the military services, 53% were in the Army, with 26% in the Navy, 19% in the Air Force, and 2% in the Coast Guard (SVA, 2021). Notably, 16% of SVs were currently members of the National Guard or Reserves, where they continued to serve beyond Active Duty (SVA, 2021). These demographics, as well as their comparison to the survey and key informant interview samples, are provided at Appendix A.

# Mental Health Challenges

While it is unclear if SVs experience mental health disorders at higher rates than their non-Veteran student peers, many face psychological distress while in the collegiate space (Barry et al., 2014; Bryan et al., 2014; Rudd et al., 2011; Rumann & Hamrick, 2010). A review of peerreviewed research found that SVs experience increased rates of health risk behaviors (e.g., drinking), psychological symptoms (e.g., PTSD), and challenges adjusting to school (i.e., forming connections) in comparison to their non-Veteran student peers (Barry et al., 2014). Specifically, among a non-random national sample of SVs, roughly 35% experienced severe anxiety, 24% experienced severe depression, and 46% experienced significant symptoms of PTSD (Rudd et al., 2011). In that same sample, 46% reported having suicidal thoughts, 20% reported having a plan, and roughly 8% reported having made a previous attempt (Rudd et al., 2011). A 2018 study found that about 93% of SVs reported chronic pain that impaired functioning, including symptoms of PTSD and traumatic brain injury (Elnitsky et al., 2018). Moreover, this group is at an elevated risk for self-harm compared to their non-Veterans peers (Blosnich et al., 2015).

# Different Lived Experiences

Compounding psychological distress, SVs have different demographic and lived experiences than their non-Veteran peers. As a cohort, they are older, with the majority 24 to 40

years of age (U.S. Department of Veterans Affairs, 2020). Roughly 47% of SVs are married and have children (U.S. Department of Veterans Affairs, 2020). About two-thirds are first-generation college students (U.S. Department of Veterans Affairs, 2020; Wurster et al., 2013). Additionally, they are twice as likely as their non-Veteran peers to have an off-campus job while attending school (U.S. Department of Veterans Affairs, 2020). SVs also face the unique challenge of transitioning from a hierarchical, structured military environment to a less regulated, fluid campus setting, which has been shown to cause distress (Mobbs & Bonanno, 2018; Rumann et al., 2011). Taken together, these additional roles, responsibilities, and unique stressors may influence SVs' ability to fully engage academically and socially in the collegiate space.

# Stigma and Barriers to Care

Despite the need for treatment and support, SVs experience stigma and barriers to seeking and receiving mental health care (Norman et al., 2015). A recent study found that even in the face of impaired physical and psychological functioning, only 19% utilized counseling services (Elnitsky et al., 2018). For comparison, a study on mental health needs and service utilization among SVs and their non-Veteran peers found that both groups had low utilization rates (Bonar et al., 2015). However, of those SVs who accessed services, few received them through the VA, which is a low- or no-cost avenue of care for this population. Specifically, SVs cited not wanting treatment on their official records as a barrier to service utilization (Bonar et al., 2015). Among Veterans in general, studies indicate roughly half of those experiencing PTSD symptoms seek treatment (Milliken et al., 2007; Tanielian et al., 2008). Those who do engage in service often drop out before completing a full course of treatment—roughly 20% to 40% in randomized clinical trials (Monson, 2006; Schnurr, 2007).

# **Three-Session Interpersonal Counseling**

Interpersonal Therapy (IPT) is an empirically supported, time-limited (i.e., 12-16 sessions), manualized intervention for the treatment of depression (Weissman et al., 2007). In recent years, IPT has been adapted for the treatment of other disorders, such as bipolar, anxiety, eating, personality, and post-traumatic stress (Bleiberg & Markowitz, 2005; Ray & Webster, 2010; Weissman et al., 2007). The goals of IPT are to improve interpersonally relevant problem areas (i.e., disputes, role transitions, grief, social isolation) and symptomatic recovery (Weissman et al., 2007). Globally, IPT has successfully been used within high-, middle-, and low-resource settings and has been delivered by both mental health specialists and non-specialists (Bolton et al., 2003; Verdeli et al., 2008; Weissman et al., 2007).

# **Interpersonal Counseling**

A brief version of IPT, called Interpersonal Counseling (IPC), was developed for primary care settings and delivered by non-mental health specialists for those with depression (Weissman et al., 2014). This three-session intervention provides evaluation and triage support as well as facilitates mental health service referrals for those in need of additional care. Since its development, IPC has been found effective in treating psychological symptoms of distress that are associated with depression, anxiety, and PTSD when delivered by non-specialists in a variety of settings (Weissman & Verdeli, 2012; Weissman et al., 2014). IPC was designed as a non-stigmatizing support intervention for those in need who may not otherwise seek mental health care in traditional care settings (e.g., hospitals) and for those who may not identify as having a diagnosed mental health disorder (e.g., depression) (Weissman & Verdeli, 2012).

# Adaption for Student Veterans

In 2018, IPC was adapted for use with SVs, incorporating Veteran cultural competencies into the intervention (Verdeli et al., 2021). The aim of this psychosocial support intervention, called IPC-3, is to reduce psychological distress by equipping SVs with coping skills and facilitating their long-term engagement with support services, if needed. This approach is tailored to address common issues SVs face after leaving the military, such as problems with daily functioning (e.g., housing, employment), adjustment to civilian life (e.g., transition stress), and transition to the collegiate environment (Mobbs & Bonanno, 2018). A 2019 one-site, open clinical trial found that IPC-3 delivered by mental health professionals was a promising strategy for short-term symptom reduction (i.e., distress, depression, PTSD) and for long-term engagement with resources by SVs in need of further mental health services (Verdeli et al., Manuscript in preparation). Building on the previous study, a two-site, open clinical trial is currently underway with the VA to evaluate IPC-3 as an efficacious strategy for short-term symptom reduction and long-term connection to resources, delivered by trained and clinically supervised peers.

# Peer Support

Peers were selected to deliver IPC-3 as peer support is associated with physical and mental health among Veterans as well as a protective factor against PTSD (Boothroyd & Fisher, 2010; Elliott et al., 2011). Specifically, SVs who receive increased peer support have demonstrated better academic performance, psychological health, self-efficacy, social support, and psychiatric symptom reduction (Drebing et al., 2018; Elliott et al., 2011; Jain et al., 2016; Mastrocola & Flynn, 2017; Whiteman et al., 2013). While understudied, initial findings from programs utilizing peer support for SVs show that they promote social connection, skill building,

and purpose, while offering support and stress reduction (Kees et al., 2017; Klaw et al., 2017). Peer support is also an integral part of military life, with programs such as the National Guard's Buddy-to-Buddy program long used as a platform for peers to address mental health concerns (Greden et al., 2010). Furthermore, the VA has a long history of using peer-support specialists in mental health settings (Shepardson et al., 2018).

# **Dissemination and Implementation Science**

The field of D&I science helps bridge the research-to-practice gap, addressing barriers that inhibit evidence-based treatments from transitioning from laboratory environments into routine delivery settings (Brownson et al., 2017; Proctor & Brownson, 2012; Proctor et al., 2009). Specifically, "dissemination" is the spread of evidence-based treatments through planned avenues to people in need, such as those experiencing psychopathology (Brownson et al., 2017). "Implementation" is the integration of evidence-based treatments into particular service-delivery settings (Brownson et al., 2017). There are many D&I frameworks and models to meet the needs of evidence-based treatments transitioning from research to practice (Brownson et al., 2017; Proctor et al., 2009; Tabak et al., 2012). Largely, these frameworks seek to identify a specific treatment, strategies to execute D&I principles, levels of implementation, and outcomes (Brownson et al., 2017; Proctor et al., 2009; Tabak et al., 2009; Tabak et al., 2012).

Once an evidence-based treatment has been selected, strategies for implementation are identified. Depending on the treatment and setting, strategies may include competency training, consultation, or resource and referral infrastructures (Karlin & Cross, 2014; Murray et al., 2014). Notably, these processes occur at multiple levels, including consumer (e.g., patient), provider (e.g., mental health professional), organization (e.g., hospital), and system (e.g., policy) levels (Proctor et al., 2009; Tabak et al., 2012). Outcomes are likewise tracked at the implementation

(e.g., feasibility), service (e.g., equity), or consumer (e.g., symptoms) levels (Proctor et al., 2009). When developing treatment interventions, D&I models encourage assessment across the treatment lifecycle—from inception through sustainment (Aarons et al., 2011). Importantly, D&I models are not universal and must be tailored to the specific needs of the evidence-based treatment being assessed (Karlin & Cross, 2014).

## **Outcome Constructs**

While there are variations across D&I models, Proctor et al. (2011) identified several common, key performance outcomes and defined their nomenclature. These models are considered best practices by the American Psychological Association's Society of Clinical Psychology (Division 12) and include Adoption, Acceptability, Appropriateness, Feasibility, Reach, and Sustainability. Table 1 presents an overview of these constructs, including their definitions, the levels at which they are measured, as well as the timing of their assessment during the implementation process.

Table 1

Overview of D&I Constructs

D&I Construct	Definition	Level of Measurement	Assessment Stage
Adoption	Intention, initial decision, or action to try or employ an innovation or evidence-based practice	Provider Organization	Early
Acceptability	Perception among implementation stakeholders that a given treatment, service, practice, or innovation is agreeable, palatable, or satisfactory	Consumer Provider	Ongoing (based on needs)

D&I Construct	Definition	Level of Measurement	Assessment Stage
Appropriateness	Perceived fit, relevance, or compatibility of the innovation or evidence-based practice for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem	Consumer Provider Organization	Early
Feasibility	Extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting	Provider Organization	Early
Reach	Integration of a practice within a service setting and its subsystems	Organization	Mid to Late
Sustainability	Extent to which a newly implemented treatment is maintained or institutionalized within a service setting's ongoing, stable operations	Organization	Late

First, "Adoption is defined as the intention, initial decision, or action to try or employ an innovation or evidence-based practice" (Proctor et al., 2011, p. 69) and has been likened to "trialability"—or one's willingness to try a new intervention (Rabin et al., 2008; Rogers, 1995; Rye & Kimberly, 2007). Adoption is traditionally captured at the provider and organizational levels, ideally early in the intervention's assessment (Brownson et al., 2017; Proctor et al., 2011). While assessed in many ways, Adoption may be measured via surveys, semi-structured interviews, focus groups, and observation (Brownson et al., 2017; Proctor et al., 2011). The intention to try an intervention is the first step in its implementation (Proctor & Brownson, 2012). However, Adoption is not the same as operationalization. Several other outcome constructs have been found to predict Adoption, including Acceptability, Appropriateness, and Feasibility (Brownson et al., 2017). Notably, Adoption has been a central construct of D&I science, stemming from the founding theories (Rogers, 1995).

Second, "Acceptability is the perception among implementation stakeholders that a given treatment, service, practice, or innovation is agreeable, palatable, or satisfactory" (Proctor et al., 2011, p. 67). Acceptability can be analyzed at many levels (i.e., consumer, provider) and across multiple timepoints in the implementation lifecycle (Proctor et al., 2011). However, for those stakeholders who are most interested in Adoption, it is recommended that Acceptability be measured early in implementation, as some theorize that the more the intervention is Adopted for use within a population, the more likely that treatment will be Accepted as well (Proctor et al., 2011; Rogers, 1995). Acceptability has been measured using surveys or semi-structured interviews (Brownson et al., 2017; Proctor et al., 2011). Overall, Acceptability may be understood as satisfaction with the specific intervention of interest, not general service satisfaction (Brownson et al., 2017; Proctor et al., 2011). Thus, Acceptability should be evaluated based on direct exposure to—or knowledge of—the intervention (Brownson et al., 2017).

Third, "Appropriateness is the perceived fit, relevance, or compatibility of the innovation or evidence-based practice for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem" (Proctor et al., 2011, p. 69).

Appropriateness is measured at the consumer, provider, and organizational levels (Brownson et al., 2017; Proctor et al., 2011). For maximum benefit, Appropriateness is measured prior to implementation via surveys, semi-structured interviews, or focus groups (Brownson et al., 2017; Proctor et al., 2011). While similar to Acceptability, Appropriateness is a separate construct. For example, providers may believe that the intervention is a good fit to address a given problem, such as distress reduction (i.e., the intervention is Appropriate). However, consumers may not be

satisfied with aspects of the intervention, such as its lack of inclusion or cultural competencies (i.e., its Acceptability) (Proctor et al., 2011).

Fourth, "Feasibility is defined as the extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting" (Proctor et al., 2011, p. 69). Feasibility is assessed at the provider and organizational levels (Brownson et al., 2017; Proctor et al., 2011). Like Acceptability, Feasibility is measured early in the implementation process, prior to the treatment's integration into routine delivery settings, at which point measurement would be irrelevant (Proctor et al., 2011). Previously, Feasibility has been measured using a variety of tools, including conducting surveys (Brownson et al., 2017; Proctor et al., 2011). While like Appropriateness, Feasibility captures if the intervention is suitable for implementation within a given setting, due to numerous factors, such as resources (i.e., budget, time, staffing). These factors may inhibit the uptake of an intervention, despite the treatment's Appropriateness in a certain setting, such as addressing the mental health needs of SVs on college campuses.

Leveraging the definition of Penetration, Reach is defined as "the integration of a practice within a service setting and its subsystems" (Proctor et al., 2011, p. 70) and is captured at the organizational level, after the intervention has been implemented (Brownson et al., 2017; Glasgow, 2007; Proctor et al., 2011; Rabin et al., 2008). Reach is typically measured midway—or later—through an evidence-based practice's implementation via surveys, semi-structured interviews, and case studies (Brownson et al., 2017; Proctor et al., 2011). Reach is likened to assessing the intervention's institutionalization within a particular setting—or the degree to which the treatment has spread across the organization (Proctor et al., 2011). Notably, increases in Reach may correlate with an increase in Sustainability (Proctor et al., 2011).

Lastly, "Sustainability is defined as the extent to which a newly implemented treatment is maintained or institutionalized within a service setting's ongoing, stable operations" (Proctor et al., 2011, p. 70). Sustainability is evaluated at the organizational level late in the implementation process via surveys, semi-structured interviews, checklists, and case audits (Brownson et al., 2017; Proctor et al., 2011; Rabin et al., 2008). Of the D&I constructs examined here, Sustainability is unique in that it can be measured over the lifecycle of the intervention, mapping the treatment over time within a specific setting. Accordingly, when measuring an evidence-based practice's Sustainability, implementers are assessing its durability, maintenance, and incorporation of the service's access over time (Proctor et al., 2011).

Utilizing these key performance outcomes, the specific aims of this dissertation are as follows:

- Aim 1: Assess the D&I science outcomes of interest via an online survey to determine changes in attitudes among PMs and SVs at the pre- and post-intervention timepoints.
  - Aim 1.1 Hypothesis 1.1: PMs will find IPC-3 to be more Adoptable, Acceptable,
     Appropriate, Feasible, and Reachable at the post-intervention timepoint (e.g., after completing three supervised training cases) than at the pre-intervention timepoint (i.e., prior to the first case assignment).
  - Aim 1.2 Hypothesis 1.2: SVs will find IPC-3 to be more Adoptable, Acceptable,
     Appropriate, Feasible, and Reachable at the post-intervention timepoint (i.e., after completing the follow-up session) than at the pre-intervention timepoint (i.e., prior to Session 1).
  - Aim 1.3 Hypothesis 1.3: PMs and SVs will experience positively correlated changes in Adoption and Acceptability at the pre- and post-intervention timepoints.

- Aim 1.4 Hypothesis 1.4: PMs will experience positively correlated changes in Reach and Sustainability at the pre- and post-intervention timepoints.
- Aim 1.5 Hypothesis 1.5: PMs will experience diminished changes in Sustainability in relation to Adoption, Acceptability, Appropriateness, Feasibility, and Reach at the preand post-intervention timepoints.
- Aim 2: Evaluate the D&I science constructs of interest in key informant interviews to
  determine changes in attitudes among SSs, PMs, and SVs at the pre- and post-intervention
  timepoints.
  - Research Question 2: Will SSs, PMs, and SVs find IPC-3 to be more adoptable, acceptable, appropriate, feasible, reachable, and sustainable at the post-intervention timepoint than at the pre-intervention timepoint?
- <u>Aim 3</u>: Integrate quantitative (i.e., survey) and qualitative (i.e., key informant interview) data findings.
  - Research Question 3: Will integration corroborate as well as highlight discrepancies between the survey and key informant interview findings?

## **CHAPTER III: METHOD**

# **Participants**

As part of the ongoing main study, recruitment of SVs, PMs, and SSs began in September 2020 and continued through June 2022, occurring across the COVID-19 pandemic. All participants signed informed consent forms prior to engaging in the study. The main study protocol was reviewed and granted exempt status by the Teachers College, Columbia University IRB in August 2020 (IRB #20-394). The IRB also granted an exempt status for this dissertation in January 2021 (IRB #22-061).

## Student Veterans

A total sample of 18 SVs participated in the key informant interviews, with 15 SVs completing the pre-intervention timepoint interview and 10 completing the post-intervention timepoint interview. A total of 43 interview transcripts captured the SV voice. Twelve (*n* = 12) SVs participated in the survey and were recruited through the VITAL Programs in New York and Utah. VITAL's mission is to provide world-class healthcare and improve the overall mental health of SVs while supporting their integration into collegiate spaces. VITAL provides tutoring, work-study, coping strategies, and referrals to counseling and academic accommodations. In the course of their routine interactions with SVs on campus, VITAL Program Coordinators and PMs identified SVs they believed would be well suited for the study, approaching them with information regarding IPC-3. If the SV expressed interest, they filled out an informed consent form. SVs were compensated up to \$30 for completing this portion of the study. Specifically, they were paid \$15 for participating in the key informant interview and survey at the pre-intervention timepoint and an additional \$15 for participating in both measures at the post-intervention timepoint. No compensation was provided for participating in the intervention.

Inclusion criteria for SVs (18+ years old) consisted of moderate psychological distress, as shown by a Kessler-6 (K6) cutoff score of 13 or higher or a Patient Health Questionnaire-9 (PHQ-9) score of 10 or higher. However, all consumers completed a series of measures to assess their fitness for the study. Thus, the study team reviewed and decided if participation would be allowed if they did not meet the K6 or PHQ-9 cutoff score but endorsed moderate or higher symptoms on other measures (i.e., Distress Rating, General Anxiety Disorder-7 [GAD-7], Posttraumatic Stress Disorder Checklist-5 [PCL-5], Military to Civilian Questionnaire [M2C]), or if they had expressed a need for assistance with their distress. Exclusion criteria included extreme suicidality—defined as endorsing a four or higher on the Columbia Suicide Severity Rating Scale (C-SSRS)—and those with active psychosis. Those SVs meeting exclusion criteria were immediately referred for appropriate care.

#### Peer Mentors

A sample of nine (n = 9) PMs were recruited through VITAL Program Coordinators at each site in New York and Utah via the ongoing study. Of this group, five (n = 5) were from the Utah site, and four (n = 4) were from the New York site. They were recruited via the ongoing study. Within the existing VA operating model, VITAL recruits volunteers and work-study students to provide services to SVs on campuses within their program region. The VITAL Program Coordinator approached peers at each site with information regarding the study, and peers self-selected to be trained and clinically supervised in IPC-3. PMs were not compensated for participation in the study. However, once consented for participation, they were equipped with skills and clinical supervision to conduct IPC-3 through initial and refresher training and weekly supervision. Inclusion criteria consisted of VITAL peers who endorsed a desire to learn IPC-3.

## Site Supervisors

A sample of three (n = 3) SSs were recruited and consented from the population of 25 VITAL Program Coordinators nationwide. One (n = 1) was from the New York site, and two (n = 2) were from the Utah site. Each self-selected into the study. SSs were not compensated for participation. However, they were also equipped with the knowledge and skills to supervise IPC-3 by a Master Trainer through initial and refresher training as well as through weekly supervision. Inclusion criteria consisted of VITAL Program Coordinators who endorsed a desire to learn IPC-3, had a doctorate in clinical psychology, and were licensed to work in their respective state.

#### Measures

## Student Veterans

The D&I Measure–Consumer Version is a valid and reliable self-report scale that captures Adoption, Acceptability, Appropriateness, Feasibility, and Reach, which are core implementation outcomes of D&I science (Haroz et al., 2019). A consumer's intention to try the intervention was reflected in Adoption items (e.g., "Do you think you will refer other SVs with similar problems to IPC-3"?). Acceptability items captured the consumer's satisfaction with the evidence-based treatment (e.g., "Do you think the skills you will learn in IPC-3 will be useful"?). Perceived fit or usefulness of the treatment was measured in the Appropriateness items (e.g., "Do you think participating in IPC-3 will fit into your daily schedule and routine"?). Feasibility was captured by inquiring about the actual fit of the intervention (e.g., "Do you think the amount of time you will spend putting IPC-3 skills to practice at home each week will be manageable"?). Finally, Reach was assessed by items querying the degree to which the evidence-based treatment

had spread across the organization (e.g., "Do you think people in the community are aware that IPC-3 is available"?).

Questions were presented on a Likert scale, with 0 being "Not at All," 1 being "A Little Bit," 2 being "A Moderate Amount," 3 being "A Lot," and 8 being "Don't Know" across the constructs. A hallmark of the measure is its ability for surface-level adaptations. For this study, the measure was adapted by including the name of the program (i.e., IPC-3). Items were also tailored to fit the needs of the populations of interest (e.g., SV, PM) and the contexts in which they operated (e.g., VITAL Program on campus). A pre- and post-version of the measure was administered. The pre-measure was administered prior to holding Session 1, and the post-measure was administered after the Follow-Up Session. The survey took approximately 30 minutes for consumers to complete in Qualtrics.

To complement this measure, the Key Informant Interview—Consumer Version captured SVs' attitudes and beliefs about IPC-3. The semi-structured guide was composed of questions mapped to each of the five D&I constructs of interest. Like the D&I Measure, the interviews were administered before Session 1 and after the Follow-Up Session. The facilitated interviews lasted approximately 45 minutes and took place via Zoom. The semi-structured interview format offered flexibility, enabling emergent dialogue between the interviewer and interviewee.

## **Peer Mentors**

Like the consumer version, the D&I Measure–Provider Version was a valid and reliable self-report scale that captured Adoption, Acceptability, Appropriateness, Feasibility, Reach, and Sustainability (Haroz et al., 2019). An example of the items' assessment of Adoption was, "Do you think you will encourage others outside your organization to become an IPC-3 PM?" For Acceptability, an example was, "Do you think you will enjoy learning IPC-3?" Appropriateness

was captured by items such as, "Do you feel providing IPC-3 is something you should be doing as part of your role?" For Feasibility, questions included, "Do you think you will have enough time to provide IPC-3 to SVs in the coming year?" Items for Reach included, "When SVs seek help, how much of a problem will the amount of time they had to wait to begin IPC-3 be?" Finally, an example of a Sustainability item was "Do you think IPC-3 will continue in your organization after the study ends?"

Items were ranked across the constructs on a Likert scale, with 0 being "Not at All," 1 being "A Little Bit," 2 being "A Moderate Amount," 3 being "A Lot," and 8 being "Don't Know." Again, for this study, the measure was adapted to fit the needs of the identified populations and the contexts in which they operated (e.g., Zoom delivery). The pre- and post-version of the measure was administered to PMs at two timepoints. The first held before the PMs began their first training case, and the second held after they had completed their third training case. The survey took roughly 30 minutes to complete online in Qualtrics.

The semi-structured Key Informant Interview—Provider Version was a facilitator-administered tool capturing PM attitudes and beliefs about IPC-3. The interview was composed of questions regarding the D&I outcomes and administered at two timepoints. The first was before PMs began their first case, and the second was after they had completed their third case. Interviews lasted approximately 45 minutes via Zoom.

# Site Supervisors

The D&I Measure–Organization Version was a valid and reliable self-report scale that captures Adoption, Acceptability, Appropriateness, Feasibility, Reach, and Sustainability (Haroz et al., 2019). An example of items assessing Adoption was, "Do you think you will discuss with other staff what you need to do to continue to use IPC-3 in the future"? For Acceptability, an

example included, "Do you feel that your organization will benefit from providing IPC-3?"

Appropriateness was captured by items such as, "Do you think IPC-3 will fit with the cultural values of the SVs with whom your organization works?" Feasibility items included questions such as, "Do you think total session time available for implementing IPC-3 will be sufficient at your organization?" An example of items measuring Reach was, "Would the least resourced SVs in the community seek IPC-3 services if needed?" Finally, the institutionalization or durability of the evidence-based treatment was evaluated in the Sustainability items, including "Do you think IPC-3 will continue after the study ends?"

As with the other measures, items were on a Likert scale, with 0 being "Not at All," 1 being "A Little Bit," 2 being "A Moderate Amount," 3 being "A Lot," and 8 being "Don't Know" across the constructs. The adapted versions of the pre- and post-measure were administered at two timepoints with SSs. The first was held before SSs began supervising their first training case, and the second was held after they completed supervising three cases. The survey took roughly 30 minutes to complete online in Qualtrics.

The study's final interview, the semi-structured Key Informant Interview—Organization Version was a facilitator-administered tool that captured attitudes and beliefs about IPC-3 from the perspective of the SSs. The interview was composed of questions regarding the D&I outcomes and administered at the two above-mentioned timepoints. Interviews lasted approximately 45 minutes via Zoom.

## Procedure

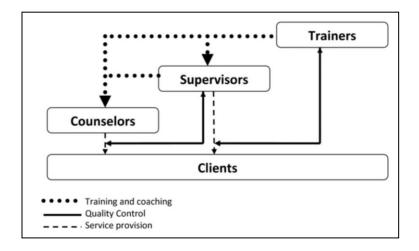
# Apprenticeship Model

When training and supervising providers, IPC-3 utilized the Apprenticeship Model, which has been frequently implemented when training non-specialists in mental health

interventions (Murray et al., 2011). There are three groups within the model: trainers, supervisors, and counselors. Trainers hold expertise in the intervention. Supervisors come from the organization wherein the intervention is implemented and are specifically selected for advanced training. Finally, counselors deliver the intervention. Figure 1 illustrates the Apprenticeship Model (Murray et al., 2011). Within IPC-3, there were two IPC-3 Master Trainers (i.e., trainers), two SSs (i.e., supervisors)—one in New York and one in Utah—and roughly four PMs (i.e., counselors) at each site.

Figure 1

Apprenticeship Model



Following the model, the initial two-day, IPC-3 training was provided to SSs and PMs in August 2020. The training had clear learning objectives and offered participants foundational knowledge regarding IPC-3 (Murray et al., 2011). It also included dynamic practice of skills under the guidance of the IPC-3 Master Trainers. After training, PMs completed a competency test, which they were required to pass at the 75% level or higher. Upon meeting competency, PMs began delivering the intervention under weekly supervision with the IPC-3 Master Trainers and their respective SS, continuing to practice and hone their skills. In supervision, SSs closely monitored cases to ensure PM fidelity to the intervention and impact on SV distress. During

supervision meetings, the IPC-3 Master Trainers also provided regular guidance and consultation to SSs. After completing three training cases, PMs were eligible for selection to perform supervisory roles for new trainees in future studies. Finally, a refresher training was held in June 2021 for all SSs and PMs.

#### IPC-3 Structure

IPC-3 was implemented over three individual, 90-minute Sessions (i.e., Session 1, Session 2, Session 3). Twenty-four hours prior to each session, the SV was sent a battery of selfreport measures, including the Distress Rating, K6, PHQ-9, GAD-7, PCL-5, and C-SSRS. The M2C was administered at the Intake and Follow-Up Sessions. PMs reviewed these measures prior to each meeting. Before Session 1, a 90-minute Intake Session was held to review confidentiality, identify levels of distress, evaluate the impacts of distress on daily functioning, and offer hope that the SV could feel better by engaging in IPC-3. In Session 1, the PM introduced the SV to the IPC-3 structure, conducted a Distress Rating, reviewed the events related to the distress, conducted an Interpersonal Inventory, identified problem areas (i.e., interpersonal disputes, role transitions, grief, social isolation) that were linked to the SV's distress, and closed with a summary of the session. In Session 2, PMs administered the Distress Rating, examined levels of distress since the last session, discussed how the SV's distress was linked to the previously identified problem area, explored the problem area using IPC-3 tools (i.e., communication analysis, decision analysis, role-play), and closed by summarizing the session. In Session 3, the PM and SV reviewed levels of distress across the three sessions, identified coping strategies to manage future distress, discussed resources and referrals for additional support, if needed, and completed their time together by discussing the SV's experience with IPC-3. One month after Session 3, a 90-minute Follow-Up Session was held to

appraise the SV's current Distress Rating, review tools learned in Sessions 1-3, and report if participants had utilized any referrals for extended care.

#### Student Veterans

In support of the study, D&I data were collected with SVs at the pre- and post-intervention timepoints. The pre-intervention timepoint took place between the Intake Session and Session 1. During this time, the D&I Pre-Measure–Consumer Version was provided, and the Key Informant Interview–Consumer Version was held. Post-timepoint data collection occurred within one week of the SV's completion of the Follow-Up Session. At this time, the D&I Post-Measure–Consumer Version was provided, and the Key Informant Interview–Consumer Version interview was held.

#### Peer Mentors

Prior to beginning their first case (i.e., pre-intervention timepoint), PMs were administered the D&I Pre-Measure–Provider Version. Concurrent with and complementary to this measure, PMs participated in the Key Informant Interview–Provider Version regarding their attitudes and beliefs about IPC-3. The post-intervention timepoint interview occurred after PMs completed their third training case. At this time, providers were administered the D&I Post-Measure–Provider Version and participated in the Semi-Structured Key Informant Interview–Provider Version.

# Site Supervisors

Prior to supervising their first case (i.e., pre-intervention timepoint), SSs were administered the D&I Pre-Measure–Organization Version. With this measure, SSs participated in the Key Informant Interview–Organization Version regarding their attitudes and beliefs about IPC-3. The post-intervention timepoint interview occurred after SSs supervised their third

training case. At this time, SSs were administered the D&I Post-Measure–Organizational Version and participated in the Key Informant Interview–Organization Version.

# **Data Analysis**

The study utilized a mixed method design, integrating data from key informant interviews and survey data across three populations, including SSs, PMs, and SVs. This methodology was chosen to expand knowledge and understanding of understudied D&I concepts within the populations of interest as well as to inform the current and future adaptations of IPC-3. Both quantitative and qualitative data were organized by applying rigorous data-management methods. Specifically, the researcher collected only aggregate and de-identified data; password-protected and encrypted stored data; cataloged data according to themes, codes, and sub-codes; conducted periodic checks for missing data; and scheduled routine backups to prevent data file loss.

## Survey

To assess Aim 1, tests were conducted to evaluate D&I science outcome scores (i.e., Adoption, Acceptability, Appropriateness, Feasibility, Reach) to determine changes in attitudes among groups from pre- and post-intervention timepoints. Aim 1.1 sought to understand if PMs would experience a change in D&I science outcome scores between timepoints. To assess this change in scores, the Wilcoxon Signed-Rank Test was utilized, as the data were non-parametric in nature as well as paired at both timepoints, leveraging a within-subjects design. Aim 1.2 assessed if there would be a change for SVs within the same D&I science outcome scores from the pre- to post-intervention. Again, the data were non-parametric. However, it was not paired. Thus, a Mann-Whitney U Test was used. This test assumed two conditions (i.e., between-subjects design). The first were those exposed to the pre-intervention, and the second were those

exposed to both the pre- and post-intervention. Aim 1.3 evaluated if changes in Adoption and Acceptability were positively correlated at both timepoints for PMs and SVs. Given the non-parametric nature of the data and the small sample size, Kendall's Tau-b correlation was conducted to see the rank-order association of each D&I construct. In this statistic, .20 to .29 indicated a moderate correlation, and .30 or higher indicated a strong correlation. Aim 1.4 explored if changes in Reach and Sustainability were positively correlated at the pre- and post-intervention timepoints among PMs. Kendall's Tau-b correlation was run to determine the relationship between pre-Reach and pre-Sustainability among participants. Again, this test was selected to accommodate the small, non-parametric sample. Aim 1.5 assessed if changes in Sustainability were diminished in relation to the other D&I constructs at the pre- and post-intervention timepoints, specifically among PMs. A Wilcoxon Signed-Rank Test was conducted to determine the effect of the intervention on change scores, as the data were non-parametric and paired. Prior to running the analysis, all assumptions were checked.

Scores for each outcome were generated by calculating the median. As composite scores (i.e., medians) were created from multiple Likert scales across each measure, the data approximated interval-level variables. Thus, the variables on this scale were treated as continuous (Johnson & Creech, 1983). Additionally, descriptive statistics were run using demographic data collected in the Intake Session. These data included participants' core demographic (e.g., age, race), student (e.g., part-time, full-time), military service-related (e.g., Service branch, number of deployments), and mental health (e.g., received services in the past) information.

# **Key Informant Interviews**

To determine changes in attitudes regarding D&I constructs among SSs, PMs, and SVs at both timepoints (Aim 2), a consistent team was assembled and uniformly trained in qualitative work, following National Institute of Health best practices (Creswell et al., 2011). Specifically, the audio files were transcribed and then coded in NVivo to establish data reliability and validity. To avoid false consensus, the team included individuals with student, clinical psychology, and military expertise.

A team-based codebook development approach was used where the team coded interviews independently, applying a co-created rulebook (MacQueen et al., 1998). The team met every one to two weeks to generate codes with each new transcript. In meetings, the team came to a consensus on the identified dominant codes and sub-codes and their definitions, which were stored in a dynamic codebook. These steps were repeated until no new codes emerged from the data (i.e., saturation). Cohen's Kappa was used as the statistic to measure the degree of agreement between coders (MacPhail et al., 2016). All transcripts were recoded using the final codebook to establish intercoder reliability of 60% or above, indicating substantial agreement.

Further, qualitative data were analyzed using deductive thematic analysis guided by phenomenological theory (Braun & Clarke, 2006; Groenewald, 2004). Deductive thematic analysis was selected as the analytical method to identify and organize patterns in the data that were driven by a specific theoretical interest—for this study, the D&I outcomes (Braun & Clarke, 2006). This approach was also chosen because it allows for the evaluation of patterns at different timepoints, such as pre- and post-intervention (Hsieh & Shannon, 2005). Next, codes were analyzed using a phenomenological lens, which is based on the theory that humans hold their own truths. Thus, facts are phenomena (Groenewald, 2004). The phenomenological theory

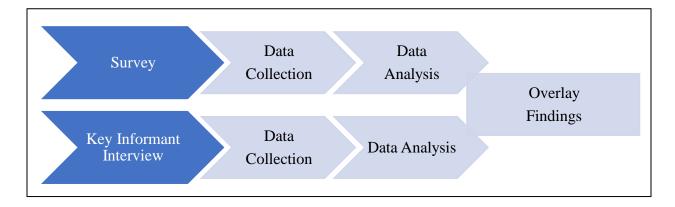
was used as a guide, as it seeks to shed light on someone's lived experience in specific settings, such as Veterans on campus (Groenewald, 2004).

### Integration

While this study relied heavily on qualitative data, a concurrent triangulation design was used to integrate quantitative and qualitative data findings in support of Aim 3. The mixed-method approach allowed for comparisons of results from simultaneously collected and analyzed quantitative (i.e., survey) and qualitative data (i.e., key informant interviews; Creswell et al., 2003). The design is helpful for cross-validating findings within single, mixed-methods studies, such as the one used here (Greene et al., 1989). Furthermore, this method provided an opportunity to overlay the potential weaknesses of a given data type with the strengths of another (e.g., limited answers in the survey versus flexibility in dialogue in the interviews; Patton, 1990). In the present study, the median composite scores for each D&I construct are elucidated by the qualitative themes emerging from the deductive thematic analysis. Figure 2 illustrates the integration process.

Figure 2

Concurrent Triangulation Design



#### **CHAPTER IV: RESULTS**

# **Study Aim 1: Survey**

While the study relied heavily on qualitative data, the quantitative survey data are reviewed below. Descriptive statistics are followed by analysis for providers (i.e., PMs) and consumers (i.e., SVs) across the constructs of Adoption, Acceptability, Appropriateness, Feasibility, and Reach. Correlations between the constructs for both populations can be found at Appendix B.

#### Peer Mentors

**Peer Mentor Survey Demographic Characteristics**. Of the PMs (n = 9), eight (n = 8) provided demographic information unless otherwise indicated. Descriptive statistics can be found in Table 2 and Appendix C. A summary is provided in Table 3 below. Providers ranged from 33 to 47 years of age, with a mean age of 38.88 (SD = 5.84). Those who served in the military (n = 7) also reported their deployment history, ranging from zero to two deployments, with a mean of .63 (SD = .92).

**Table 2**Peer Mentors: Selected Survey Descriptive Statistics

Characteristic	M	SD	Range
Age $(n = 8)$	38.88	5.84	33-47 <sup>a</sup>
Deployment History $(n = 7)$	.63	.92	$0-2^{b}$

<sup>&</sup>lt;sup>a</sup> Years.

In terms of gender identity, four (50%) PMs identified as men, three (37.5%) as women, and one (12.5%) as non-binary. Regarding sexual orientation, seven (87.5%) reported as heterosexual and one (12.5%) reported as bisexual. For race/ethnicity, five (62.5%) PMs identified as White and three (37.5%) as Black. Three (37.5%) were married, three (37.5%)

<sup>&</sup>lt;sup>b</sup> Number of deployments.

divorced, one (12.5%) single, and one (12.5%) separated. For domicile status, four (50%) providers were living with a spouse or partner, three (37.5%) lived alone, and one (12.5%) with a roommate. Geographically, four (50%) resided in the West, three (37.5%) in the Northeast, and one (12.5%) in the South. Regrading educational levels, three (37.5%) PMs held a bachelor's degree, two (25%) a master's, two (25%) an associate's, and one (12.5%) a doctorate. Three (37.5%) worked full-time, three (37.5%) part-time, and two (25%) were unemployed. All participants were classified as "peers," due to their past military affiliation; three (37.5%) were full-time students, two (25%) were part-time, and three (37.5%) were not students at the time of participation. Of those who were students (n = 5), two (40%) PMs were pursuing a degree in psychology, two (40%) in social work, and one (20%) in religion. In terms of military status, five (62.5%) identified as Veterans, two (25%) as retired, and one (12.5%) as a military dependent. Of those who served (n = 7), four (57.1%) providers were in the Army, one (14.3%) in the Navy, one (14.3%) in the Marine Corps, and one (14.3%) in the Air Force. Among this group (n = 7), four (57.1%) were E-1-4 (i.e., in training or on initial assignment), and three (42.9%) were among the mid-level enlisted ranks of E-5-7 (i.e., noncommissioned officer, petty officer). For religion, five (62.5%) PMs identified as Christians, two (25%) of these were Catholic, and one participant (12.5%) was Jewish. When asked if they were currently receiving mental health care, four (50%) reported yes and four (50%) said no. When asked if they previously received mental health care, six (75%) providers reported they had, while two (25%) had not. Six (75%) reported a current diagnosed medical illness, and two (25%) did not. These same individuals also reported a previous medical illness.

 Table 3

 Peer Mentors: Survey Demographics

Characteristic	Frequency	Percentage
Gender Identity	(n=8)	•
Male	4	50%
Female	3	37.5%
Non-binary	1	12.5%
Sexual Orientation	(n = 8)	
Heterosexual	7	87.5%
Bisexual	1	12.5%
Race/Ethnicity	(n = 8)	
White	5	62.5%
Black	3	37.5%
Marital Status	(n=8)	
Married	3	37.5%
Divorced	3	37.5%
Single	1	12.5%
Separated	1	12.5%
Domicile Status	(n=8)	12.5 / 0
Living with Spouse/Partner	4	50%
Living Alone	3	37.5%
Living with Roommate	1	12.5%
Geographic Location	(n=8)	12.570
Northeast	$\frac{n-6}{3}$	37.5%
West	4	50%
South	1	12.5%
Education	(n=8)	12.570
Bachelor	$\frac{(n-6)}{3}$	37.5%
Associate	$\frac{3}{2}$	25%
Masters	2	25%
Doctorate	1	12.5%
Employment Status	(n = 8)	12.5/0
Full-Time	$\binom{n-3}{3}$	37.5%
Part-Time	3	37.5%
Unemployed	2	25%
Student Status	(n=8)	23 /0
Full-Time	$\binom{n-3}{3}$	37.5%
Unenrolled	3	37.5%
Part-Time	2	25%
Military Status	<del>-</del>	23 70
Veteran	(n=8)	62.5%
	5 2	
Retired Military Dependent		25% 12.5%
Military Dependent	1	12.5%
Military Service Branch	(n=7)	

Characteristic	Frequency	Percentage
Army	4	57.1%
Navy	1	14.3%
Marine Corps	1	14.3%
Air Force	1	14.3%
Highest Rank at Discharge	(n = 7)	
E-1-4	4	57.1%
E-5-7	3	42.9%
Religion	(n = 8)	
Christian	5	62.5%
Catholic	2	25%
Jewish	1	12.5%
Currently Receiving Mental Health Care	(n = 8)	
Yes	4	50%
No	4	50%
Previously Received Mental Health Care	(n = 8)	
Yes	6	75%
No	2	25%
Current Medical Illness	(n = 8)	
Yes	6	75%
No	2	25%
Previous Medical Illness	(n = 8)	
Yes	6	75%
No	2	25%

# Changes in Adoption, Acceptability, Appropriateness, Feasibility, and Reach

(Aim 1.1). It was hypothesized that PMs would find IPC-3 more Adoptable, Acceptable, Appropriate, Feasible, and Reachable at the post-intervention timepoint (e.g., after completing three supervised training cases) than the pre-intervention timepoint (i.e., prior to the first case assignment). This hypothesis was informed by literature suggesting that utilizing the Apprenticeship Model for the training and supervision of non-mental health specialists, such as PMs, positively influences D&I outcome constructs (Murray et al., 2011). To assess changes across constructs and between the pre- and post-intervention timepoints (i.e., repeated measures), the Wilcoxon Signed-Rank Test (e.g., within-subjects design) was employed to account for the small sample size, yielding non-parametric data. Of the sample (n = 9), five (n = 5) PMs had scores at both timepoints. The assumptions were checked prior to running the analysis. First, the

sample held symmetry in distribution at the pre- and post-intervention timepoints. Second, the observations were assumed to be independent, which was confirmed by examining the differences among providers' timestamps, locations, and IP addresses. PM output for the Wilcoxon Signed-Rank Test can be found in Appendix D. The test statistics can be found in Table 4 below.

**Adoption.** Of the five providers, one (n = 1) experienced an increase in Adoption post-intervention score, noting they were more likely to employ the intervention than at the pre-timepoint. Two providers (n = 2) experienced a decrease in Adoption scores at the post-intervention timepoint, indicating they were less willing to try and continue using IPC-3 after completing all three training cases. Two providers (n = 2) scored the same at the pre- and post-intervention timepoints, indicating no change in attitude. Overall, there was a median decrease in Adoption scores from pre-intervention (Mdn = 3.17) to post-intervention (Mdn = 3.04). However, this difference was not statistically significant, z = -.54, p = .30 (one-tailed), r = -.24.

Acceptability. Of the five providers, three (n=3) experienced an increase in Acceptability scores, noting they saw IPC-3 as more palatable or satisfactory after completing three training cases. Two providers (n=2) experienced a decrease in Acceptability scores at the post-intervention timepoint, indicating they found IPC-3 to be less satisfying and agreeable than at the pre-intervention timepoint. Overall, there was a median decrease in Acceptability scores from pre-intervention (Mdn=3.71) to post-intervention (Mdn=3.35). However, this difference was not statistically significant, z=-.41, p=.34 (one-tailed), r=-.18.

Appropriateness. Of the five providers, two (n = 2) experienced an increase in Appropriateness scores, noting they saw IPC-3 as more of a fit to support SVs experiencing psychological distress after completing three training cases than they had before delivering the

intervention. Two providers (n = 2) experienced a decrease in Appropriateness scores at the post-intervention timepoint, indicating they found IPC-3 to be less compatible than they had at the pre-intervention timepoint. One provider (n = 1) had no change in scores from the pre- to post-intervention timepoints. Overall, there was a median decrease in Appropriateness scores from pre-intervention (Mdn = 3.29) to post-intervention (Mdn = 3.14). However, this difference was not statistically significant, z = -.37, p = .36 (one-tailed), r = -.17.

**Feasibility.** Of the five providers, three (n = 3) experienced an increase in Feasibility scores, indicating a belief that IPC-3 could be more successfully implemented by PMs on campus at post-intervention timepoints than at the beginning of their training cases. Two providers (n = 2) experienced a decrease in Feasibility scores at the post-intervention timepoint, indicating they found that IPC-3 to be less Feasible given available resources within their setting after completing three training cases than they would have been at the pre-intervention timepoint. Overall, there was a median increase in Feasibility scores from pre-intervention (Mdn = 3.22) to post-intervention (Mdn = 3.23). However, this difference was not statistically significant, z = -14, p = .45 (one-tailed), r = -.06.

**Reach**. Of the five providers, one (n=1) experienced a score increase post-intervention, suggesting they found IPC-3 to be more integrated to the campus setting at the post-intervention timepoint than at the pre-intervention timepoint. Three providers (n=3) experienced a decrease in Reach scores at the post-intervention timepoint, indicating IPC-3 was not as easily available to people who needed the services at the post-intervention timepoint than at the pre-intervention timepoint. One provider (n=1) had no change in scores between timepoints. Overall, there was no change in the median Reach scores from pre-intervention (Mdn=2.40) to post-intervention

(Mdn = 2.40). This difference was not statistically significant, z = -1.29, p = .10 (one-tailed), r = -.56.

 Table 4

 Peer Mentors: Changes in Constructs from Pre- and Post-Intervention

Measure	Post-Pre	Post-Pre	Post-Pre	Post-Pre	Post-Pre
	Adoption	Acceptability	Appropriateness	Feasibility	Reach
Z	535 <sup>a</sup>	405 <sup>a</sup>	365 <sup>a</sup>	135 <sup>b</sup>	-1.289a
Asymp. Sig. (2-tailed)	.593	.686	.715	.893	.197

Note. N = 5.

Correlated Changes in Adoption and Acceptability (Aim 1.3). It was hypothesized that Adoption and Acceptability would be positively correlated at the pre- and post-intervention timepoints among PMs. This hypothesis was informed by literature suggesting a strong association between these constructs (Proctor et al., 2011). Kendall's Tau-b correlation was run to determine the relationship between them at the pre-intervention timepoint. This statistic was chosen given the non-parametric nature of the data and the small sample size. There was a strong, positive association between Adoption and Acceptability scores (n = 8) at the pre-intervention timepoint, which was statistically significant,  $\tau b = .57$ , p = .03 (see Table 5).

 Table 5

 Peer Mentors: Adoption and Acceptability Correlations at the Pre-Intervention Timepoint

	Correlations	
		PreAdoption
Kendall's PreAcceptability	Correlation Coefficient	.566*
Tau-b	Sig. (1-tailed)	.029
	N	8

<sup>\*</sup> Correlation is significant at the .05 level (1-tailed).

<sup>&</sup>lt;sup>a</sup> Based on positive ranks.

<sup>&</sup>lt;sup>b</sup> Based on negative ranks.

Kendall's Tau-b correlation was also run to determine the relationship between Adoption and Acceptability scores (n = 6) at the post-intervention timepoint. Again, there was a strong positive association between Adoption and Acceptability scores at the post-intervention timepoint, which was statistically significant,  $\tau b = .73$ , p = .02 (see Table 6).

 Table 6

 Peer Mentors: Adoption and Acceptability Correlations at the Post-Intervention Timepoint

		Correlations	
			PostAdoption
Kendall's	PostAcceptability	Correlation Coefficient	.733*
Tau-b		Sig. (1-tailed)	.019
		N	6

<sup>\*</sup> Correlation is significant at the .05 level (1-tailed).

Correlated Changes in Reach and Sustainability (Aim 1.4). It was hypothesized that Reach and Sustainability would be positively correlated at the pre- and post-intervention timepoints among PMs. This hypothesis was based on findings suggesting an association between these constructs (Proctor et al., 2011). Given the small sample size and non-parametric data, Kendall's Tau-b correlation was run to determine the relationship between pre-Reach and pre-Sustainability (n = 7). There was a weak, negative association at the pre-intervention timepoint, which was not statistically significant,  $\tau b = -.05$ , p = .44 (see Table 7).

 Table 7

 Peer Mentors: Reach and Sustainability Correlations at the Pre-Intervention Timepoint

	Correlations		
		PreReach	PreSustainability
Kendall's PreReach	Correlation Coefficient	1.000	048
Tau-b	Sig. (1-tailed)	•	.440
	N	7	7
PreSustainability	Correlation Coefficient	048	1.000
	Sig. (1-tailed)	.440	
	N	7	8

There was a moderate, positive association between Reach and Sustainability at the post-intervention timepoint, which was not statistically significant,  $\tau b = .45$ , p = .15 (see Table 8).

 Table 8

 Peer Mentors: Reach and Sustainability Correlations at the Post-Intervention Timepoint

	Correlations		
		PostReach	PostSustainability
Kendall's PostReach	Correlation Coefficient	1.000	.447
Tau-b	Sig. (1-tailed)		.148
	N	5	5
PostSustainability	Correlation Coefficient	.447	1.000
	Sig. (1-tailed)	.148	
	N	5	6

Changes in Sustainability (Aim 1.5). Finally, it was hypothesized that among PMs, changes in Sustainability would diminish relative to Adoption, Acceptability, Appropriateness, Feasibility, and Reach at the pre- and post-intervention timepoints. This hypothesis was based on the literature finding that Sustainability may not be indicated until later stages of implementation and is, thus, beyond the timeline of this study (Proctor et al., 2011). Again, a Wilcoxon Signed-Rank Test was conducted to determine the effect of the intervention on change scores in Sustainability and the other constructs (i.e., Adoption, Acceptability, Appropriateness,

Feasibility, Reach). To do so, the differences in scores at the post-intervention timepoint were examined (versus changes in pre- to post-intervention test scores occurring over time). The scores were then paired by participant (e.g., Adoption and Sustainability), and change scores were created by taking the difference of the post- minus the pre-intervention timepoint scores. PM output for the Wilcoxon Signed-Rank Test can be found in Appendix E. The test statistics can be found in Table 9 below.

**Sustainability and Adoption.** Of the five providers, two (n = 2) showed an increase in Adoption scores relative to Sustainability scores, with PMs scoring higher on the former than on the latter. Three providers (n = 3) experienced a decrease in Adoption scores. Overall, there was no statistically significant change in Adoption scores (Mdn = .00) relative to Sustainability scores (Mdn = .26), z = -0.14, p = .45.

Sustainability and Acceptability. Again, of the five providers, two (n = 2) experienced an increase in Acceptability scores relative to Sustainability scores, as hypothesized. Three providers (n = 3) experienced a decrease in Acceptability scores. Overall, there was no statistically significant change in Acceptability scores (Mdn=.08) relative to Sustainability scores (Mdn=.26), z=-0.67, p=.25.

Sustainability and Appropriateness. As hypothesized, of the five providers, three (n = 3) experienced an increase in Appropriateness scores relative to Sustainability scores. Two providers (n = 2) experienced a decrease in Appropriateness scores. Overall, there was no statistically significant change in Appropriateness scores (Mdn = .00) relative to Sustainability scores (Mdn = .26), z = -0.41, p = .34.

Sustainability and Feasibility. Of the five providers, two (n = 2) experienced an increase in Feasibility scores relative to Sustainability scores, as anticipated. Three providers (n = 3)

experienced a decrease in Feasibility scores. Overall, there was no statistically significant change in Feasibility scores (Mdn = .11) relative to Sustainability scores (Mdn = .26), z = -0.41, p = .34.

Sustainability and Reach. Finally, of the five providers, two (n=2) experienced an increase in Reach scores relative to Sustainability scores, as hypothesized. Three providers (n=3) experienced a decrease in Reach scores. Overall, there was no statistically significant change in Reach scores (Mdn=-0.17) relative to Sustainability scores (Mdn=.26), z=-0.67, p=.25.

 Table 9

 Peer Mentors: Changes in Sustainability and Other Constructs Pre- and Post-Intervention

Differences Test Statistics					
Measure	Adoption-	Acceptability-	Appropriateness-	Feasibility-	Reach-
	Sustainability	Sustainability	Sustainability	Sustainability	Sustainability
Z	135 <sup>b</sup>	674 <sup>b</sup>	405 <sup>b</sup>	405 <sup>b</sup>	674 <sup>b</sup>
Asymp. Sig.	.893	.500	.686	.686	.500
(2-tailed)					

<sup>&</sup>lt;sup>a</sup> Wilcoxon Signed-Ranks Test.

#### Student Veterans

Student Veteran Survey Demographic Characteristics. All consumers (n = 12) provided demographic information unless noted below. Descriptive statistics for SVs are shown in Table 10 and Appendix F. A summary is provided in Table 11 below. Consumers ranged in age from 25 to 39 years old, with a mean age of 31.33 (SD = 5.11). SVs also reported their deployment history, ranging from zero to four deployments, with a mean of 1.25 (SD = 1.36).

<sup>&</sup>lt;sup>b</sup> Based on positive ranks.

**Table 10**Student Veterans: Selected Survey Descriptive Statistics

Characteristic	M	SD	Range
Age	31.33	5.11	25-39 <sup>a</sup>
Deployment History	1.25	1.36	0-4 <sup>b</sup>

<sup>&</sup>lt;sup>a</sup> Years.

*Note*. N = 12.

In terms of gender identity, 10 SVs (83.3%) identified as men, and two (16.7%) as women. All (100%) identified as heterosexual. For race/ethnicity, eight consumers (66.7%) identified as White, two (16.7%) as Native American, one (8.3%) as Hispanic/Latino, and one (8.3%) as Black. Regarding marital status, six (50%) were single, four (33.3%) divorced, and two (16.7%) married. Of those who reported (n = 8), six SVs (75%) had children, and two (25%) did not. Five (41.7%) lived alone, four (33.3%) with a roommate, and three (25%) lived with a spouse or partner. The group came from distinct regions of the country, with seven (58.3%) residing in the Northeast, three (25%) in the West, and two (16.7%) in the Midwest. Four (33.3%) consumers held a high school diploma, four (33.3%) held a bachelor's degree, and four (33.3%) held an associate's degree. For employment status, five (41.7%) relied on the GI Bill or VA Disability as their sole source of income, four (33.3%) were unemployed, two (16.7%) worked part-time, and one (8.3%) full-time. Nine SVs (75%) reported that they were full-time students, two (16.7%) were part-time students, and one (8.3%) was a graduating senior at the start of the study. Regarding military status, 10 (83.3%) identified as Veterans, one (8.3%) as retired, and one (8.3%) as a member of the National Guard. Five (41.7%) consumers were in the Army, three (25%) in the Navy, three (25%) in the Marine Corps, and one (8.3%) in the Air Force. Six (50%) were E-1-4, five (41.7%) were E-5-7, and one (8.3%) was among the field grade officer ranks of O-1-3. In terms of religion, five SVs (41.7%) were Christian, three (25%)

<sup>&</sup>lt;sup>b</sup> Number of deployments.

agnostic, two (16.7%) atheist, and two (16.7%) affiliated with an unspecified religion. When asked if they were currently receiving mental health care, six consumers (50%) reported yes, and six (50%) reported no. When asked if they had previously received mental health care, one SV (8.3%) reported yes, while 11 (91.7%) reporting no. Eight (66.7%) stated they had completed their last full course of psychiatric treatment, with four (33.3%) saying they had dropped out. Six (50%) noted receiving services at the VA, three (25%) at a private practice, and three (25%) at another location. Two SVs (16.7%) were currently taking psychiatric medication, while 10 (83.3%) were not. However, seven (58.3%) had previously taken psychiatric medication, while five (41.7%) had not. Ten SVs (83.3%) reported having a currently diagnosed medical condition, while two (16.7%) reported they did not. Seven (58.3%) reported a previous medical illness, while five (41.7%) did not.

Table 11
Student Veterans: Survey Demographics

Characteristic	Frequency	Percentage
Gender Identity	(n = 12)	-
Men	10	83.3%
Women	2	16.7%
Sexual Orientation	(n = 12)	
Heterosexual	12	100%
Race/Ethnicity	(n = 12)	
White	8	66.7%
Native American	2	16.7%
Hispanic/Latino	1	8.3%
Black	1	8.3%
Marital Status	(n = 12)	
Single	6	50%
Divorced	4	33.3.%
Married	2	16.7%
Children	(n = 8)	
Yes	6	75%
No	2	25%
Domicile Status	(n = 12)	
Living Alone	5	41.7%

Characteristic	Frequency	Percentage
Living with Roommate	4	33.3%
Living with	3	25%
Spouse/Partner		
Geographic Location	(n = 12)	
Northeast	7	58.3%
West	3	25%
Midwest	2	16.7%
Education	(n = 12)	
High School	4	33.3%
Associates	4	33.3%
Bachelors	4	33.3.%
Employment Status	(n = 12)	
GI Bill/VA Disability	5	41.7%
Unemployed	4	33.3%
Part-Time	2	16.7%
Full-Time	1	8.3%
Student Status	(n = 12)	
Full-Time	9	75%
Part-Time	2	16.7%
Unenrolled	1	8.3%
Military Status	(n = 12)	
Veteran	10	83.3%
Retired	1	8.3%
National Guard	1	8.3%
Military Service Branch	(n = 12)	
Army	5	41.7%
Navy	3	25%
Marine Corps	3	25%
Air Force	1	8.3%
Highest Rank at Discharge	(n = 12)	0.0 / 0
E-1-4	6	50%
E-5-7	5	41.7%
O-1-3	1	8.3%
Religion	(n = 12)	0.5 / 0
Christian	5	41.7%
Agnostic	3	25%
Atheist	2	16.7%
Unspecified	2	16.7%
Currently Receiving Mental	(n = 12)	10.770
Health Care	(n-12)	
Yes	6	50%
No	6	50%
Previously Received Mental	(n = 12)	3070
Health Care	(n-12)	
Yes	1	Q 20/
1 68	1	8.3%

Characteristic	Frequency	Percentage
No	11	91.7%
Completed Treatment	(n = 12)	
Yes	8	66.7%
No	4	33.3%
Where Received Treatment	(n = 12)	
VA	6	50%
Private Practice	3	25%
Other	3	25%
Current Medication Use	(n = 12)	
Yes	2	16.7%
No	10	83.3%
Past Medication Use	(n = 12)	
Yes	7	58.3%
No	5	41.7%
Current Medical Illness	(n = 12)	
Yes	10	83.3%
No	2	16.7%
Previous Medical Illness	(n = 12)	
Yes	7	58.3%
No	5	41.7%

# Changes in Adoption, Acceptability, Appropriateness, Feasibility, and Reach

(Aim 1.2). It was hypothesized that SVs would find IPC-3 to be more Adoptable, Acceptable, Appropriate, Feasible, and Reachable at the post-intervention timepoint (i.e., after completing the Follow-Up Session) than at the pre-intervention timepoint (i.e., prior to starting Session 1). As with providers, this hypothesis was informed by literature that suggests utilizing the Apprenticeship Model for training and supervision of non-mental health specialists—a practice that positively influences D&I outcomes constructs among consumers (Murray et al., 2011). To assess changes across constructs and among this sample of SVs, a Mann-Whitney U Test (i.e., between-subjects design) was utilized, assuming two conditions: those who were exposed to the pre-intervention and those who were exposed to both the pre- and post-intervention timepoints. (Of note, the post-intervention score for one (n = 1) participant was dropped for the analysis, so as not to violate the assumption that consumers are only in one condition and not both. Retaining

the pre-intervention score allowed for the participant to remain similar to their peers in the condition.) Assumptions were checked prior to analysis. First, the dependent variable was measured at the continuous level. Second, the independent variable consisted of two categorical, independent groups (i.e., pre- and post-intervention timepoints). Third, the observations were assumed to be independent, which was confirmed by examining the differences among provider's timestamps, locations, and IP addresses. Finally, the scores for SVs were assumed to be non-parametric, given the small sample size. SV output for the Mann-Whitney U Test can be found in Appendix G. The test statistics can be found in Table 12 below.

Adoption. A Mann-Whitney U Test was run to determine if there were differences in Adoption among SVs at the pre-intervention (n = 8) and post-intervention (n = 5) timepoints. Scores in Adoption before receiving the intervention (Mdn = 3.29) were not statistically significantly different than those after completion of IPC-3 (Mdn = 3.13), U = 16.00, z = -.59, p = .28 (one-tailed), r = -.16.

Acceptability. Next, the differences in Acceptability scores among SVs at the preintervention (n = 8) and post-intervention (n = 5) timepoints were assessed using the Mann-Whitney U Test. Scores before receiving the intervention (Mdn = 3.32) were not statistically significantly different than those after completion of IPC-3 (Mdn = 3.87), U = 11.50, z = -1.25, p = .11 (one-tailed), r = -.35.

Appropriateness. Then, the differences in Appropriateness scores among SVs at the preintervention (n = 8) and post-intervention (n = 5) timepoints were again assessed via a Mann-Whitney U Test. Scores before receiving the intervention (Mdn = 3.52) were not statistically significantly different than those after completion of IPC-3 (Mdn = 3.77), U = 17.50, z = -.37, p = .36 (one-tailed), r = -.10. *Feasibility*. Additionally, Feasibility scores among SVs were assessed at the preintervention (n = 8) and post-intervention (n = 5) timepoints using a Mann-Whitney U Test. Scores before receiving the intervention (Mdn = 3.53) were not statistically significantly different than those after completion of IPC-3 (Mdn = 3.85), U = 17.00, z = -.44, p = .33 (one-tailed), r = -.12.

**Reach**. Finally, a Mann-Whitney U Test was run to determine differences in Reach among SVs at the pre-intervention (n = 7) and post-intervention (n = 5) timepoints. Scores in Reach before receiving the intervention (Mdn = 1.67) were not statistically significantly different than those after completion of IPC-3 (Mdn = 1.40), U = 15.00, z = -.41, p = .34 (one-tailed), r = -.11.

Of note, when assessing the scores for Reach (n = 7), a post-intervention score for one (n = 1) provider was dropped from the inferential analysis to maintain that consumers were in only one condition (and not both) to meet the assumption of symmetry. The pre-intervention score was retained, given that this condition was most similar to that of their pre-intervention peers (i.e., no exposure to post-intervention outcome measure).

Table 12

Student Veterans: Changes in Constructs Pre- and Post-Intervention

Test Statistics					
	Adoption	Acceptability	Appropriateness	Feasibility	Reach
Mann-Whitney U	16.000	11.500	17.500	17.000	15.000
Wilcoxon W	31.000	47.500	53.500	53.000	30.000
Z	587	-1.253	366	442	409
Asymp. Sig. (2-tailed)	.557	.210	.714	.659	.683
Exact Sig. [2*(1-tailed	.622 <sup>b</sup>	$.222^{b}$	.724 <sup>b</sup>	.724 <sup>b</sup>	.755 <sup>b</sup>
Sig.)]					

Note. N = 7.

<sup>&</sup>lt;sup>a</sup> Grouping variable: Condition.

<sup>&</sup>lt;sup>b</sup> Not corrected for ties.

Correlated Changes in Adoption and Acceptability (Aim 1.3). It was hypothesized that the constructs of Adoption and Acceptability would be positively correlated at the pre- and post-intervention timepoints among SVs, as both Adoption and Acceptability are hypothesized to be strongly associated (Proctor et al., 2011). However, since only one (n = 1) consumer filled out data at both timepoints, Kendall's Tau-b correlation could not be run to determine the relationship between the two constructs at the pre-intervention timepoint.

### **Study Aim 2: Key Informant Interviews**

### Site Supervisors and Peer Mentors

Site Supervisor Key Informant Interview Demographic Characteristics. Two providers (n = 2) provided demographic information, and the third consumer chose only to consent. Descriptive statistics can be found in Table 13 and Appendix H. A summary is provided in Table 14 below. The providers ranged from 39 and 59 years of age, with a mean age of 49 (SD = 14.14).

Table 13
Site Supervisors: Key Informant Interview Selected Descriptive Statistics

Characteristic	M	SD	Range
Age	49	14.14	39-59

Note. N = 2.

For gender identity, one (50%) provider identified as a man, and one (50%) as a woman. Regarding sexual orientation, one reported to be Heterosexual (50%), and one reported to be Queer (50%). For race/ethnicity, both (100%) providers identified as White. Regarding marital status, both were married (100%); for domicile status, both (100%) lived with a spouse or partner. For geographic location, one provider (50%) lived in the Northeast, and one (50%) in the West. Regarding education, as required by the inclusion criteria, both (100%) held doctoral

degrees. In terms of employment status, one (50%) provider worked full-time, and one (50%) worked part-time. For student status, neither (100%) was a student at the time of participation. Regarding military status, one (50%) provider identified as a Veteran, and one (50%) as a military dependent. The one who had served (n = 1) was in the Marine Corps, being among the mid-level enlisted ranks of E-5-7 and reported deploying twice. Regarding religion, one (50%) provider was an atheist, and one (50%) was Jewish. When asked if they were currently receiving mental health care, one (50%) reported yes, and one (50%) reported no. Both (100%) providers reported previously receiving mental health care. One (50%) reported they had a currently diagnosed medical condition, while the other (50%) did not. Lastly, both providers reported having a past medical illness (100%).

Table 14
Site Supervisors: Key Informant Interview Demographics

Characteristic	Frequency	Percentage
Gender Identity	- 1	
Men	1	50%
Women	1	50%
Sexual Orientation		
Heterosexual	1	50%
Queer	1	50%
Race/Ethnicity		
White	2	100%
Marital Status		
Married	2	100%
Domicile Status		
Living with Spouse/Partner	2	100%
Geographic Location		
Northeast	1	50%
West	1	50%
Education		
Doctorate	2	100%
Employment Status		
Part-Time	1	50%
Full-Time	1	50%
Student Status		

Characteristic	Frequency	Percentage
Unenrolled	2	100%
Military Status		
Veteran	1	50%
Military Dependent	1	50%
Religion		
Atheist	1	50%
Jewish	1	50%
Currently Receiving Mental Health Care		
Yes	1	50%
No	1	50%
Previously Received Mental Health Care		
Yes	2	100%
Current Medical Illness		
Yes	1	50%
No	1	50%
Previous Medical Illness		
Yes	2	100%
No	0	0%

Note. N = 2.

Peer Mentor Key Informant Interview Demographic Characteristics. All providers (n = 8) offered demographic information, unless otherwise noted. Descriptive statistics can be found in Table 15 and Appendix I. A summary is provided in Table 16 below.

Providers ranged from 28 to 47 years of age, with a mean age of 38.25 (SD = 6.76). The deployment history of those who served (n = 7) ranged from zero to five deployments, with a mean deployment figure of 1.25 (SD = 1.75).

Table 15

Peer Mentors: Key Informant Interview Selected Descriptive Statistics

Characteristic	M	SD	Range
Age $(n = 8)$	38.25	6.76	28-47 <sup>a</sup>
Deployment History $(n = 7)$	1.25	1.75	0-5 <sup>b</sup>

<sup>&</sup>lt;sup>a</sup> Years.

For gender identity, five (62.5%) providers identified as men, two (25%) as women, and one as non-binary (12.5%). Regarding sexual orientation, seven (87.5%) identified as

<sup>&</sup>lt;sup>b</sup> Number of deployments.

heterosexual, and one (12.5%) as bisexual. For race/ethnicity, five (62.5%) providers identified as White and three (37.5%) as Black. Three (37.5%) were divorced, two (25%) were married, two (25%) were single, and one (12.5%) was separated. Regarding domicile status, three (37.5%) providers were living with a spouse or partner, three (37.5%) lived alone, and two (25%) with a roommate. Four (50%) resided in the Northeast, three (37.5%) in the West, and one (12.5%) in the South. Three (37.5%) PMs held a bachelor's degree, two (25%) an associate's, one (12.5%) a master's, one (12.5%) a high school diploma, and one (12.5%) a doctorate. In terms of employment status, four (50%) worked part-time, two (25%) full-time, and two (25%) were unemployed. Although the entire PM sample was classified as "peers" due to their past military affiliation, four (50%) reported to be full-time students, two (25%) were part-time, and two (25%) were not students at the time of participation. In terms of military status, five (62.5%) providers identified as Veterans, two (25%) as retired, and one (12.5%) as a military dependent. Of those who served (n = 7), four (50%) were in the Army, one (12.5%) in the Navy, and two (25%) in the Marine Corps. Again, of those who served, four (50%) were of the rank E-5-7, and three (37.5%) were E-1-4. Regarding religion, five (62.5%) PMs listed "Other," one (12.5%) identified as Christian, one (12.5%) as Catholic, and one (12.5%) as an atheist. When asked if they were currently receiving mental health care, four (50%) providers reported yes, and four said (50%) no. When asked if they had previously received mental health care, seven (87.5%) reported yes, and one (12.5%) said no. Seven (87.5%) PMs reported having a currently diagnosed medical condition, and one (12.5%) did not. Seven (87.5%) also reported having a past medical illness.

 Table 16

 Peer Mentors: Key Informant Interview Demographics

Characteristic	Frequency	Percentage
Gender Identity	(n = 8)	
Men	5	62.5%
Women	2	25%
Non-binary	1	12.5%
Sexual Orientation	(n = 8)	
Heterosexual	7	87.5%
Bisexual	1	12.5%
Race/Ethnicity	(n = 8)	
White	5	62.5%
Black	3	37.5%
Marital Status	(n = 8)	
Divorced	3	37.5%
Married	2	25%
Single	2	25%
Separated	1	12.5%
Domicile Status	(n=8)	12.6 / 5
Living with Spouse/Partner	3	37.5%
Living Alone	3	37.5%
Living with Roommate	2	25%
Geographic Location	(n = 8)	
Northeast	4	50%
West	3	37.5%
South	1	12.5%
Education	(n=8)	
Bachelors	3	37.5%
Masters	2	25%
Associates	$\frac{\overline{}}{2}$	25%
High School	1	12.5%
Doctorate	1	12.5%
Employment Status	(n=8)	
Part-Time	4	50%
Full-Time	2	25%
Unemployed	$\frac{-}{2}$	25%
Student Status	(n = 8)	
Full-Time	4	50%
Part-Time	2	25%
Unenrolled	2	25%
Military Status	(n=8)	
Veteran	5	62.5%
Retired	2	25%
Military Dependent	1	12.5%

Characteristic	Frequency	Percentage
Military Service Branch	(n = 7)	
Army	4	50%
Marine Corps	2	25%
Navy	1	12.5%
Highest Rank at Discharge	(n = 7)	
E-1-4	3	37.5%
E-5-7	4	50%
Religion	(n = 8)	
Other	5	62.5%
Christian	1	12.5%
Catholic	1	12.5%
Atheist	1	12.5%
Currently Receiving Mental Health Care	(n = 8)	
Yes	4	50%
No	4	50%
Previously Received Mental Health Care	(n = 8)	
Yes	7	87.5%
No	1	12.5%
Current Medical Illness	(n = 8)	
Yes	7	87.5%
No	1	12.5%
Previous Medical Illness	(n = 8)	
Yes	7	87.5%
No	1	12.5%

**Deductive Thematic Analysis**. Deductive thematic analysis revealed a depth and breadth of SS and PM (i.e., provider) attitudes toward the D&I outcome constructs of Adoption, Acceptability, Appropriateness, Feasibility, and Reach, which were examined at both the preand post-timepoints. Cohen's Kappas for each theme at both timepoints can be found in Table 17 and Table 18 below, respectively. A synthesis of thematic findings across timepoints can be found in Table 19.

 Table 17

 Site Supervisors & Peer Mentors: Cohen's Kappas by Theme at the Pre-Intervention Timepoint

ID	Adoption	Acceptability	Appropriateness	Feasibility	Reach
01	.68	.68	.78	.65	.72
02	.76	.72	.71	.66	.64
03	.67	.77	.73	.64	.77
0101	.94	.74	.93	.91	.81
0102	.73	.73	.66	.91	.65
0103	.85	.82	.92	.82	.62
0104	.87	.97	.87	.90	.90
0201	1.00	.75	.74	.85	.78
0202	.86	.84	.89	.79	.83
0203	.90	.77	.74	.70	.81
0204	1.00	.97	.63	1.00	.77

*Note.* n = 11.

 Table 18

 Site Supervisors & Peer Mentors: Cohen's Kappas by Theme at the Post-Intervention Timepoint

ID	Adoption	Acceptability	Appropriateness	Feasibility	Reach
01	.74	.72	.78	.66	.72
0101	.80	.94	.75	.71	.86
0103	.73	.78	.70	.79	.80
0104	.61	.74	1.00	.84	.61
0201	.96	.95	1.00	.67	.93
0202	1.00	.69	.75	.81	.72
0204	1.00	1.00	.97	.91	.65

Note. n = 7.

 Table 19

 Site Supervisor & Peer Mentors: Overview of Key Informant Interview Themes

D&I Constructs	Pre-Intervention	Consistent Across	Post-Intervention
	Timepoint	Timepoints	Timepoint
Adoption		Barriers	Barriers
		<ul> <li>Managed multiple responsibilities</li> <li>Had difficulty maintaining professional boundaries</li> </ul>	<ul> <li>Lacked campus leadership support</li> <li>Impacted by slowed recruitment and operational tempo</li> <li>Experienced psychology distress</li> </ul>
		Facilitators	Facilitators
		- Possessed time/available bandwidth	- Learned tools to manage provider
		- Equipped with knowledge, skills, and resources	distress
		<ul><li>Motivated to give back to the Veteran community</li><li>Felt supported by the IPC-3 Team</li></ul>	- Possessed adequate physical space
Acceptability	Learning IPC-3	Learning IPC-3	Learning IPC-3
	- Desired to be a provider prior to becoming a supervisor	<ul> <li>Presented information accessibly and clearly</li> <li>Mixed impressions of training length</li> <li>Experienced connection with training group</li> <li>Enhanced satisfaction with IPC-3</li> </ul>	- Continued learning across implementation
		Impressions	Impressions
		<ul><li>Provided effective tool to reduce distress</li><li>Could be implemented by non-professionals</li></ul>	<ul> <li>Adapted for military and Veteran communities</li> </ul>
		<ul> <li>Allowed for flexible, individualized support</li> <li>Fostered openness to receiving mental health services in the future</li> </ul>	- Desired dissemination across Veteran community

D&I Constructs	Pre-Intervention	Consistent Across Timepoints	Post-Intervention Timepoint
Appropriateness	Timepoint  Value Alignment  - Allowed pathway for direct assistance	Value Alignment - Offered flexible, individualized care	Value Alignment  - Utilized social support for recovery - Provided opportunity to gain professional skills
	<ul><li>Impact on Distress</li><li>Varied response based on individual needs</li><li>Impressions of the number of sessions</li></ul>	<ul> <li>Impact on Distress</li> <li>Facilitated buy-in via peer support</li> <li>Perceived provider connection influenced consumer response</li> <li>Fostered self-efficacy in distress management</li> </ul>	<ul><li><i>Impact on Distress</i></li><li>Equipped with coping skills to decrease distress</li></ul>
Feasibility	Prepared to Provide IPC-3 - Prepared by educational background	Prepared to Provide IPC-3  - Prepared by initial and refresher training  - Prepared by previous personal and professional experiences  - Prepared by dispositional traits  - Experienced anxiety surrounding learning a new skill	Prepared to Provide IPC-3 - Prepared by implementation tools
	Setting and Provider Impressions - Concerned for provider levels of distress	Setting and Provider Impressions - Preferred services on campus - Preferred in-person delivery - Preferred delivery by peers	
Reach	- Experienced discrimination or stigma due to gender identity	<ul> <li>Lacked awareness or had difficulty navigating services</li> <li>Held beliefs about help-seeking learned in the military</li> <li>Managed multiple roles and responsibilities</li> <li>Impacted by previous negative experiences accessing services</li> <li>Affected by transition stress</li> </ul>	- Perceived dearth of providers with Veteran cultural competencies
Sustainability		<ul> <li>Complemented VITAL role</li> <li>Expanded VITAL role</li> <li>Offered structure for support</li> <li>Provided additional tools for support</li> </ul>	

Adoption. Providers were asked about their attitudes and beliefs regarding Adoption to understand the willingness of SSs and PMs to try IPC-3 and continue using it. Specifically, providers shared factors that affected their ability to participate in the intervention, elucidating several barriers and facilitators toward trying—and then employing—the program. Barriers included juggling responsibilities outside IPC-3, the emotional burden of delivering IPC-3, the difficulty of maintaining professional boundaries, a lack of campus leadership support, and slowed operational tempo of cases. Facilitators included having adequate time to participate in IPC-3, possessing the knowledge and skills for its implementation, being motivated to give back to the SV community, feeling supported by the IPC-3 study team and fellow providers, and possessing private space to hold sessions (see Table 20).

Table 20
Site Supervisors & Peer Mentors: Adoption Themes

### **Barriers**

- Managed multiple responsibilities outside of IPC-3
- Experienced psychology distress during provision
- Had difficulty maintaining professional boundaries
- Lacked campus leadership support
- Impacted by slowed recruitment and operational tempo

## **Facilitators**

- Possessed time management skills and/or available bandwidth
- Equipped with knowledge, skills, and resources
- Motivated to give back to the Veteran community
- Learned tools to manage provider distress
- Felt supported by the IPC-3 team
- Possessed physical space, enabling privacy for sessions

First, providers spoke about barriers to Adoption, including factors that impeded IPC-3 use. Many discussed being overwhelmed or overburdened by their existing responsibilities, including work, school, and family life. They shared that they held many roles outside of IPC-3, which represented barriers to initial and continued engagement. These roles and responsibilities

made it difficult to schedule weekly SV sessions. Providers also spoke candidly about logistical challenges associated with attending consultation meetings, due to time constraints. Time was a consistent barrier to Adoption across both timepoints.

It can be challenging to find the time, especially because I'm working 40 hours and then also attending full-time school.

Providers also described the effect providing IPC-3 had on their mental health, which acted as a barrier to Adoption. For some, witnessing the distress of fellow SVs aggravated their own psychological distress, including panic and dissociation, which affected their ability to engage in IPC-3. Others noted feeling overwhelmed by the clinical content discussed in weekly consultation calls, which included listening to detailed accounts of stressors and mental health challenges across a variety of cases. One provider expressed dissatisfaction with the interpersonal dynamics of consultation meetings. This theme was present at the post-intervention timepoint only.

I am struggling with my own personal mental health. And I'm finding, as a mental health patient with a long history of being in therapy, that specifically the [symptom] measures and the consultation calls have been particularly challenging.

Relatedly, PMs, specifically, expressed concern about their investment in Veteran issues, which was a barrier to Adoption. At both timepoints, they expressed fears that they might become "too involved" while providing support. PMs noted the potential for countertransference, blurring the boundaries between their personal lives and IPC-3 roles through overidentification with consumer identities, experiences, and overlapping mental health challenges (e.g., their own or those of friends and family).

Mental health is a huge part of my family. I have several members who struggle with it, and several that I've lost to suicide.... So, one on hand that gives me the opportunity to understand [SVs] on a better level.... But at the same time, I don't want to say it clouded my judgement, but I don't ever want my personal past and my experience with it to ever

be projected or to overlap on to theirs. I want this to be about them and them only and be giving the help that they need.

SSs also shared concerns regarding the wellbeing of PMs whom they supervised.

I knew the mentors, so I knew what kinds of things they might have been dealing with in their lives as well. And then I might be concerned about how they're doing in addition to wanting to supervise the cases.

At the post-intervention timepoint only, providers noticed the impact of leadership support on Adoption. Notably, while administered by the VA, the VITAL Program is physically located on individual campuses, often run out of offices directly overseen by the hosting academic institutions. Providers described navigating the competing priorities laid out by campus leaders within those offices.

We got a new director at the Veterans Center here about that same time that we did the training for [IPC-3] and started taking on cases. He agreed that this was awesome to be able to learn and take part in. But at the same time, he had a vision of what direction he wanted to take the office in. And so, we had a lot of our resources and manpower, including myself, geared towards that and pushing that in and out and getting it going.

A minority of providers reflected on the operational tempo of the study at the post-intervention timepoint. They noted the difficulties of remaining engaged during downtimes, especially when there were few new cases to discuss in consultation meetings. Some acknowledged VITAL operated virtually—instead of on-campus during the COVID-19 pandemic—which may have slowed recruitment efforts.

In terms of barriers, I think the major one, the volume of participants could have been much more.

Second, providers discussed factors that promoted IPC-3 Adoption and facilitated its implementation. They noted having availability in their schedules as a facilitator, with some possessing more time to learn and provide a new program. For PMs, time management skills helped balance IPC-3 tasks with school, work, and personal responsibilities, which positively

influenced intervention uptake. This theme showed up as a facilitator at the post-intervention timepoint only.

Being a full-time student with no other responsibilities, I was not working at the same time outside of work study. So, that was helpful.

Other providers discussed having confidence in their ability to execute the program, which acted as a facilitator to Adoption. Specifically, they felt equipped with knowledge and skills to execute their roles, acting as either SSs or PMs. Many attributed this competence to their educational backgrounds and professional training. Provider knowledge of mental health theory and practice, as well as skills such as time management, assisted them in executing IPC-3 tasks. Still other providers noted that their awareness of Veteran-specific resources facilitated IPC-3 Adoption. Given their status as VA employees (i.e., SSs) and SVs (i.e., PMs), providers came into IPC-3 with a baseline of knowledge across a wide variety of domains, including how to navigate VA benefits enrollment, GI Bill benefits, and campus resources. Others were familiar with services specific to the geographic region in which they lived. Previously obtained knowledge of these resources and referrals facilitated IPC-3 uptake. This theme was present at both timepoints.

I'm an MSW [Master of Social Work] student as well at VITAL. I'm working a lot of theory at school, and [IPC-3] allows me to put some of that into practice.

Providers also felt deeply connected to the SV community and were highly motivated to support them. Their desire to assist and give back to their community facilitated Adoption, inspiring providers to engage in and continue providing IPC-3. This theme was present at both timepoints.

I'm giving back, and [IPC-3 is] a way to give back.... As long as I feel value, and that the program's helping people, I'm going to be a part of it.

At the post-intervention timepoint only, providers discussed how exposure to IPC-3 techniques facilitated Adoption. They felt that learning to provide IPC-3 offered exposure to more effective ways of managing distress, techniques which they could use in their own lives. Others described how connecting with Veterans via consultation meetings made them feel less alone and more connected to a purpose greater than themselves, building wellness through the presence of social support.

It served as a therapy for me in a way. Sometimes, some of the problems that Veterans would have, it would either bring me back to a time where I had experienced that, or perhaps, it was applicable to something that was going on in my life at the time. And so, I enjoyed that aspect.

In addition to learning coping skills, providers also reported feeling supported by the IPC-3 team, including the research team members. They believed these individuals helped keep the "paperwork" moving, freeing up their time to focus on SV sessions. Furthermore, they expressed the camaraderie between the delivery team of providers. This theme was present at both the pre- and post-intervention timepoints.

I think this team overall [Study Team members and PMs]—I think everything about this program—I personally love.... The attention and the care for us as the providers. That's another big reason [to participate].

Finally, at the post-intervention timepoint only, one provider said that having access to physical space to hold sessions facilitated Adoption.

Living by myself.... I had a space. I didn't have to worry about finding a place to go.

Acceptability. Additionally, providers were queried about their perceptions of IPC-3's Acceptability. To understand if providers found IPC-3 to be satisfying and agreeable, they were first asked about their impressions of IPC-3 delivered by peers for SVs. Second, they were invited to describe their experiences learning IPC-3. For the former, providers shared themes centering on IPC-3 as an effective tool to decrease distress, delivery by non-mental health

specialists, flexible implementation structure, treatment orienting nature, adaptation for SVs, and a desire for this program to be widely disseminated across Veteran communities. For the latter, themes centered on the training's accessibility and clarity of information covered, impressions of the trainers and training group, continued learning through case provision, thoughts on the number of sessions offered, impressions of being a PM prior to taking on the SS role, and how training solidified their perceptions of the intervention (see Table 21 below).

 Table 21

 Site Supervisors & Peer Mentors: Acceptability Themes

	Experience Learning IPC-3
-	Presented information accessibly and clearly
-	Experienced sense of connection with the training group
-	Continued learning across implementation, including role plays and skills practice
-	Mixed impressions of training length
-	Desired to be a provider prior to becoming a supervisor

# Impressions of IPC-3

- Provided an effective tool for reducing distress and building coping skills
- Could be implemented by non-mental health professionals

Enhanced satisfaction for the intervention after training

- Allowed for flexible, individualized support
- Fostered openness to receiving mental health services in the future
- Adapted for Veteran communities
- Desired dissemination of IPC-3 across Veteran community

First, providers depicted their experiences learning IPC-3. Many described the accessibility of the information presented. This included the training format, which consisted of two virtual training days. Providers found the training well organized, with information clearly presented and explained. It was facilitated by two IPT Master Trainers who included didactics and role-play and were perceived as professional, engaging, and affable. This theme remained consistent across timepoints, positively influencing Acceptability.

It provided a lot of information and a lot of repetition and a lot of reviewing. It was very naturally built into how the training was presented. It didn't feel like it was trying to

cover too much at once. And people were encouraged to participate in the discussion and share concerns.

Provider feedback from the training also resulted in real-time edits to the manual and implementation of provider tools.

I mean no one made recommendations where we saw places we could make improvements that were not taken and put to the wayside. Literally, you came back the next week, and the manual had been updated.

A minority of providers highlighted their dissatisfaction with the virtual training format.

We trained virtually. We did the best we could in that environment, but certainly face-to-face would be best.

Next, SSs and PMs overwhelmingly described a connection and camaraderie among the training group, despite previously not knowing each other and being geographically divided (i.e., New York and Utah). Providers noted the familiarity in stories told, common interests shared, and the feeling of being seen and known by other members of the greater Veteran community.

If absolutely nothing else, being in a room full of people who care about Veterans—virtual or otherwise—always tends to bring out the best in that group. So, I found it entertaining and engaging and very easy to absorb.

Providers also noted IPC-3 was not only learned in the initial training, but that learning continued through annual refresher training and consultation meetings. They were satisfied with this model, as it provided opportunities to ask questions and practice newly acquired skills across implementation. This theme was present at the post-intervention timepoint only.

It is a lot of information, but I feel like it comes with a lot of support and resources that we can go back and check. So, that we don't feel like we have to retain everything that we learned in that single training at that time.

Another theme expressed only at the post-intervention timepoint was the desire for additional role-play and skills practice in training and consultation calls. Providers said that rehearsal under

the guidance of clinical supervisors helped "hardwire" session tasks and bolstered provider confidence in these newly learned skills.

I think going over it, and then being like, "Okay, now let's use this. Let's practice Session 1." That would be super helpful.

Additionally, providers commented on the training length at both timepoints. Some expressed that the training was succinct and comprehensive. They acknowledged it was impossible to learn a new discipline overnight. However, they said the time dedicated to covering the theory, structure, goals, and tasks of IPC-3 was satisfactory. Some noted the training team's ability to pivot based on the groups' needs, spending more time on specific techniques, which was agreeable. Conversely, others felt two days was not sufficient, desiring additional time for role-play and practice.

It is a lot. I think it was a 6- to 8-hour training each day. It was pretty long. So, that can be quite a firehose of information.

Uniquely to SSs, one of the two clinical supervisors noted how being a PM prior to becoming an SS may have been preferable, as it would have offered a strong foundation on which their current supervisory role could be based. This theme was evident at the pre-intervention timepoint only.

I always thought that [being trained as a provider] would've been very useful for me.... So now, you're learning it at the same time as the mentors are learning it.

Finally, providers said that their training experience enhanced or solidified their belief that IPC-3 was Acceptable. Many offered general yet positive comments regarding the training experience, suggesting their interest in and enthusiasm for IPC-3. They stated that the training increased their desire to become an IPC-3 provider and felt they would be offering effective, practical support for others in their community. These comments were present across both timepoints.

I was excited by [the training] because I think [IPC-3 is] so useful. And it's concise. It's clear. It's doable. It's practical. I really had a sense that the Veterans were going to appreciate it.

Second, providers discussed their impressions of IPC-3 delivered by peers for SVs experiencing psychological distress. Overwhelmingly, SSs and PMs described IPC-3 as an effective tool to support the SV community, decreasing distress and increasing coping skills. They highlighted that SVs also found IPC-3 to be a helpful tool to address distress, with clinical gains remaining at the one-month Follow-Up Session. While they were hopeful IPC-3 would be effective at the pre-intervention timepoint, they confirmed this impression at the post-intervention timepoint.

Things may have gotten a little bit stressful [for the SV] in that month between the third one and the Follow-Up. But a lot of times they'll say they feel like they had the tools. They've been relying on the tools.... So, I think IPC-3 is so critical right now, especially for this target population.

Next, SSs and PMs believed IPC-3's implementation by peers was possible at both timepoints. Specifically, providers found IPC-3 to be easy to learn and said the theoretical approach "made sense." Many PMs discussed how being an IPC-3 provider was empowering, offering them additional competencies to aid SVs and support from clinical supervisors.

For the peers, it's a very positive thing, because it's empowering for them to get additional training and a sense of competence that they can intervene and be of help.

Relatedly, many SSs and PMs discussed that IPC-3 was unique in its provision by peers at both timepoints. They noted leveraging peer support was less stigmatizing than seeking help from traditional mental health professionals. In addition to removing barriers to help-seeking, utilizing peers was perceived as a better fit to serve the needs of SVs, lending an ease of connection between provider and consumer and offering a layer of comfort when discussing challenges.

I think it's a great strategy. I think getting Veterans involved in helping other Veterans, there's a level of connection and that relatability. Veterans maybe more likely to open up to another Veteran, where they may not to someone who's a social work intern who never served or someone who is a psychology student who never served.

Some PMs shared initial concerns that they would be asked to fulfill clinical duties, which they felt ill-equipped to carry out, such as assessing for suicide. However, they noted that the roles and responsibilities between SSs and PMs were clarified in the initial training, which increased Acceptability.

The training clarified the role for us as PMs. The training greatly helped because the line was clearly drawn that we're not training as clinicians.

Providers also perceived IPC-3 as less formal or rigid than traditional mental health treatments. While it offered clear steps and delineated tasks for each session, providers noted the intervention was easily implemented across the course of "normal" conversation with SVs, which they believed was foundational in peer mentorship. This translated to the perception that IPC-3 was more palatable than traditional treatments at both timepoints.

I think it's a really well thought out structure. I like the different meetings, and how they are laid out and what exactly needs to be done. I think it's very systematic, but also allows for that kind of impromptu conversation to gauge how somebody is feeling.

Also, at both timepoints, some providers observed that IPC-3 assisted SVs in becoming oriented to future treatment beyond IPC-3. They acknowledged the strong presence of stigma surrounding mental health care among Veteran populations. Providers saw IPC-3 as a gateway, utilizing peers on campus to deliver an intervention tailored for Veterans. They believed SVs' positive experience with IPC-3 reduced stigma and fostered an open attitude toward future mental health services.

Honestly, I think this is just the bridge that most Veterans need on their way to something more, if needed.

Some providers discussed factors relating to IPC-3's adaptation for Veteran communities. Many found the intervention to be satisfying in that it was developed *for* Veterans *by* members of the community, noting a preference for tailored interventions addressing Veteran-specific challenges. This theme was present at the post-intervention timepoint only.

I think [IPC-3] did a pretty good job about integrating that military aspect to it. Because that's a whole different world. And Veterans need Veteran-specific care based off the experience that they've had.... So, that it wasn't so general that you could take anybody and ask them the same questions, and it would work for anybody. This actually felt a little more Veteran specific.

Conversely, one provider noted that IPC-3's adaptation for Veterans may not appeal to all within the SV population, especially those who no longer desire identification with the military.

But among [SVs], many of them either don't want to identify at all with the military, or the rest of them are proud of their military service and find value in military community. But it doesn't define who they are.... Some of the lingo that's used to try to relate to Veterans, I don't know that there's any benefit to that. And to some, I could see it as being off-putting.

Finally, providers believed IPC-3 was an effective, non-stigmatizing tool when delivered by peers through the VITAL Program. Many expressed hope that IPC-3 would be disseminated across the Veteran community—including through VITAL Programs in other states—at the post-intervention timepoint only.

There are more than enough Veterans equipped to deliver this intervention. There's more than enough Veterans out there who are in dire need of this intervention.... We need to train a miniature army in [my city] and have them ready and available right on campuses to alleviate some of that stress that Veterans face.

**Appropriateness**. Next, SSs and PMs provided their perceptions of IPC-3 as an Appropriate intervention that fit the needs of SVs experiencing psychological distress. To gauge whether providers believed IPC-3 was effective in reducing SV distress and compatible with peer mentorship, they were asked two questions. First, they were asked how IPC-3 aligned with their values. Second, they were asked how they thought SVs would—or did respond—to IPC-3,

including its impact on distress levels. Several themes emerged surrounding perceived fit and compatibility. Regarding fit, themes included a value alignment due to IPC-3's flexibly and responsive implementation, providing an avenue for direct support to SVs, utilization of social support, and the opportunity to gain professional skills. As for compatibility, themes focused on IPC-3's impact on distress reduction and efficacy in management, how its delivery by peers influenced buy-in for support, the impact of the provider and consumer connection on distress reduction, and perceptions surrounding IPC-3 teaching SVs to self-manage their distress (see Table 22).

 Table 22

 Site Supervisors & Peer Mentors: Appropriateness Themes

Value A	Alignment
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- Offered flexible, individualized care
- Allowed pathway for direct assistance
- Utilized social support as a tool for recovery
- Provided opportunity to gain relevant professional skills

## Impact on Distress

- Equipped with coping skills to decrease distress
- Facilitated buy-in via peer support
- Perceived connection to the provider influenced consumer response
- Fostered self-efficacy in distress management

First, providers described how IPC-3 aligned with their values as a Veteran and a peer. At both timepoints, SSs and PMs identified a value alignment based on their view of IPC-3 as a tailored, informal, flexible, non-stigmatizing support avenue for a population they believed encountered challenges seeking and receiving care. They highlighted IPC-3's adaptability in meeting the needs of each SV, fostering mutuality and collaboration between provider and consumer. This approach laid the foundation for the identification of problems with daily living and gaining coping skills for distress management. This was juxtaposed with traditional treatments that were seen as more rigid, formal, and prescriptive.

I think it aligns with my values because we certainly meet the Veterans where they are. We're not pressing the Veteran either way to attempt to do something he or she's not willing. We offer the language for him or her to describe what they're going through. And also giving them the tools to decide which might work best for them in terms of regulating distress.

Other providers felt a value alignment based on their perception that IPC-3 offered an avenue to directly support members of their community. Instead of referring Veterans to mental health professionals, IPC-3 equipped PMs with the knowledge to provide services in real-time. It also offered an alternative avenue to access care outside the VA, a delivery pathway about which some providers expressed skepticism and distaste. They felt IPC-3's peer mentorship approach was particularly suitable in that it allowed Veterans to serve other Veterans, fostering a sense of accountability for and action to address challenges experienced within the community. This theme was present at the pre-intervention timepoint only.

It's nice to have a simplified—not simplified—but at least a format that someone like me, who's not a clinician, can use and still get similar, hopefully positive outcomes from it.

Providers also perceived a value alignment based on their belief in social support at the post-intervention timepoint only. They had strong feelings about the power of peer mentorship and its role in recovery and well-being. As such, they were motivated to learn and provide IPC-3, finding it satisfactory, as the intervention leveraged social behaviors and networking for community healing.

I think the very concept of IPC-3—that it's meant to train non-clinicians to function in high stress environments, to provide support for people who have been traumatized by certain experiences—it's absolutely within the vein and in the realm of everything that peer mentoring with our SVs is attempting to do. I think the values align perfectly.

Also, at the post-intervention timepoint only, SSs held the unique view that IPC-3 was a value fit, as it supported the professional development of PMs. Specifically, they saw IPC-3 as

an opportunity for members of their VITAL peer team to be exposed to clinical theory and practice, which would behoove them in their current field of study.

There were so many different aspects of how it meshed with my values in the sense that the people who are mentors want to do mental health work in the future. And so, it helped them develop those skills.

Second, providers shared their beliefs regarding the impact of IPC-3 on consumer distress following the intervention's completion, which shifted from the pre- to post-intervention timepoint. At the pre-intervention timepoint only, some believed individual consumers would respond differently based on personal attitudes about and previous experiences with help-seeking—highlighting that SVs are a heterogeneous group. Specifically, providers noted that IPC-3 may be less attractive to those who no longer want to identify with the military or to those with an aversion to mental health services in general.

I think there's going to be the ones that think that it's a great system, and that they are excited to participate in it. And then there's those others that you can't touch them with a 10-foot pole with even the idea of it.... Anything that has to do with mental and emotional health and the stigma that goes along with it.

Also, at the pre-intervention timepoint only, a small minority of providers believed that some SVs would not think three sessions were adequate to address the severity of their distress, preferring to engage in long-term treatment.

Maybe they had therapy when they were in another state, or when they were on active duty. Then they fell away from it. But now, 2 years later, they're struggling with their relationship or other things. They're already pretty familiar with what their issues are. And the three sessions...they understood that's not going to be enough.

However, by the post-intervention timepoint, attitudes had shifted, with providers believing IPC-3 was effective in decreasing consumer psychological distress. They specifically noted that the intervention equipped SVs with coping skills to manage their present distress and prepared them to respond effectively to distress arising in the future.

I mean the most severe of the three cases I had, [the SV] was suicidal. Nobody in his family knew about it. He was just holding it to himself. It was eating him from the inside out.... But he—having the most severe symptoms—I think benefitted the most. I think all of them benefitted.

Many providers stated that SVs were apprehensive about or skeptical of IPC-3 at the outset of engagement. SSs and PMs believed this was due to negative past experiences with mental health systems, making SVs wary of engaging in a new program. However, providers noted a switch from anxiety to engagement once sessions began. They attributed this shift in attitude to the connection forged between the PM and SV, believing shared lived experiences (e.g., culture, lexicon) as well as collaboration in treatment broke down initial reluctance toward engagement. This theme was consistent across the pre- and post-intervention timepoints, with initial impressions confirmed after completing their training cases.

At first, they were a little wary and skeptical, as Veterans are with a lot of things geared for us.... But I've been able to see some of the Veterans warm up to it and open up to it. From the first time [meeting], we get that little professional banter going on back and forth.... I tell them all the time we have things that we got to get to. But you're guiding this session.... So, I think even for the ones who come a little weary, I found that they quickly open up and warm up to the idea of IPC-3.

Building on this theme, many providers spoke about the importance of the connection between the PM and SV. They believed the SV response would be—or had been—mediated by the strength of the relationship between the two Veterans. SSs and PMs discussed the importance of empathetic listening, which they felt peers were uniquely positioned to provide. They believed peer mentorship enabled candid conversations of Veteran-specific issues, fostering openness and approachability within the dyad. This theme was consistent across the intervention, being present at both timepoints.

I think that [SVs] do like being able to feel like they can just talk one-on-one with somebody that probably does have that background or understands them—either the military connection or in some form or another. They can relate to them and not just feel

so daunted. Like when you're going to sit down with a counselor or a clinician and be grilled on everything.

Finally, at both timepoints, providers noted that IPC-3 encouraged self-direction through choosing problem areas on which to work both in sessions and in "work from home" between sessions. They believed that IPC-3 fostered self-efficacy, teaching SVs to identify sources of distress and to build ways for managing future distress in a supportive, structured environment. Providers believed these characteristics would influence IPC-3's impact on SV distress.

I feel like they liked how the conversation was more organic, just talking. And then we would use prompts to help guide them through it. But in a way that they felt like they were the ones coming up with the solutions and how to advocate for themselves. We weren't necessarily telling them what they needed to do. We're just guiding them through what, probably, they already felt would be helpful. They just needed somebody to be able to help them find that.

Feasibility. Next, SSs and PMs were asked to share their perceptions of providing IPC-3 based on existing resources available through VITAL. For real-life challenges, such as limited time and technology, lack of physical space, and juggling multiple obligations, providers were queried about the extent to which IPC-3 could successfully be used within their organization (i.e., VITAL), in a particular setting (i.e., campus), and with a distinct population (i.e., SVs). To do so, they noted ways in which they felt prepared to provide IPC-3. Themes included feeling prepared to provide IPC-3 through the initial and refresher trainings, available implementation tools, educational background and previous professional experiences, and dispositional traits. Others spoke candidly about how they were nervous to provide peer support through a new lens. Second, providers discussed their perceptions of IPC-3 being offered on campus by peers. Several themes emerged across this domain, including a preference for on-campus services, delivery in-person by peers, and impressions of how exposure to IPC-3 impacts distress levels (see

Table 23).

 Table 23

 Site Supervisors & Peer Mentors: Feasibility Themes

#### Prepared to Provide IPC-3

- Prepared to provide by initial and refresher training
- Prepared to provide by implementation tools
- Prepared to provide by educational background
- Prepared to provide by professional and personal experiences
- Prepared to provide by dispositional traits
- Experienced anxiety surrounding learning a new skill

### Setting and Provider Impressions

- Preferred services to be located on campus
- Preferred in-person delivery versus virtual provision
- Preferred delivery by peer providers
- Concern for provider levels of distress

First, SSs and PMs shared perceptions of their preparedness levels to provide IPC-3.

Those who felt prepared highlighted that the initial and refresher trainings were critical in affording foundational knowledge and skills to implement IPC-3. Some felt that information was presented clearly and comprehensively. The content and interaction with the training group were also instrumental in learning the intervention. This theme was present at both the pre- and post-intervention timepoints.

I found the training very effective. I found it really good to go through it with other peers—this sort of network—and shop ideas and questions to refine what we needed.... I felt very prepared in the methodologies, and I had great access to all of the scripts and all of the walkthroughs and all of the reasons and all of the reasoning. I felt like I was well prepared in an educational sense of what the process was going to be and what would be expected of me. As well as what would be expected of the clinical team, what would be expected of the student.

At the post-intervention timepoint only, providers felt they were prepared to deliver IPC-3 via the implementation tools offered to PMs during training and in consultation meetings. They noted that modifications were made to the manual across implementation, incorporating tips for how to deliver IPC-3 virtually. In addition to the manual, PMs were given a checklist of goals

and session tasks, templates for conceptualizing cases through the IPC-3 lens, and sample scripts for presenting concepts and tools to SVs in session.

I felt I was very prepared for IPC-3. And a lot of that came from the [session] checklist and the extra modifications to the manual, making the format ready for a Zoom interaction. Those tools certainly helped the delivery.... With the extra tools, I can be more attuned to the SV. I could be looking at them in Zoom and also literally flashing through very quickly that tabletop guide that has been developed.

Additionally, SSs and PMs acknowledged that their educational background and training contributed to their preparedness to provide IPC-3. Many had received training in psychology, social work, or spiritual counseling, which acted as a foundation to learning and administering the intervention. This background made it easier to understand the theoretical concepts underlying IPC-3 and served as a basis for cultivating deeper mentorship skills. The theme was present at the pre-intervention timepoint only.

I hold a masters of spiritual counseling that I received from a seminarian entity. I also hold a Doctor of Divinity with an emphasis on religious anthropology. So, I do have some experience in the field.

At both the pre- and post-intervention timepoints, other providers discussed leveraging previously acquired skills from their personal and professional lives, including peer mentorship and military leadership. Some explained that the skills learned in IPC-3 were an extension of those they already utilized in their VITAL Program mentorship roles or through other campus peer-support programs for SVs. Several providers correlated their preparedness levels to provide IPC-3 with experience gained as leaders in the military, caring for those in their charge.

I think my time served as a Platoon Sergeant in the [Service branch] prepared me.... [And] I was a Peer Advisor and a Student Success Mentor at [my school].... Even if it's not something that I learned here through IPC-3, it might be something that they taught me as a Peer Advisor at [my school], that might serve me.

At both timepoints, some providers believed they possessed personality traits that contributed to their preparedness in providing IPC-3, including a perception that they had high

levels of empathy, strong listening skills, and emotional intelligence. Others noted they were good at learning new concepts, saw themselves as adaptable when addressing the needs of others, and were open to receiving feedback from the team leadership (e.g., IPC-3 SSs).

I'm very empathetic, and I'm a good listener. I feel like that helped a lot. That if all else failed...the best thing I could do was at least just listen and provide empathy to the Veteran.

PMs also discussed the challenges inherent in learning new skills. While they felt prepared by the training and implementation resources, they were also concerned about "getting it right." Many said that providing structured peer support, as set forth by IPC-3, was different from how they had provided support in the past—even though they felt confident in their abilities as an IPC-3 PM. Moreover, they shared concerns surrounding their effectiveness and ability to control anxiety when learning and implementing IPC-3. Providers expressed this concern at both timepoints, feeling a sense of responsibility in and gravity in their role.

You get nervous that when you're actually doing these sessions with them that you're going to say everything you need to say, ask everything you need to ask, and do it in a way that's going to be helpful. You get worried a little bit about it.

One SS normalized these concerns, validating feelings of nervousness when learning new, formalized skills, while also conveying their belief in PMs' abilities to implement the program.

They're not trained as clinicians. Of course, they feel nervous, particularly at first. But I've noticed that they've really grown in their confidence.

Second, SSs and PMs discussed their perceptions surrounding delivering IPC-3 on campus. Universally, providers believed housing IPC-3 on campus had many merits, including convenience and accessibility for SVs. They noted the troublesomeness of traveling to a separate physical location to access services, which required SVs to spend valuable time and money on transportation. Others indicated skepticism or hesitancy to engage with services at the VA. IPC-

3's physical location on campus fostered a sense of separateness from the "system," which was seen as desirable. This theme was present at both the pre- and post-intervention timepoints.

We have the Vet Center Liaison that comes up to [my school] once or twice a week. And the readjustment counselors and LCSW. As you might imagine, it is scheduled pretty far out.... And there's a geographical barrier. It takes you 75 miles to get to [the VA] through a canyon that, in the wintertime, is sometimes shut down and can be pretty dangerous.... So, for that Veteran who has an aversion to deal with the VA, it's something that can be done right there on campus. And they can feel good about that.

Also, as the present study took place during the COVID-19 pandemic, providers shared the impact of delivering IPC-3 virtually. Some SSs and PMs felt they were equally as prepared to provide the program virtually as they were in-person. However, many felt that virtual delivery was less than ideal and presented unique challenges, such as building an alliance or connection with SVs online. This theme was present at both timepoints.

I don't think it impacts how prepared I am. I do think it provides a different set of challenges. Because I do think it is a little bit harder to establish a kind of connection and rapport via video with distance. You can't read body language cues. They can't read yours too much.

Next, providers described their perceptions surrounding IPC-3 being provided by peers instead of clinical providers. At both timepoints, they noted a belief in the power of peer support, which was preferred over services delivered by mental health professionals. However, they saw their role as separate from that of a clinical provider, offering triage support for daily challenges.

I think the PM part can be very disarming. We Veterans tend to find ourselves more comfortable with people who speak our own language and understand that shared lived experience. And having a PM be the provider, I think helps quite a lot with that.

Finally, one SS shared a concern that PMs may not be seeking the mental health support while acting as IPC-3 providers at the pre-intervention timepoint. Recognizing the emotional burden providing support services can take, this clinician also expressed curiosity regarding how

providing a mental health intervention may impact the providers' openness to receiving support themselves.

I think the thing that might concern me most is the effect that it has on the peers, and that at least one of the three has never sought professional care. Although they are very grounded, I'm very curious to see how this will move them for their own well-being.

Reach. To understand if IPC-3 was readily available to those in need of support, SSs and PMs were queried about intervention integration within and across the service setting (i.e., VA VITAL) and the population (i.e., SVs). To do so, they were invited to share why and whether SVs sought support for their distress. Notably, providers offered reasons they believed SVs did not seek support. These included a lack of awareness of available resources, the stigma around help-seeking learned in the military, a dearth of time due to managing multiple responsibilities, negative past experiences accessing care, a lack of providers with Veteran cultural competency, the effects of transition stress, and the experience of discrimination when seeking help (see Table 24).

 Table 24

 Site Supervisors & Peer Mentors: Reach Themes

#### Themes

- Lacked awareness or had trouble navigating mental health systems and services
- Held beliefs about help-seeking learned in the military
- Managed multiple roles and juggled competing responsibilities
- Impacted by previous negative experiences accessing mental health care services
- Perceived dearth of providers with Veteran cultural competencies
- Affected by transition stress
- Experienced discrimination or stigma due to gender identity

Of all of the D&I construct domains, SSs and PMs shared the most data on the barriers facing SVs when seeking support for their distress. First, many providers stated that SVs often do not know where to seek help at both the pre- and post-intervention timepoints. Some discussed a perception that mental health services were not widely promoted in military culture.

Thus, SVs do not know how to navigate services available in the civilian world. Others described a lack of promotion of mental health services on campus, noting SVs must often do their own exploration, as they were not proactively offered support.

A lot of them don't know where to go or where to look for the help. They don't even know it exists because in the military there was no such thing.

Second, providers discussed the influence of military culture on Veteran help-seeking at both timepoints. Many described a specific set of attitudes labeled as a "mission mindset," where the individual is hyper-focused on attending to and accomplishing the task at hand. Such a mindset is cultivated in the military, where focus, dependability, and an all-or-nothing effort are required to complete critical missions. However, providers recognized that this pass-or-fail, all-or-nothing mentality was at odds with help-seeking. Perhaps related to the mission mindset, providers shared that some SVs feel pressure to do well in school. Equating performance with worth, they see help-seeking as a "failure."

Unless your leg is broken or you're bleeding profusely, shut up and just keep going until the job is done. You complain when it's done. A lot of folks are just trying to push through that bachelors, that masters, that PhD.... And even beyond that, a lot of us have not been trained to ask for help. Especially on active duty. Everything you needed should have been at your fingertips. And if it wasn't, it was because you didn't need it. Or at least you were taught that you didn't need it.... Unless something like [IPC-3] meets Veterans where they are, expecting Veterans to literally walk over, pick up the phone, or take the initiative to engage with wellness, it's almost a daunting task.

Others described the impact of beliefs surrounding self-reliance on help-seeking learned and cultivated during military service. They shared that military culture strongly values self-sufficiency, where Service members are shaped to be independent, confident, and competent to execute missions. These internalized beliefs (e.g., self-stigma) of how a Service member "should" be remained with SVs in civilian life, acting as a barrier to care. This theme was present at both timepoints.

You're told that you're this resilient war fighter. And then even after you leave the military, specifically, if you were on infantry combat side, that persists. "I can do anything if I set my mind to it." And a lot of Veterans don't realize how much education will f--- you up. It's a very difficult thing, especially at the tier that [my school] competes at. But those stigmas and those personal beliefs, they still persist.

Many providers described how the stigma associated with seeking help interferes with accessing care. Some felt this was instilled on military service, with military culture emphasizing strength and peak performance. Others spoke about how they were inculcated with negative attitudes toward help-seeking from their families, communities, and culture at large. Specifically, SSs and PMs discussed the pervasive perception held among SVs that it is not acceptable to seek help, seeing it as a sign of weakness. This theme was present at both timepoints.

The military stigmatizes mental health. If you told somebody in the military that you were going to the hospital for mental health, it was game over. Several of the jobs I did in the military, if I would've told them how I was actually feeling or told them that I wanted to go to therapy, I wouldn't have been able to do my job.

Other SSs and PMs described the challenges inherent in juggling multiple responsibilities with help-seeking. Most notable was adjusting to an academic schedule, attending classes, tutoring sessions, and group meetings. They acknowledged that some SVs work both on and off campus, in addition to attending school. Providers also noted that SVs often have different family responsibilities than their non-Veteran peers, such as being a spouse or parent. In addition, SVs may be handling VA disability claims and seeking medical care for physical health conditions. Taken together, SVs have limited time and flexibility in their busy schedules, which acts as a barrier to seeking and receiving care. This barrier was acknowledged at both timepoints.

It is very hard to go [to therapy] with the number of different things a Veteran has to do.... Whether they are dealing with the VA, dealing with a job, having a family and kids, dealing with school, working on compensation and pension exams with the VA, as they might have benefits that they are applying for. So, all of those are different people they have to meet with on different timelines. They have appointments they have to make.

Also at both timepoints, SSs and PMs noted that SVs have not always had positive experiences when interfacing with mental health care systems and providers, both in the military and civilian worlds. These negative experiences accessing mental health care affect perceptions surrounding help-seeking, decreasing a desire to or being wary of seeking help in the future.

They've had previous experience that didn't go so well when they did reach out. That can influence how likely they'll be to try it again.

At the post-intervention timepoint only, some providers discussed difficulty finding mental health professionals who possess Veteran culture competencies. They believed this was a barrier to SVs receiving care, as it would not be "easy" to form an alliance or rapport with providers who do not understand military culture, norms, experiences, and lingo.

As a Veteran myself, I'll tell you on campus there are resources that are available that are competent to help Veterans professionally. But in terms of military cultural competency, it's far and slim. There's not a lot of folks on campus who are ready for a Veteran to really sit down and tell them what it is that's going on with them.

At both timepoints, many providers stated that SVs do not seek support due to difficulty transitioning from military to student life. They described how, as a group, SVs are largely unfamiliar with institutions of higher education. Coming from a professional military environment, SVs find it difficult to adjust to an academic mindset, navigate a less structured environment, independently learn novel skills, and socially engage within a new community. Providers noted that some SVs struggle with time management and prioritizing as they adjust to a collegiate setting. In addition to adapting to student life, many SVs are not equipped to navigate civilian care settings, including services and academic accommodations available on campus. Furthermore, providers discussed the incongruence between the expectations of school being "easier" than their time in service versus the reality of the work required while attending

rigorous academic institutions. As a result, providers felt that SVs often enter school unprepared and ill-equipped with the necessary tools and skills to succeed.

Being disconnected from support structures, [military] chain of command, and other things that we've been indoctrinated in, we find ourselves within the civilian realm where such chains of command do exist but are perhaps less apparent. They're more subtle. Certainly, less formalized in a lot of ways, that we don't necessarily know where to engage or receive "orders" or support or resources as students. Because we're so used to engaging with them from a very direct, mandated kind of perspective.

At the pre-intervention timepoint only, a minority of providers felt that SVs do not seek support due to stigma surrounding their gender identity. Specifically, providers noted that military and VA mental health systems are often geared toward men (e.g., myth of male-only combat exposure). SSs and PMs shared that SVs who identify as women may not feel at home within these "patriarchal" systems, having had negative experiences seeking help within traditional care settings (e.g., lack of competency surrounding violence against women, reproductive health).

My one female [SV] tried to get help, but they dismissed her. That's why she's not seeking any additional help. Because [she thinks] nobody is going to take her seriously, which is wrong.

Finally, after describing the challenges SVs face when accessing care, one SS highlighted that IPC-3 may address some of these barriers to care at the pre-intervention timepoint only.

That's a part of why we have the peer mentoring program to begin with. So, that we can do outreach to them and not wait for them to be in a crisis, which is a lot of times what it takes for them to present for help.

Sustainability. Finally, providers shared attitudes and beliefs regarding IPC-3 as a Sustainable program—or one that continues after the end of external support (i.e., Global Mental Health Lab ongoing study). To better understand the extent to which IPC-3 was institutionalized at each of the VA VITAL sites, SSs and PMs were asked how IPC-3 fit into their current roles and responsibilities as a VITAL Program Coordinator (i.e., SS) or peer (i.e., PM). Emergent

themes included if being a PM constituted an expansion of their existing roles and responsibilities, what IPC-3 offered in terms of structure for providing support, and if IPC-3 would be used by providers outside of the study (see Table 25).

 Table 25

 Site Supervisors & Peer Mentors: Sustainability Themes

## Themes

- Complemented VITAL peer role and responsibilities
- Expanded VITAL peer role and responsibilities
- Offered structure for providing psychological support
- Provided additional tools in the toolbox to support Veterans

The majority of SSs and PMs stated that being an IPC-3 SS or PM fit well within their existing responsibilities in the VITAL Program. Providers felt the roles were complementary, with one encapsulating many of the duties of the other. Both involved serving the SV community through mentorship, empathetic listening, problem-solving, facilitating access to resources, and providing opportunities for social support. Many of the providers noted that IPC-3 was in line with VITAL's mission to aid SVs in their collegiate life transition, a theme that was present at both timepoints.

I feel like a lot of what I got from IPC-3 helped me to improve what I was doing with VITAL and [a campus SV support program]. I think they're extremely complimentary. And using them together allowed me to help build and improve myself for all three of those organizations and efforts.

A minority expressed that being an IPC-3 provider expanded upon their current role in VITAL, adding duties and responsibilities outside the scope of their work. These providers shared that VITAL peers typically did not engage in "deep" psychological support work. Instead, they offered peer support and then referrals to mental health resources. In this way, IPC-3 required them to deliver a different level of care in addition to peer mentorship.

I'm just thinking about rolling this out nationally. People will definitely feel it's an extra something else.... Even though we were doing outreach, and [peers] were talking to Veterans, it was much more superficial.

While largely synchronizing with VITAL responsibilities, PMs noted that IPC-3 provided additional structure to the support they gave to SVs in their existing roles. IPC-3 acted as a roadmap for engaging with SVs experiencing psychological distress, identifying problems that caused and maintained distress, and offering tailored and sustainable coping strategies. IPC-3's structure, while flexible, offered a helpful framework to provide support in the course of their work—a theme present at both the pre- and post-intervention timepoints.

I welcome being on IPC-3 because I knew I would be doing [peer support] anyway .... And this just gave me the opportunity to do that in a formal way.

Finally, providers saw IPC-3 as an additional "tool in the toolbox" when working with SVs through their VITAL roles. They believed IPC-3 training and the associated practice of applying skills through cases enhanced their existing skills and abilities. This theme was present across both timepoints.

I think it's another tool in the old tool belt. I think having IPC-3 be available to us as peers to do that little bit of crisis intervention and, therefore, break some of the stereotypes and get these students to help quicker is all part and parcel with the job.

#### Student Veterans

Student Veteran Key Informant Interview Demographic Characteristics. All but one of the 18 consumers (n = 17) provided demographic information, unless otherwise noted below. Descriptive statistics for SVs can be found in Table 26 and Appendix J. A summary is provided in Table 27 below. Consumers ranged from 21 to 36 years of age, with a mean of 28.29 (SD = 4.86). In addition, SVs reported their deployment history, ranging from zero to three deployments, with a mean of .88 (SD = 1.17).

 Table 26

 Student Veteran: Key Informant Interview Selected Descriptive Statistics

Characteristic	М	SD	Range
Age	28.29	4.86	21-36 <sup>a</sup>
Deployment History	.88	1.17	0-3 <sup>b</sup>

*Note.* n = 17.

Regarding gender identity, 15 (88.2%) SVs identified as men, and two (11.8%) as women. All consumers (100%) reported being heterosexual. Of those who reported their race/ethnicity (n = 16), six (37.5%) identified as White, three (18.8%) as Hispanic/Latino, three (18.8%) as Asian/Pacific Islander, two (12.5%) as Black, and two (12.5%) as Native American. In terms of marital status, nine (52.9%) SVs were single, three (17.6%) were divorced, three (17.6%) were partnered, and two (11.8%) were married. Of those who reported (n = 13), 12 (92.3%) had children. Seven (41.2%) consumers lived with a roommate, six (35.3%) with a spouse or partner, and four (23.5%) alone. Most (n = 14) lived in the Northeast (82.4%), with three (17.6%) in the West. Six (35.3%) SVs held a high school diploma, six (35.3%) an associate's degree, and five (29.4%) held a bachelor's. For employment status, 10 (58.8%) relied solely on the GI Bill and/or VA Disability for their income, four (23.5%) worked part-time, and three (17.6%) were unemployed. In terms of student status, 14 (82.4%) SVs were full-time, two (11.8%) part-time, and one (5.9%) was either entering college or had recently graduated. Of the group, 15 (88.2%) identified as Veterans, and two (11.8%) as retired. Regarding military service branch, nine (52.9%) consumers were in the Army, four (23.5%) in the Navy, three (17.6%) in the Marine Corps, and one (5.9%) in the Air Force. Nine (52.9%) identified in the junior enlisted ranks of E-1-4, six (35.3%) were among the mid-level enlisted ranks of E-5-7, and one (11.8%) was among the field grade officer ranks of O-1-3. In terms of religion, five (29.4%) SVs were

<sup>&</sup>lt;sup>a</sup> Years.

<sup>&</sup>lt;sup>b</sup> Number of deployments.

Christian, four (23.5%) agnostic, three (17.6%) atheist, one (5.9%) Catholic, and four (23.5%) an unspecified religious affiliation. When asked if they were currently receiving mental health care, 10 (58.8%) reported yes, and seven (41.2%) said no. When asked if they had previously received mental health care, 13 (76.5%) SVs reported yes, and four (23.5%) said no. Ten (58.8%) stated that they had completed their last full course of psychiatric treatment, with seven (41.2%) saying they had dropped out before finishing the recommended course. Nine (52.9%) consumers reported previously receiving mental health care at the VA, two (11.8%) at a private practice, and six (35.3%) at another location. Four (23.5%) were currently taking psychiatric medication, while 13 (76.5%) were not. However, eight (47.1%) SVs had previously received psychiatric medication, while nine (52.9%) had not. Fourteen (82.4%) reported a currently diagnosed medical condition, with three (17.6%) reporting they did not. Eight (47.1%) consumers reported having a previous medical illness, while nine (52.9%) did not.

Table 27
Student Veteran: Key Informant Interview Demographics

Characteristic	Frequency	Percentage
Gender Identity	(n = 17)	
Men	15	88.2%
Women	2	11.8%
Sexual Orientation	(n = 17)	
Heterosexual	17	100%
Race/Ethnicity	(n = 16)	
White	6	37.5%
Hispanic/Latino	3	18.8%
Asian/Pacific Islander	3	18.8%
Black	2	12.5%
Native American	2	12.5%
Marital Status	(n = 17)	%
Single	9	52.9%
Partnered	3	17.6%
Divorced	3	17.6%
Married	2	11.8%
Children	(n = 13)	

Characteristic	Frequency	Percentage
Yes	12	92.3%
No	1	7.7%
Domicile Status	(n = 17)	
Living with Roommate	7	41.2%
Living with Spouse/Partner	6	35.3%
Living Alone	4	23.5%
Geographic Location	(n = 17)	
Northeast	14	82.4%
West	3	17.6%
Education	(n = 17)	
Associates	6	35.3%
High School	6	35.3%
Bachelors	5	29.4%
Employment Status	(n = 17)	
GI Bill/VA Disability	10	58.8%
Part-Time	4	23.5%
Unemployed	3	17.6%
Student Status	(n = 17)	
Full-Time	14	82.4%
Part-Time	2	11.8%
Unenrolled	1	5.9%
Military Status	(n = 17)	
Veteran	15	88.2%
Retired	2	11.8%
Military Service Branch	(n = 17)	
Army	9	52.9%
Marine Corps	4	23.5%
Navy	3	17.6%
Air Force	1	5.9%
Highest Rank at Discharge	(n = 7)	
E-1-4	9	52.9%
E-5-7	6	35.3%
O-1-3	1	11.8%
Religion	(n = 17)	
Christian	5	29.4%
Other	4	23.5
Agnostic	4	23.5%
Atheist	3	17.6%
Catholic	1	5.9%
Currently Receiving Mental Health Care	(n = 17)	
Yes	10	58.8%
No	7	41.2%
Previously Received Mental Health Care	(n = 17)	
Yes	13	76.5%
No	4	23.5%

Characteristic	Frequency	Percentage
Completed Treatment	(n = 17)	
Yes	10	58.8%
No	7	41.2%
Where Received Treatment	(n = 17)	
VA	9	52.9%
Other	6	35.3%
Private Practice	2	11.8%
Current Medication Use	(n = 17)	
Yes	4	23.5%
No	13	76.5%
Past Medication Use	(n = 17)	
Yes	8	47.1%
No	9	52.9%
Current Medical Illness	(n = 17)	
Yes	14	82.4%
No	3	17.6%
Previous Medical Illness	(n = 17)	
Yes	8	47.1%
No	9	52.9%

*Note.* n = 17.

Deductive Thematic Analysis. Deductive thematic analysis revealed a complex and nuanced view of D&I constructs and provided a deeper understanding of the lived experiences of SVs. The D&I outcome constructs of Adoption, Acceptability, Appropriateness, Feasibility, and Reach were examined at both the pre- and post-intervention timepoints. Changes in themes were noted as well as when they remained constant. Cohen's Kappas for each emergent theme for the pre- and post- timepoints can be found in Table 28 and Table 29, respectively. A synthesis of findings across themes at both timepoints is provided in Table 30 below.

 Table 28

 Student Veterans: Cohen's Kappas by Theme at the Pre-Intervention Timepoint

ID	Adoption	Acceptability	Appropriateness	Feasibility	Reach
010103	.62	1.00	.74	.81	.73
010104	.70	.92	.85	.74	.65
010105	.65	.64	.76	.75	.60
010106	.61	.97	1.00	.87	.71
010108	.66	.73	.83	.96	.61
010201	.61	.83	.86	.88	.65
010301	.75	.70	.98	.70	.62
010302	.74	.93	.74	.92	1.00
010304	.95	.93	.96	.86	.81
010305	.67	.61	.68	.89	.69
010307	.97	1.00	.70	.93	1.00
010402	.94	1.00	.68	1.00	.70
020101	.91	.70	.87	1.00	.79
020501	.94	.66	.94	1.00	.60

*Note.* n = 14.

 Table 29

 Student Veterans: Cohen's Kappas by Theme at the Post-Intervention Timepoint

ID	Adoption	Acceptability	Appropriateness	Feasibility	Reach
010103	.73	.72	.80	.96	.66
010104	.66	.95	.79	.68	.99
010106	.73	1.00	.83	.89	.80
010109	.62	1.00	.74	.81	.73
010201	.88	.88	.86	1.00	.81
010301	.65	.71	1.00	.91	.95
010307	.60	.78	1.00	.94	.82
010401	.71	.62	.76	.80	.91
020401	.62	.81	.89	.89	.72
020402	.68	.92	.69	.94	.65

*Note.* n = 10.

Table 30
Student Veterans: Overview of Key Informant Interview Themes

D&I Constructs	Pre-Intervention	Consistent Across	Post-Intervention
	Timepoint	Timepoints	Timepoint
Adoption	Intervention	Intervention Characteristics	Intervention Characteristics
	Characteristics	- Preferred virtual delivery of sessions	- Perceived as flexible and
	- Provided enrollment assistance	- Impacted by IPC-3 Study Team	responsive to consumer schedules
	- Preferred brief or time-	Provider Characteristics	
	limited services	- Felt connection with provider	
	- Recognized limitations of Veteran adaptation	- Desired provider with similar identities or lived experiences	
	or veteran adaptation	experiences	
		Consumer Characteristics	
		- Lacked time to attend sessions	
		- Expressed openness to learning coping skills	
		- Held prosocial beliefs	
		- Influenced by self-stigma	
		- Limited privacy	
		- Impacted by burden of distress	
Acceptability	- Reached out	- Adapted for Veteran communities	- Offered support with mutuality
	proactively	- Utilized trained and supervised peers as providers	and collaboration
		- Provided opportunities for social support	- Concerned about number of
		- Assisted in treatment orientation	sessions offered

D&I Constructs	Pre-Intervention	Consistent Across	Post-Intervention
	Timepoint	Timepoints	Timepoint
Appropriateness		Impact on Distress	
		- Reduced distress via peer support	
		- Increased knowledge, insight, and coping skills	
		- Facilitated access to resources	
		Value Alignment	
		- Held prosocial beliefs	
		- Believed in social support	
		- Desired self-improvement	
Feasibility	Setting	Setting	
	<ul> <li>Experienced ambiguity</li> </ul>	- Preferred delivery on campus versus a medical facility	
	surrounding service setting	- Varied perceptions of virtual delivery	
		Provider	
		- Preferred provision by peers instead of mental health	
		professionals	
Reach	Environmental-Level	Environmental-Level Barriers	
	Barriers	- Had trouble navigating and accessing resources	
	- Experienced travel as	- Experienced challenges scheduling appointments	
	barrier to care	- Lacked connection with provider	
	Individual-Level Barriers	Individual-Level Barriers	
	- Believed would not be	- Lacked time to engage due to multiple responsibilities	
	understood by civilian	- Dearth of knowledge and awareness of resources	
	providers	- Experienced low levels of mental health literacy	
		- Impacted by stigma	
		- Influenced by previous experiences seeking care	
		- Lacked social support system	
		<ul> <li>Impaired social and occupational functioning due to psychological distress</li> </ul>	

Adoption. For the first D&I construct, SVs were queried on their willingness to engage in and continue to use IPC-3. To understand their intentions, SVs were asked to provide perspectives on the factors that might affect—or did affect—their ability to participate in a full course of IPC-3. Several themes emerged, including facilitators and barriers to Adoption. Factors were grouped into three dominant themes: intervention characteristics, provider characteristics, and consumer characteristics (see Table 31).

Table 31
Student Veterans: Adoption Themes

<b>Intervention Characteristics</b>
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- Provided enrollment assistance
- Preferred brief or time-limited support services
- Perceived as flexible and responsive to consumer schedules
- Preferred virtual delivery of sessions
- Recognized limitations of adaption for Veteran communities
- Impacted by the IPC-3 Study Team

### **Provider Characteristics**

- Felt connection or perceived alliance with the provider
- Desired assignment to a provider with similar identities or lived experiences

## **Consumer Characteristics**

- Lacked time to attend sessions given other responsibilities
- Expressed openness to learning new ways to manage stress
- Held prosocial beliefs, such as supporting the mental health needs of other Veterans
- Influenced by self-stigma surrounding accessing mental health care
- Limited privacy when engaging in sessions
- Impacted by the burden of psychological distress

First, SVs noted distinctive characteristics of IPC-3 that influenced their intention to try the new psychosocial support program. These themes included the brief nature of IPC-3, its adaptation for Veteran communities, assistance in signing up for the program, flexible scheduling of sessions, and virtual delivery of the intervention.

Consumers discussed the ease of program sign-up at the pre-intervention timepoint only.

Given IPC-3's recruitment through the VITAL Program on local campuses, SVs noted that

VITAL Program Coordinators (i.e., SSs) and peers (i.e., PMs) shared information regarding the intervention before signing up and assisted SVs in real-time enrollment, which facilitated engagement.

[My VITAL Program Coordinator] said, "Hey, would you want to do this study?" I said, "It sounds interesting" or whatever. She told me a little bit about it. And she said, "I could tell the person to email you right now." And I was like, "Okay. Sure." So, it just fell into my lap.... So, I think now that I'm here, I'm going to do it. I think the hardest part was making it easy for me.

At the pre-intervention timepoint only, a minority of SVs said that the brief nature of IPC-3 would impact their willingness to try the program. The brevity of IPC-3 facilitated their engagement, with participation appearing achievable, as it was not too demanding of their time.

I understand that it's a fairly easy commitment. It's three sessions. It's not too demanding. It's something that I could really do. So, I'm not sure there's anything that would deter me from not participating.

At the post-intervention timepoint, SVs noted that IPC-3 was an adaptable and responsive support service. Specifically, they were satisfied with the flexibility provided in scheduling, which facilitated Adoption. Instead of demanding attendance at a particular time slot per week, PMs could schedule and reschedule sessions based on the changing needs of the SV, which impacted their continued engagement in services.

Initially, I was kind of hesitant about it because I was like, I don't have time. I'm so busy. I don't have time. But I was just making an excuse. Fortunately, they're very like, "Oh, we will work with your schedule. We'll work around you." And I was like, "Well, [darn].... All right. Fine. I'll give you 45 minutes of my time."

At both timepoints, SVs discussed the differences between traveling to and from services offered in a physical location versus those offered through virtual platforms. They explained that the delivery of IPC-3 through Zoom positively affected their willingness to engage in IPC-3. Specifically, it reduced the time needed for commuting and offered more flexibility in scheduling, as co-locating for a session was not requisite.

Even though I have a car, I am busy most of the time. And I live in the city. So, it's very difficult to move from A to B, and then back to A. This saves me so much time and effort. Otherwise, I don't think I would have.... Otherwise, I would have had some challenges doing this kind of participation.

At the pre-intervention timepoint only, some consumers described how IPC-3's adaptation for Veteran communities affected their intention to try the program. Unlike in Acceptability, where the adaptation had a positive influence, SVs expressed concerns that tailoring the intervention for Veterans would not be desired by all within the community. They described the preferences of some SVs to detach from their military identity, indicating that those who no longer wanted to associate with the military would not gravitate to a program tailored for SVs.

I know some people, they burned the bridge when they were coming out. So, they don't want to associate with the military anymore. I know there are some cases like this but not many.

Finally, SVs discussed the administration of IPC-3 at both timepoints. Specifically, consumers shared their perceptions of interpersonal interactions with the research team, who coordinated participant consent, weekly measures, key informant interviews, and payment for study participation. At the pre-intervention timepoint, one SV noted interactions with the research would either facilitate or become a barrier to the program's Adoption.

The only things I could think of when I was doing the survey would be if I was talking to you, and I felt like you didn't really care about what I was saying. Or if you literally only cared just for statistical purposes and not for my actual experience of what's going on.

At the post-intervention timepoint, only one SV noted their perceptions of the study protocol and research team. They expressed dissatisfaction with the research team's involvement in providing secure virtual links for sessions with their PM.

I think it was a little bit weird having an intermediary for scheduling. I get that this is a study, and there's certain ways certain things have to be done. But it felt a bit

inefficient.... It was odd having to go through a third party to schedule things and get links and everything.

Second, SVs described specific characteristics of IPC-3 providers at both timepoints. They explained factors relating to the connection between the consumer and provider, highlighting that peer providers enabled them to feel seen and known. Consumers perceived an alliance between themselves and PMs, and general perceptions that those working on IPC-3 cared about them and the greater SV community. At the pre-intervention timepoint, SVs noted how important this alliance would be to facilitating their engagement.

Maybe if I'm sensing that [the PM is] not understanding or not being empathetic to what I have to say. Because sometimes I feel like you can tell when people are really there to help you, or people that are there to just check a box.

At the post-intervention timepoint, many SVs noted that they remained in IPC-3 due to the connection forged with the PM, which affected their desire for continued engagement.

That [the PM] was also a Veteran—even if it wasn't the same Service as me or the same experience as me—I knew that [they] had been through enough similarities of experiences.... There was a kinship, I guess is a good way of putting it.

Also, at both timepoints, consumers described the impact of being assigned to a PM with a similar identity (e.g., race, gender) or lived experience (e.g., Service branch, military occupational specialty). Specifically, SVs noted their intention to try IPC-3 was impacted by representation levels among PMs. When SVs perceived a "good match" between themselves and their PM, it facilitated Adoption.

The thing I liked about it the most was that the IPC program would pair you with someone that they think would be a really great fit for you. Someone that you can relate to. And fortunately for me, it was another African American gentleman who was also in the Navy. And I was like, "This guy…he looks like me," you know? So, that made a big difference.

Third and finally, SVs discussed factors related to their own desire to engage in IPC-3.

Specifically, they described time constraints to attend sessions, largely due to the need to balance

other responsibilities at both timepoints. These barriers included competing responsibilities for classes, schoolwork, extracurricular activities (e.g., student affairs), professional work-life as well as managing physical and mental health needs (e.g., doctor's appointments).

I would say the time schedule. First and foremost, I have school. I have to take care of myself. I have obligations to others because of my positions in the [organization name].

Also, SVs noted a desire and/or an openness to learning new ways of managing distress, which facilitated Adoption at both timepoints. Some SVs acknowledged that they had not always been receptive to learning new coping skills or seeking mental health services. A shift in their willingness to engage in self-care facilitated SVs' initial and continued engagement in IPC-3.

I'm always down to find new ways to help improve myself or help tackle the stress. I feel like doing interpersonal work or any emotional regulation kind of stuff is stressful. But it's good stress. It's stress that I'm choosing, and that I know is going to help me grow.... So, definitely having more tools in my toolbox to kind of help myself out—and other Veterans—would be awesome.

Next, SVs described prosocial behaviors at both timepoints. This facilitating factor related to their interest in supporting other Veterans, including the mental health needs of SVs. While consumers may not have been willing to try IPC-3 to address their own psychological distress, they felt compelled to engage in research that would assist others in their community.

The big reason for me to participate in this program is to be of help to fellow SVs.... I just want to share my experience, my knowledge with the rest. And it's really amazing that you guys are doing this for us.... I know some people in the [Service branch], and they are getting out. So, I'm giving them this information.

At both the pre- and post-intervention timepoints, some SVs believed they did not deserve help, were ashamed of seeking help, or were influenced by a negative perception of mental health care. These statements of self-stigma presented barriers to SV engagement in IPC-3 and to seeking mental health care in general.

I guess, at that point, it was pride. I wasn't looking for pity. I was like, "Yeah, there's going to be tougher things in life." That's what I was thinking. So, that prevented me from reaching out to other people that can possibly get me a little more help.

Furthermore, SVs discussed factors relating to their personal privacy at both timepoints. These concerns were often related to the intervention's virtual delivery, and the SVs' limited access to confidential physical spaces in which to hold sessions. A lack of privacy was depicted as a barrier to engagement.

One huge factor is the lack of privacy I have in my home. It's a two-bedroom apartment, and we have five people in it, unfortunately.... Right now, I'm sitting in my car, and it's a little odd. It's a little weird.

Finally, SVs noted the relationship between the effects of their psychological distress and the desire to engage in IPC-3 at both timepoints. This included when distress interfered with functioning (e.g., low energy, lack of motivation, intrusive thoughts), which inhibited attendance or full participation in sessions.

I feel like I'm doing better, and I'm on an upswing. But if I was in that really depressive, "Hey, I don't want to do anything. I don't want to leave bed." That would be the other thing I feel like that would hold me back from doing [IPC-3].

Acceptability. SVs provided their perceptions of IPC-3's palatability and the degree to which they found the intervention agreeable or satisfactory in addressing psychological distress. To do so, SVs were asked to offer impressions of IPC-3, both before and after receiving the intervention. Specifically, consumers were asked about this psychosocial support service delivered by peers, which had been specifically designed for SVs. Acceptability themes centered around IPC-3's recruitment process, length of the intervention, client-focused orientation, adaptation for Veterans, and the use of peers as providers. Furthermore, SVs discussed impressions of IPC-3 as treatment orienting, a source of social support, and a resource offering transition assistance for the SV community (see Table 32).

Table 32

Student Veterans: Acceptability Themes

### Themes

- Reached out proactively to consumers in distress
- Adapted for Veteran communities
- Utilized trained and supervised peers as providers
- Offered support with mutuality and collaboration
- Provided opportunities for social support
- Concerned about the number of sessions offered
- Assisted in treatment orientation for future support

At the pre-intervention timepoint, SVs believed IPC-3 utilized a unique recruitment method, where the VITAL staff proactively offered IPC-3 as a potential avenue of support during their natural interactions on campus. This approach was juxtaposed with traditional models of accessing care in which the burden of reaching out for help is on the distressed SV. Those who spoke to this theme found this paradigm shift critical to receiving support.

The best part was people reaching out to me. I didn't have to seek it out.... I didn't have to put the work in. It's easy to talk. But sometimes you don't know who to talk to you. Being reached out to was probably the biggest pro.

At both timepoints, SVs discussed how IPC-3's adaptation for Veteran communities impacted their satisfaction with the program. They noted the challenges of acclimating to collegiate life and expressed gratitude that a Veteran-focused intervention existed. At the post-intervention timepoint, some consumers acknowledge their initial ambivalence toward engagement in a program designed for SVs. However, they found great value in speaking with a peer who had shared lived experiences and with whom to explore distress that originated from their military service.

I think before the program, my mentality was like, "Look, I have things that I need to deal with that preexist my military experience. My military experience didn't really affect me." And I would've gone forward thinking that. I was even skeptical of talking to a Veteran.... But then that ended up being key, because [my PM] was able to open up some things about the military experience that I had never thought about.

Relatedly, at both timepoints SVs described IPC-3's adaptation as agreeable in supporting their transition from military to student life. Many noted their excitement to return to the collegiate space while also expressing the difficulties of this unique period, where their environments, roles, and routines were altered. Some SVs discussed a lack of preparation prior to transitioning, and they appreciated assistance navigating their new space, which provided respite from transition stress.

I think it's good to have an extra pair of ears and also someone to talk to and to vent or talk about experiences. And make you feel like you're not alone as a SV transitioning from the military.

At both timepoints, SVs discussed the appeal of using trained and supervised peers as providers. Consumers believed the use of peers fostered a deeper connection within the dyad, forging trust and relatability between parties. They also perceived that speaking with a peer carried less stigma than seeking help from a traditional mental health provider. SVs discussed experiencing deep relief when speaking with someone with a shared lived experience, feeling a kinship and trust with those familiar with Veteran culture (e.g., use of terms, slang, acronyms).

I think it could be really helpful to have a resource where you can reach out and talk to a Veteran that has had some counseling training and some military training. They know where you've been, or they have an idea of the mentality you are at, and the way you were taught to think for a period of life. They can empathize with you. And that's nice. Because there's not a lot of people that can really.

At the pre-intervention timepoint, some SVs noted limitations inherent in the provider's status as a peer. These concerns surrounded a perceived lack of training or appropriate level of expertise to support those SVs who needed a higher level of care.

I think I would be really concerned about seeing where the exact limits of what [PMs are] able to handle are. Because I feel like there's some situations where it could be more dangerous or threatening that would be out of depth for a peer mentor type. I mean if somebody is really suicidal or somebody is having issues processing a trauma, I don't know. There might be some things that are just too much for a PM.

However, by the post-intervention timepoint, attitudes had shifted. After receiving support from PMs, SVs spoke to about reductions to their stress, resulting in increased functionality and well-being.

I was honestly very hesitant at first with the peer thing. I just really did not want to do it. But I was like, "You know, let me just check it out. This is the only thing I haven't tried before." It really got me through the semester, honestly. There were hard times and just being able to reach out, it really made a difference.

After completing IPC-3, SVs described the intervention as a consumer-centered support service. They perceived mutuality and collaboration between themselves and PMs. This contrasted with previous experiences accessing mental health services, which adhered to a therapist- or treatment-driven agenda. This contributed to the overall agreeableness of IPC-3.

It wasn't pushy. I never felt at any time during the whole process that my [PM] was like, "Hey, you need to do this." Or "If it was me, I would do this." And "If you don't do it, you're wrong." It was very, "How can I help you?" and "What would benefit you?" Or "What kind of tools do you think would benefit you?" I feel like [my PM] was more focused on me than focused on the tools he could provide.

Contributing to this view, some consumers noted how consistent communication with their provider impacted their perceptions of IPC-3 at the post-intervention timepoint. Specifically, SVs thought that persistent follow-up from their PMs—even if the SV did not reciprocate—had kept them engaged in care.

And even when sometimes I wouldn't respond, [my PM] would follow up. The consistency, the persistency...That right there really kept me coming back.

Further, many SVs praised their provider's willingness to offer flexible scheduling of sessions at the post-intervention timepoint. This perceived responsiveness positively influenced their satisfaction with IPC-3.

I think that the program is amazing, honestly. And the biggest thing I mentioned earlier was that [the PMs are] flexible. Everyone's always so busy and always has a speech, "Oh, I can't make it this time." My mentor was like, "Hey, I'm flexible with your time. Just let me know what works best for you."

Many consumers expressed that IPC-3 leveraged the power of social support to provide relief from their distress at both timepoints. While acknowledging the benefits of formal therapy, some SVs highlighted that IPC-3 was a more natural avenue to feeling connected and supported. Speaking to another person about daily challenges made them feel less alone. They discussed social support as an antidote to loneliness brought on by isolation and a lack of belonging.

I think that's a great place to start in terms of engaging on the peer level. I think ultimately close community connections is how we address systemic isolation or loneliness or despair. Veterans knowing that they could have somebody to reach out to at any time.

SVs also discussed their impressions of the number of IPC-3 sessions, which emerged as a theme only at the post-intervention timepoint. The few consumers who spoke to this theme felt three sessions were not sufficient after completing IPC-3. These SVs desired additional sessions, stating that three sessions would not adequately meet the needs of all SVs. They believed that some SVs may not feel comfortable disclosing their distress until later sessions—after rapport was established. One consumer said that the SV community may feel IPC-3 is a brief stop before being referred to other providers, which would be undesirable.

I don't know how much they're going get out of it because it is so brief. They might feel like they're being passed along. Especially, if their issue is connecting or relating.... I could imagine that by the time we get into that third session, they feel like, "Okay, I'm ready to talk about some stuff now," as you're wrapping up.

Finally, at both timepoints, a minority of SVs expressed that IPC-3 prepared them to engage in future mental health support services (i.e., treatment orienting). Consumers believed that IPC-3 offered an informal, non-stigmatizing model for care, which influenced their perceptions surrounding the intervention's desirability. Following this positive experience receiving care, SVs believed those within their community who previously did not believe in or were hesitant to seek formal mental health services may be more likely to do so in the future.

I think it's a pretty good way to get people into counseling that might not originally be open for it.

Appropriateness. To elucidate this construct, SVs provided perceptions of IPC-3 as a pathway to address the psychosocial needs of their community, including whether the intervention was a good fit with Veteran culture. First, SVs were queried on the impact IPC-3 had on their distress. Second, they were asked if IPC-3 aligned with the values of the Veteran community. Specifically, themes emerged speaking to IPC-3's perceived fit, relevance, and compatibility for SVs experiencing psychological distress (see Table 33).

Table 33

Student Veterans: Appropriateness Themes

	Impact on Distress
-	Reduced distress via peer support
-	Increased knowledge, insight, and coping skills
_	Facilitated access to resources, such as VA benefits enrollment and academic tutoring
	Value Alignment
-	Held prosocial beliefs
-	Believed in social support, community, and mentorship
-	Desired self-improvement and introspection

First, SVs described the impact of IPC-3 on their distress levels. At the pre-intervention timepoint, many consumers felt hopeful that IPC-3 would assist them in decreasing their levels of distress through feeling understood, heard, and validated by others. IPC-3's delivery by peers was the factor most linked to this perception, as these providers held shared lived experiences and identities with their consumers. SVs anticipated that IPC-3 would provide a platform to share their stories, a space for open expression and safe dialogue, and social support within the Veteran peer group.

I think it'll help. It's just a good environment to get rid of some stuff. At least feel understood or heard. Sometimes that's a lot of it.

At the post-intervention timepoint, SVs confirmed that IPC-3 helped mitigate their levels of distress through social support, with consumers stating that they felt seen, heard, and known by their PM.

If I wouldn't have done this, I don't know what would've happened.... To be able to talk to my [PM] every week and just having that conversation. It's nice to get the reassurance that it's all right to feel what you feel. But this is how you can work on it, how you can process it, and that you don't have to struggle with certain things because we are able to give you resources as well.

At the pre-intervention timepoint only, other SVs believed that IPC-3 would provide an opportunity to increase knowledge about themselves, cultivating insight into their present life and equipping them with new coping skills. With new knowledge, skills, and abilities learned via IPC-3, SVs anticipated a more robust ability to manage their distress.

I think adding more tools to the toolbox would help out. And even if I get in a crisis or a mindset that is difficult to pull myself out of, I can still say, "Oh, I have a tool that's across the room. I just need to get up and go get it and use it." Instead of looking around being like, "I have nothing here. I have no reason to get up and try to change this."

At the post-intervention timepoint, consumers confirmed that IPC-3 had assisted them in cultivating new insights and providing additional tools to mitigate distress. SVs shared that they brought both large and small daily challenges into sessions. Regardless of scale, PMs had aided them by discussing more effective ways of handling distress and reminding SVs of their existing tools and skills. Some SVs noted how weekly sessions with their PM provided accountability in skill practice.

One of my staffers gave me a metaphor. He said, "You're a cup, and there's a faucet running over. So, we're filling the cup, and when you talk to someone, you're tipping the cup over, releasing some of that water. What you also need to figure out is how to turn off the faucet." I think that IPC-3 helped in both ways. It helped me clear out the cup by talking, so it helped me clear out some of the water. But it also helped me turn off the faucet by giving me things to do, things to tackle the shutdown feelings.

At the pre-intervention timepoint, many SVs hoped that IPC-3 would facilitate access to resources for Veteran-specific challenges on and off campus, such as enrollment for benefits at the VA or academic tutoring. Following a course of IPC-3, they confirmed the intervention offered tailored resources for their various, present life challenges—ranging from academic to interpersonal support. PMs offered a conduit to campus and community resources alike, thus, decreasing SVs' distress levels.

I was struggling with some of the schoolwork. And [my PM was] like, "Oh, if you need more time with assignments or you just need tutors, I know how to set you up with the accommodation center." And I was like, "Wow, I didn't even know how to do that."... And that took a lot of stress off, and that gave me so many more resources.

Second, SVs discussed whether IPC-3 aligned with their values as a member of the SV community. At both the pre- and post-intervention timepoints, consumers overwhelmingly shared how IPC-3 was compatible with their value of helping others (i.e., prosocial behaviors). Many SVs stated that they engaged in the program to help other Veterans, noting that this aspect of IPC-3 was equally as important as receiving support themselves. Some offered that helping other Veterans was a primary motivator in completing the full course of treatment.

That's why I also did the program. Not only to seek help but see what the program was about. Because knowing the struggles that I went through during the transition and after the transition, and how lost Veterans can get. And the people that helped me. I want to help pay it forward. And then finding out about IPC-3—knowing that a program like this exists, and it helps Veterans during the transition—is extremely awesome.

At both timepoints, SVs noted the power of social support, which they felt aligned with the spirit of IPC-3. Many spoke to the importance of robust interpersonal connections, a sense of community, and the value of mentorship. Some consumers connected these as values cultivated in military life, in which higher-ranking members were expected to provide support for lower-ranking members (e.g., "I am my brother's keeper"). This sense of community and social support was desired in their new life as a SV.

I love the mentor relationship. It could be very informal. That's something that I remember doing in the [Service branch], counseling all my young [Service branch members].... And that's what I think IPC-3 can provide a lot of people. That sense of camaraderie."

Finally, at the pre- and post-intervention timepoints, SVs shared that IPC-3 aligned with their desires to cultivate a deeper understanding of self and engagement in self-improvement. They desired to be "healthy," both for themselves and for other important people in their lives. Some SVs expressed a value alignment in self-exploration and introspection, desiring a deeper understanding of the impact of lived experiences on their mental health.

I do think it's important to explore your experiences and understand why you behave the way that you do. [IPC-3's] mission definitely aligned with my values.

*Feasibility*. To better understand Feasibility, SVs were queried about whether IPC-3 could be successfully used within a particular setting and with a certain population. Specifically, they were asked how they felt about IPC-3 being provided in a campus setting (e.g., VITAL Program), instead of in a medical setting (e.g., VAMC). They were also invited to provide thoughts about IPC-3 being delivered by peers instead of by clinical providers. Feasibility themes are summarized in

Table 34.

Table 34

Student Veterans: Feasibility Themes

# Setting

- Preferred delivery on campus instead of a medical facility
- Experienced ambiguity surrounding service setting
- Varied perceptions of virtual delivery

Provider

- Preferred provision by peers instead of mental health professionals

At both timepoints, SVs reported a preference for IPC-3 being delivered on campus.

They elucidated that an academic setting allowed for services to be physically co-located with

SV life, which they described as convenient, relaxing, approachable, less bureaucratic, and easier to access.

I think [providing services on campus] would be amazing because it's a direct line of help. You don't have to go through a medical center. I just feel like it would be so much easier and helpful.

Specifically, at both timepoints SVs expressed that delivery on campus was appealing, as it was less stigmatizing than seeking care within traditional medical settings. This perception was informed by the consumers' distrust of healthcare systems, such as the VA, and the self-stigma associated with help-seeking for mental health services. Many SVs described hospitals as a place for "sick people." These facilities were juxtaposed with IPC-3, which could be delivered on campus and accessed regardless of diagnosis or severity of distress. Further, the informality of a campus setting allowed SVs to seek support for everyday living problems, such as loneliness or academic stress.

I don't like medical facilities. They freak me out generally because it's for sick people. I avoid medical facilities unless I truly need them. So, the idea that it's outside of that environment is slightly comforting. It's a little easier and more welcoming, I suppose.

At the pre-intervention timepoint only, a minority of SVs spoke to their preference for services delivered in a traditional medical setting. These consumers noted the confidence and assurance provided by this formal setting and the professionalism associated with hospitals and medical facilities.

I think I do like the fact that it's like in a medical center—it's something medical center related—because the sense of professionalism is there.... It feels more serious, if it's at a [medical] facility.

Again, at the pre-intervention timepoint only, one SV spoke the perceived similarities in accessing care across settings, noting that session content would likely be the same regardless of where it was delivered.

I guess the difference is I wouldn't have to commute to the VA, which is a pain in the a--. That's kind of a barrier.... So, in a different world, I'd be meeting someone on campus, although right now over [Zoom] is pretty convenient. But other than that, I think it's probably the same.

As the present study took place during the COVID-19 pandemic, IPC-3 was delivered on a secure, online platform by peers who provided remote VITAL Program services on behalf of their academic institutions. Thus, SVs spoke to the impact of IPC-3 being delivered online instead of in-person. At both timepoints, there was a recognition that virtual delivery provided greater flexibility and convenience, both in location and scheduling.

I'm okay with [virtual delivery]. Especially due to the current circumstances, it's understandable. And, in a way, it provides flexibility and scheduling as well. I think, overall, it's positive.

However, at the post-intervention timepoint, a minority shared that virtual delivery was less satisfying in that it felt impersonal, less warm, and less connected than in-person services.

Sometimes you just need that in-person, that face-to-face. That's what makes us human and sometimes you need that interaction.... Don't get me wrong, the Zoom format is nice as well. But having it on campus wouldn't harm at all.

Second, at both timepoints, SVs discussed a preference for peers providing IPC-3 instead of mental health professionals, with many feeling peers would be more personable, approachable, and relatable. Consumers also noted how utilizing peer support was a familiar concept, as the military cultivates a camaraderie between "battle buddies" and leverages peers in mental health programming. Furthermore, SVs discussed the special connection between those who have served, which did not exist with those in the civilian world.

In my experience, Veterans do get along with other Veterans because they understand each other. They understand the stuff that we had to go through. So, it's relatable. I guess it's easier to talk to you about. Especially with the jargon and abbreviations that we had to learn [in the military]. They would easily understand them.

While recognizing the benefits of provision by peers, some SVs provided descriptions of the potential limitations at both timepoints. At the pre-intervention timepoint, SVs more frequently shared concerns that PMs would not be equipped with the training and skills to provide support in the same way as a mental health provider. Specifically, one SV shared concerns that PMs would not have the skills necessary to address acute or severe mental health challenges that arise.

My fear is what if there's somebody who needs a lot of help at a moment, and a very inexperienced peer can't provide that. What are you to do then? I'm sure there's protocol, but I guess that's just one of the kinks that need to be worked out.

While some SVs retained these concerns, others experienced a shift in attitudes by the post-intervention time. They discussed the positive impact of having another Veteran with whom to speak, which brought an enhanced level of comfort as well as fostered feelings of being understood due to the PM's ability to relate to unique military experiences.

Honestly, I was super hesitant at first. I was like, "We're both students, and I'm coming to you with my problems?"... But that first conversation, it was refreshing. I felt heard, and I was kind of like, "I can do this next week, too." That relatability really makes an impact.

Further, SVs at both timepoints highlighted how stigma surrounding mental health providers impacted their perception of IPC-3. They discussed how reaching out to a mental health professional would be undesirable due to a perception that the provider would not be able to understand or relate to the SV. Other consumers discussed their hesitancy to seek help from someone "paid" to provide support. Even at the pre-intervention timepoint, SVs noted that PMs did not have this associated stigma. Instead, SVs suggested that peers may be well-positioned to provide psychological services or support.

Some people don't believe in therapy.... So, when you associate the title with [the support], they already have their preconceived notions of them. So, there is a bias. You

don't really have a bias towards a peer mentor.... So, they're more willing to accept what the person will say, or the ideas that they will throw out.

**Reach**. Finally, SVs offered their perceptions of IPC-3's accessibility. To understand if the intervention was readily available to the SVs in psychological distress, consumers were asked if anything got in the way of receiving services. Moreover, SVs were queried about why they believed SVs generally do not seek support for their distress. In response, SVs spoke to their beliefs regarding the barriers encountered in accessing IPC-3 and mental health services in general. In doing so, they discussed barriers at the environmental and individual levels (see Table 35).

Table 35

Student Veterans: Reach Themes

# **Environmental-Level Barriers**

- Had trouble navigating and accessing resources
- Experienced challenges scheduling appointments to receive care
- Lacked connection with the provider
- Experienced travel as a barrier to care

# **Individual-Level Barriers**

- Lacked time to engage due to multiple responsibilities
- Dearth of knowledge and awareness of resources
- Experienced low levels of mental health literacy
- Believed they would not be understood by civilian providers
- Impacted by stigma, as a barrier to care
- Influenced by previous negative experiences seeking care
- Lacked social support system
- Impaired functionality due to burden of psychological distress

First, at the environmental level, many SVs spoke about the difficulty navigating resources when seeking care at both timepoints. Many discussed a willingness to engage with services if the resources were readily available or if enrollment was easy to achieve. For most SVs, these impressions were informed by previous experiences navigating formal care pathways,

such as the VA. Specifically, consumers spoke about challenges in enrollment, evaluation, intake, and obtaining a disability rating, which made accessing care difficult.

It sounds like a hassle to sign-up sometimes, you know? [IPC-3] was fairly easy to sign-up for. But I know other things, like the VA.... I remember I tried to sign in for my ebenefits, which is what we, the Veterans, use for stuff like health insurance... It just put me through virtual circles.

Other SVs discussed feeling overwhelmed by the number of resources offered to them. They were unsure of how to filter through the many services, programs, and options offered on campus, within their communities, and in federal programs. It was this experience—not a lack of desire to engage in services—that acted as a barrier to SVs accessing the help they sought.

I think for me it's just a matter of how easy it is. I think I always know that I'm going to benefit from it.... It's very hard for me to make myself go out of my way and make phone calls and make it happen for some reason. But if it falls into my lap, I'm like, "Great."

Again, at both timepoints, most SVs spoke of scheduling as a significant barrier to care. They often encountered long wait times to receive an appointment for mental health support once enrolled within a system. The VA was the most frequently discussed healthcare system, though some SVs noted wait times at campus counseling centers. Difficulty scheduling an appointment for care was often accompanied by challenges navigating large care systems.

I tried to reach out for help at the VA. They told me it was a year wait list for the therapy that they were recommending. But they were ready and willing to offer me prescription medicine, which I didn't want to do. I felt it was a little inappropriate. It just seemed reckless to me. And I went back a year after that, and I got passed around through initial intakes with a few people. But then similarly, there wasn't anybody available for whatever reason. And I think the third time, I got passed around for initial intakes with three people until the third person was like...I was told that I needed to go through group sessions for like 8 or 6 or 7 weeks or something like that before I could have a one-on-one with anybody. And I didn't end up doing that because I felt super uncomfortable in a group.

Other SVs discussed how a perceived lack of connection or alliance with the provider was a barrier to care. For many, feeling seen and known was facilitated by a continuity of care

over time. Other consumers discussed feeling aligned with providers who were genuine, sincere, and responsive. They also spoke to the trust inherent with providers who have served in the military, noting the familiarity of receiving support from another "brother-in-arms." Some SVs expressed a dissatisfaction with providers by whom the SV felt judged. A minority of SVs expressed mistrust and limited connection with providers whom they perceived were focused on prescribing psychiatric medications, which was undesirable.

I dread the day I have to find another counselor because [Dr. X] knows me so well. I don't need to get [Dr. X] up to speed, as I would with a new counselor. I wouldn't have to tell her from the start, from scratch, what it is bothering me. She already knows what's going on.

Finally, at the pre-intervention timepoint only, SVs discussed traveling as a barrier to accessing services. This included the cost of transportation and the time spent getting to and from in-person appointments. Conversely, virtual delivery of services facilitated SV access to support, as it removed barriers associated with travel.

I think Zoom is a great format to negate extensive travel times. If I have to go down to East [X]rd Street to the VA Center down there, it takes 3 hours out of my day. That's frigging expensive, that time investment on my day, that chunk of time.

Second, at both timepoints SVs spoke to the individual-level barriers to care that affected their access to support services. Many noted multiple demands on their time due to managing several responsibilities. Competing obligations at school, work, and home limited SV availability to participate in a full course of IPC-3.

Nothing but good things to say about the experience itself, but I would say the barrier for me was I'm busy. And I don't want it to be a waste of time, which it absolutely wasn't.

Other SVs expressed that a lack of awareness about resources and services presented a barrier to engagement and care. At both timepoints, SVs discussed difficulty finding support due to being ill-informed about Veteran-specific services on campus or within the community. They

explained that not knowing who or what to ask about made it challenging to engage with mental health services.

I know I've asked the wrong questions because I didn't understand what I was trying to ask until later. You could feel a bit overwhelmed.... There were some things that I didn't know that I could do for school this year that I needed.

Relatedly, at both timepoints, some consumers spoke about a lack of knowledge and understanding of mental health issues within their community in general. This lack of mental health literacy impacted SV ability to navigate complex health systems and made it difficult for them to skillfully reach out when in need of assistance. They believed this aversion to help-seeking began within their families and communities of origin.

I think Veterans, probably especially enlisted Veterans, come from neighborhoods or families or environments where there aren't a lot of resources. So, maybe their first instinct is not like, "Let me see what resources are available to me." Their first instinct is like, "All right. I got to deal with this."

At the pre-intervention timepoint, SVs described a belief that those who have not served in the military would not be able to understand the unique lived experiences and the resulting challenges of Veterans. This perception that civilians would misunderstand their stories, experiences, and beliefs was a barrier to care.

[SVs] feel like they can't talk to anyone besides the people that they served with. Because only they would understand how they're feeling. I was a firefighter in the [Service branch], and I used to only feel like only my fellow parachute guys would know what I'm talking about when I was talking about anything. That's why I only felt like I could talk to them.

One SV spoke about their belief in peer support due to this perceived lack of understanding between civilian and military culture.

And I feel like a lot of that work occurs on the peer-to-peer level. It doesn't occur at office hours or walk-in times for a clinic. Those are great, but I think that Veterans want to go to people they trust first and foremost. I feel like that's why you are your brother's keeper in a sense.

Prominently, SVs discussed how stigma acted as a barrier to care. Notably, many explained a cultural norm of not seeking help while they served in the military. SVs described the military as a performance-based environment that prized self-reliance and strength. Many SVs acknowledged that this culture was at odds with help-seeking behaviors.

I think most of it is pride. And I think that linked to this is the concept in military culture of, "You are self-sufficient." It's not just your life, but the lives of the people around you are dependent on you having your s--- together. So, this whole concept of reaching out for help, reaching out for support, it's not just foreign to military Veterans, but it's literally diametrically opposed to what is in military culture.

Furthermore, as each SV played a role in a large team while serving in the military, consumers experienced guilt when slowing their operational tempo, feeling like they were letting others around them down.

In the [Service branch], the things that you know you should do for yourself is to go to the [medical facility] and get seen for your [hurt] knee. But everybody else is saying, "You do that then we're going to be one man short, and we're not going to get the job done." Or they'd be like, "Are you going to be sick or a [special forces operator]," trying to make fun of you.

Compounding this issue, consumers reflected that seeking mental health care in the military was logistically challenging. For example, Service members are required to have time off approved by their chain of command, need permission to leave base, and have medical appointments documented on their permanent professional records.

When you're in the military, you can't just walk into behavioral health clinics. Your commander would be immediately notified. It has immediate ramifications on your career.

Along with negative attitudes and beliefs about systems of care, at both timepoints SVs discussed self-stigma as a barrier to care. They stated that the internalization of negative attitudes, stereotypes, and prejudices about mental illness influenced their desire to seek help, even when they felt highly distressed or functionally impaired. This included perceived shame

for help-seeking, a strong belief in self-reliance, and/or a rejection of help due to pride. While many SVs connected their self-stigma with the military, others spoke about how non-help-seeking attitudes were learned from the civilian world. Some believed they should be better equipped to handle adversity in student life, given their age and levels of experience.

Veteran students might have more trouble reaching out because they feel like they should already know this, or they should be strong enough to handle this. They're ashamed of themselves for asking or reaching for help.... They are like, "I should be knowing this, or I should know that." So instead of reaching out, they just go on with their way.

At both timepoints, SVs noted how previous experiences seeking help as a Veteran at the DoD and VA influenced their beliefs about accessing mental health care. They described the VA as a low or no-cost option to receive mental health services, ranging from psychotherapy to psychiatric medications. However, the bureaucracy to access services, long wait times once enrolled in the system, the perceived poor quality of care, and high provider turnover rates influenced SVs' desire to seek or receive care within this system. These experiences fueled mistrust of the VA's ability to meet their mental health needs. Many SVs decided to privately pay for providers outside the VA due to these challenges. Experiences accessing care in the DoD and VA systems left many SVs with a mistrust of mental health care systems and professionals. These negative perceptions represented a significant barrier to seeking care.

The VA is too much of a bureaucratic black hole to really trust them with my mental health.... My worst nightmare would be having to go to the VA. And to their credit, the VA does great work. They really do. But all it takes is one counselor that doesn't give a s--- to make you feel like there's no hope left. And I never wanted to get to that point. So, I felt like private care at [my campus counseling center] was a better option for me.

At both timepoints, SVs spoke about the role of social isolation and loneliness when accessing care, framing it as a distinctive barrier to care. This included a general lack of social support during the COVID-19 pandemic as well as geographic separation or disruptions within existing interpersonal relationships while attending school. Other SVs noted how a lack of

connection with peers on campus made reaching out for help challenging, as there were fewer people with whom to share daily life struggles.

I have a lack of interaction with people from school. I didn't really have anyone to talk to about stuff. No one asked me what's going on or anything like that.

Finally, SVs discussed how their distress impacted their ability to access care at both timepoints. Many noted how debilitating symptoms (e.g., depression, anxiety, transition stress) interfered with a desire or capability to reach out for help, decreasing social and occupational functioning. Without energy or motivation, SVs felt help-seeking was unattainable, even if they knew receiving services would alleviate their distress.

Sometimes it's taking that first step to begin the process of seeking the help you need. And that first step, it felt like it was an insurmountable amount of work in addition to everything else I had going on. The stressors of daily life, of transition, of school, of mental health. All of that stuff.

# **Study Aim 3: Integration**

In support of the study's mixed methods design, triangulation was used to integrate quantitative and qualitative findings. Triangulation was chosen because it converges and corroborates findings across both methodological approaches (Greene et al., 1989). Specifically, quantitative and qualitative data were overlaid to determine whether the D&I outcome constructs measured in the survey reflected the key informant interviews and vice-versa. This analysis necessitated considerable care, given the small sample size of the survey dataset. Further, while the quantitative results were not significantly different from the pre- to post-intervention timepoints across constructs, further inspection revealed that median scores at the pre-intervention timepoint fell at the upper end of the scale, indicating ceiling affects for both samples. Thus, the qualitative results offered nuanced insights into both provider and consumer perceptions regarding the D&I constructs. A discussion of results follows in the next chapter.

# Site Supervisors and Peer Mentors

Adoption. In the survey, SSs and PMs did not experience a statistically significant change in Adoption scores from pre- to post-intervention (z = -0.54, p = .297, r = -0.24). However, the key informant interviews elucidated provider attitudes about their intentions to try—and continue to use—IPC-3. Providers offered a litany of barriers, including managing multiple responsibilities outside of IPC-3; difficulty maintaining professional boundaries and personal experiences; a lack of support from campus leadership; slow study recruitment and operational tempo; and experiencing psychological distress when providing IPC-3. Conversely, providers listed a multitude of facilitators to IPC-3, including possessing space and time within their daily lives; possessing knowledge, skills, and resources they felt as necessary for the role; feeling a strong motivation to give back to the Veteran community; tools to manage levels of distress for the provider; physical space with privacy to participate; and perceived support from the IPC-3 team.

While many themes remained consistent across time—corroborating survey results—some shifted across the course of providing the program. Specifically, at the post-intervention timepoint only, SSs and PMs cited a lack of leadership support from the campus programs in which they were providing peer support as a barrier. At the post-intervention timepoint, providers also discussed how the recruitment of SVs to IPC-3 slowed during the COVID-19 pandemic. This slowing affected operational tempo for case assignment and provision, all of which were seen as barriers to continued engagement. Furthermore, at the pre-intervention timepoint only, PMs reflected on their mental health while providing IPC-3. Some indicated that being a provider triggered and amplified psychological distress, representing a barrier to continued involvement. In contrast, at the post-intervention timepoint only, providers shared that

IPC-3 had equipped them with new tools to manage their own distress, facilitating Adoption.

Providers also believed adequate physical space to ensure privacy—for themselves and the SVs they served—was a facilitating factor at the post-intervention timepoint only.

Acceptability. SSs and PMs did not experience a statistically significant change in Acceptability scores from pre- to post-intervention in the survey (z = -0.41, p = .34, r = -0.18). Yet the key informant interviews provided some insight into this finding. Providers found IPC-3 to be agreeable and satisfying, offering impressions regarding the intervention as a tool to decrease distress; delivery by non-mental health specialists; flexibility in implementation while providing structure for support; treatment-orientation; adaptation for Veteran communities; and a desire for dissemination to the larger Veteran community. Providers also shared their experiences learning IPC-3, including perceptions of the training's accessibility and clarity; intervention length; trainers and training group; role-play and practice of IPC-3 techniques; holding the PM role prior to becoming a SS; and continued learning through supervision and case provision.

In concert with the survey, most themes in the qualitative data remained consistent across both timepoints. However, a few providers' perceptions shifted regarding their experience learning IPC-3. At the pre-intervention timepoint only, one provider reflected on the value of being a PM prior to taking on the SS role. At the post-intervention timepoint only, several providers discussed a desire to engage in more skills practice, both in the initial and refresher trainings and weekly consultation calls. When reflecting on their impressions of IPC-3 as a satisfying program, at the post-intervention timepoint only, providers discussed a preference for services tailored to Veteran communities, expressing support for IPC-3's dissemination across the Veteran community beyond the student population.

**Appropriateness.** As with the previous two constructs, there was no statistically significant difference in Appropriateness scores between the pre- and post-intervention timepoints among those who completed the survey (z = -0.37, p = .36, r = -0.17). The key informant interviews were helpful in illuminating providers' perceptions of IPC-3's fit for SVs experiencing distress when discussing the program's alignment with provider values and also when discussing their impressions regarding IPC-3's impact on SV levels of distress. For the intervention's value alignment, themes included the ability to flexibly implement the manualized intervention; conceptualizing IPC-3 as an avenue to provide direct support to SVs; the intervention's utilization of social support; and an opportunity to gain professional skills. Regarding how IPC-3 impacted SV levels of distress, themes included an overall reduction in psychological distress as well as an increase in management and coping skills. Other impressions included providers noting that, because Veterans are a heterogenous group, they will be impacted by IPC-3 differently based on their individual needs and circumstances. Some providers felt that IPC-3's impact on distress would be influenced by the connection SVs experienced with their PMs. Still others were hesitant to say that distress could be impacted in only three sessions.

Notably, providers experienced several shifts in attitudes regarding IPC-3's Appropriateness. At the pre-intervention timepoint only, SSs and PMs discussed how IPC-3 offered an opportunity to directly support their community's mental health needs, juxtaposed with their VITAL peer roles, where they referred SVs out for psychological services. Also, at the pre-intervention timepoint, providers believed that SVs would respond to IPC-3 in different ways, depending on their levels of distress and desire to continue identifying with the Veteran community. Furthermore, at the pre-intervention timepoint only, a minority of SSs and PMs were unsure if SVs would appreciate the brevity of IPC-3, expressing concerns that SVs may feel like

they were being "passed off" to another short-term care provider. At the post-intervention timepoint only, providers reflected on IPC-3's focus on social support for recovery and the opportunity for providers to build skills aligned with career goals. Finally, at the post-intervention timepoint only, SSs and PMs highlighted that IPC-3 helped decrease SV distress, promoting coping skills for managing current and future stress.

**Feasibility**. In addition, there was no statistically significant difference in Feasibility scores between the pre- and post-intervention among those who participated in the survey (z = -0.14, p = .45, r = -.06). As with the previous constructs, the key informant interviews offered insight into provider attitudes about whether IPC-3 could be successfully carried out by VITAL peers on campus. In response, providers discussed the ways they were prepared to provide IPC-3, including through the initial and refresher trainings; PM implementation tools; previous educational, professional, and personal experiences; dispositional traits (e.g., empathetic); and trepidation to execute a new skill. Providers also shared attitudes regarding IPC-3's provision, including a preference for services on campus, delivered in-person, by peers.

While many themes remained consistent across the intervention timepoints, mirroring survey findings, others diverged, shifting from pre- to post-intervention. At the pre-intervention timepoint only, SSs and PMs shared that they felt prepared to provide IPC-3 based on their educational and professional backgrounds. At the post-intervention timepoint only, other providers noted that they felt prepared to provide IPC-3 through the PM implementation tools provided. When discussing impressions regarding IPC-3 setting (i.e., campus) and providers (i.e., peers), one SS was concerned that the mental health of PMs may be affected by provision, especially those who had not engaged in mental health treatment themselves, at the pre-intervention timepoint only.

**Reach**. Next, there was no statistically significant change in Reach scores between the pre- and post-intervention timepoints among survey providers (z = -1.29, p = .10, r = -0.56). The key informant interviews provided additional context as to why providers believed consumers sought support for their distress. Barriers to accessing care included gender-based discrimination; lack of awareness surrounding services; stigma learned in the military; shortage of time to engage with services; negative past experiences accessing care and impairment due to transition stress; and the perception that providers did not hold adequate Veteran cultural competencies.

Convergent with the survey findings, most Reach themes remained consistent over time. However, a few shifts in perception occurred. At the pre-intervention timepoint only, providers shared a belief that SVs experienced discrimination due to gender identity. Specifically, this related to SVs who identified as women and had accessed VA services. At the post-intervention timepoint only, SSs and PMs perceived that there were not enough mental health providers who held Veteran cultural competencies, acting as a barrier to SVs accessing care.

### Student Veterans

**Adoption**. The survey indicated no statistically significant difference in Adoption scores at the pre- and post-intervention timepoints (U = 16.00, z = -0.59, p = .28, r = -0.16). However, SVs' perceptions of the intention to initially try IPC-3—and to continue to use it—were evident in the key informant interviews. Specifically, consumers discussed which facilitators and barriers affected their ability to participate in IPC-3. These factors occurred at three levels: intervention, provider, and consumer. Intervention characteristics included factors relating to the brief nature of IPC-3; its adaptation for Veteran communities; assistance given to sign-up; the flexible and responsive nature of IPC-3; how the intervention was delivered (i.e., virtual, in-person); and factors relating to the IPC-3 team. Provider characteristics included factors relating to the

connection between SV and PM and being paired with a provider who shared similar identities (e.g., race, gender) or lived experiences. Consumer characteristics included factors relating to time for engagement in the intervention; an openness to learn ways to manage distress; and privacy. Consumers also acknowledged factors relating to prosocial behaviors, self-stigma, and impairment due to psychological distress.

While the provider and consumer characteristics were consistent across time, corroborating survey findings, several intervention themes appeared to shift over the course of delivery. Notably, at the pre-intervention timepoint only, a small group of SVs said that the brevity of IPC-3 facilitated Adoption. At this early timepoint, SVs discussed IPC-3's adaptation for Veteran communities, expressing concerns that those who no longer wanted to affiliate with the military would not select the intervention for support. Additionally, at the pre-intervention timepoint only, consumers noted that real-time enrollment through the VITAL Program facilitated their engagement in IPC-3. At the post-intervention timepoint only, SVs described IPC-3's flexibility and responsiveness to consumer needs as a facilitator in Adoption.

Acceptability. Survey Acceptability scores at the pre- and post-intervention timepoints were not different at a statistically significant level (U = 11.50, z = -1.25, p = .11, r = -0.35). As with Adoption, the key informant interviews provided supplemental information to illuminate perceptions surrounding this construct. SVs described that a satisfactory intervention would include several dimensions, including an intervention that offered proactive outreach for service engagement; adaptation for Veteran communities; opportunities for social support; orientation to treatment; an adequate number of sessions; and support with mutuality and collaboration between consumer and provider. SVs found support services that utilized peer mentorship to be

agreeable, emphasizing the palatability of services that provided flexible scheduling with providers who remained in consistent contact across the intervention.

Though many themes were consistent across timepoints, some perceptions shifted over time. At the pre-intervention timepoint only, SVs were satisfied that IPC-3 proactively offered support through the VITAL Program, instead of placing the burden of searching for and signing up for assistance on their own. At the post-intervention timepoint only, some consumers desired additional sessions beyond the three offered in IPC-3. Also, at the post-intervention timepoint, SVs perceived that IPC-3 offered mutuality and collaboration in support, which was seen as desirable and, thus, positively influenced Acceptability.

Appropriateness. Additionally, there was no statistically significant difference in Appropriateness scores before and after receiving the intervention among those who participated in the survey (U = 17.50, z = -.37, p = .36, r = -0.10). While qualitative findings diverged from quantitative findings in the previous two constructs, the key informant interviews ultimately confirmed the survey data for Appropriateness, highlighting the critical aspects of IPC-3's compatibility with addressing SVs' needs on campus and across time. SVs described IPC-3's impact, perceiving that IPC-3 decreased their distress by helping them feel understood and validated through peer support. Consumers said IPC-3 equipped them with coping skills and facilitated their access to Veteran-specific resources. They also described how IPC-3 aligned with their values as an SV, including a belief in prosocial behaviors, self-improvement, and social support. These impressions were confirmed at both timepoints, with Appropriateness attitudes remaining consistent across the intervention.

**Feasibility**. Furthermore, there was no statistically significant difference among survey consumers in Feasibility scores at the pre- and post-intervention timepoints (U = 17.00, z = -

0.44, p = .33, r = -0.12). However, the key informant interviews provided color and texture to observations of whether IPC-3 could be successfully implemented for SVs via the VITAL Program. Specifically, SVs discussed aspects related to the setting, including the stigma associated with seeking help at various locations and varied preferences accessing services virtually, on campus, or in traditional settings (e.g., hospitals). Consumers also shared their views on treatment providers, including delivery preferences by peers instead of mental health professionals, the stigma surrounding seeking care with traditional providers, and potential limitations of peers as providers.

In line with the survey, SV perceptions of IPC-3's delivery on campus (i.e., the setting) by peers (i.e., providers) remained largely constant across the two timepoints. While most SVs conveyed their preference for IPC-3's delivery on campus versus at a medical facility, stating that it destigmatized accessing care, a minority still preferred accessing care in a traditional medical setting at the pre-intervention timepoint only. When discussing preferences surrounding providers, SVs experienced a shift in perceptions at the post-intervention timepoint. SVs said that their initial skepticism regarding PMs delivering mental health services diminished after receiving the intervention, noting a connectedness to providers with whom they could uniquely relate.

**Reach**. Finally, there was no statistically significant difference in Reach scores at the preand post-intervention timepoints based on the survey (U = 15.00, z = -.41, p = .34, r = -0.11). However, SVs' perceptions of IPC-3's accessibility were further elucidated in key informant interviews. Specifically, SVs discussed barriers accessing IPC-3 and mental health care at the environmental and individual levels. First, environmental-level barriers included difficulty navigating existing resources; challenges scheduling an appointment to receive care once

enrolled within a system; lack of connection to the mental health provider; and the strain of traveling to service delivery locations. The latter concerns included costs associated with travel, a lack of transportation, or being geographically distant from services. Second, individual-level barriers included time management in juggling multiple responsibilities; finding support services due to a lack of awareness of resources; limited understanding of mental health issues; fear of not being understood by providers outside the Veteran community; negative previous experiences with providers or systems; internalization of negative attitudes, stereotypes, and prejudices about mental illness toward self (i.e., self-stigma); lack of social support; and finally, functional impairment, which inhibited help-seeking.

Congruent with survey findings, many barriers remained constant from the pre- to post-intervention timepoints. Of those who experienced a shift, SVs noted that travel was a barrier to accessing mental health support at the pre-intervention timepoint only (environmental-level barrier). Additionally, at the pre-intervention timepoint only, SVs believed that civilian providers could not understand their lived experiences and the resulting mental health needs of the Veteran community (individual-level barrier). However, neither of these themes were apparent at the post-intervention timepoint.

### **CHAPTER V: DISCUSSION**

### **Site Supervisors and Peer Mentors Discussion of Findings**

Findings from the survey and key informant interviews provided insight into SS and PM attitudes and beliefs regarding the D&I constructs of Adoption, Acceptability, Appropriateness, Feasibility, Reach, and Sustainability. When integrated, they offer information on how mental health care treatment developers and delivery systems may support providers serving SVs. Specific implications regarding the use of trained and clinical supervised peers to address psychological distress as well as recommendations, when appropriate, follow below. A consolidation of observations and recommendations for the selection and training of providers and implementation of IPC-3 can be found in Appendix K.

# Selection of Providers

PMs were recruited through the VITAL Program. Specifically, the VITAL Program Coordinator identified peers for advanced training within the program, approaching them regarding possible participation in IPC-3. Based on their interest in learning the intervention, VITAL peers were then trained, demonstrated competency, and given clinical supervision to implement three training cases. This study revealed specific factors to be considered when selecting providers, which may impact VITAL peers' ability to successfully transition into the role of an IPC-3 PM.

First, findings indicate that possessing the time and relevant skills needed to engage in IPC-3 may contribute to an increase in Adoption and Feasibility. Specifically, PMs required adequate bandwidth to fully participate in consultation meetings and weekly sessions with SVs, which acted as a facilitator for implementation. Conversely, PMs who espoused feeling overburdened or overwhelmed by their existing roles and responsibilities (e.g., students,

employees, VITAL peers) found implementation more difficult. In a literature review of student peer mentor characteristics, 26% of studies noted that having the necessary time to provide mentorship was an essential factor in the peers' suitability for the role (Terrion & Leonard, 2007). Also, this study found that VITAL peers who were equipped with relevant skills from their previous or current educational experiences, those who held knowledge of local and national Veteran-specific resources, and those who maintained a connection to Veteran community were more likely to continue implementing IPC-3. Specifically, PMs spoke of previously acquired professional training as well as transferable skills gained as leaders in the military, which they could apply in the program. Thus, it is recommended that IPC-3 implementors consider targeted recruitment of VITAL peers, identifying those with not only a willingness to learn new skills but who also possess the time, skills, and knowledge to do so.

Second, providers noted becoming an IPC-3 PM offered a unique opportunity for professional development, which positively influenced Appropriateness. VITAL Program Coordinators (i.e., SSs) believed IPC-3 offered an opportunity for peers to gain useful skills, which in turn expanded their capacity to serve more SVs in the VITAL Program. PMs also noted that receiving training and clinical supervision in a psychosocial support intervention aligned with their professional goals. Notably, of the VITAL peers who self-selected to become IPC-3 PMs, many were studying in the fields of psychology or social work. This finding echoes existing scholarship indicating a positive correlation between a peer's career goals and their ongoing engagement in psychosocial service provision (Allen, 2003). Thus, it is recommended that future implementors highlight the unique opportunity IPC-3 offers to support long-term career goals (e.g., learning skills, receiving clinical supervision, delivering a psychosocial intervention), which may be useful when recruiting IPC-3 PMs.

Third, PMs believed that IPC-3 aligned with and complemented their roles and responsibilities as a VITAL peer. Specifically, they felt that IPC-3 provided a helpful framework and discrete strategies to address psychological distress. Providers characterized IPC-3 as another "tool in the toolbox" when supporting SVs, perceiving the intervention as a "value add" to their VITAL responsibilities. This positively influenced Sustainability. While there is a dearth of research on this topic, it is recommended that future implementation efforts consider highlighting IPC-3 as a complementary and congruent tool to VITAL's existing mission and goals when recruiting and selecting peers for advanced training.

Fourth, findings suggest that IPC-3's adaptation for Veteran communities was largely appealing to VITAL peers, with providers finding the intervention desirable in that it was developed *for* Veterans *by* members of the community. PMs noted that they volunteered to be trained in IPC-3 because it was a tailored intervention to address Veteran-specific challenges on campus, such as transition stress and suicidality, as a well facilitated access to care for their community members. This positively influenced their perceptions surrounding Acceptability. As military identity extends beyond the time of service for many Veterans, future efforts to recruit VITAL peers may find it useful to highlight IPC-3's adaption to address specific experiences and challenges faced by the SV community, as is currently done in the main study (Daley, 1999).

# Training of Providers

IPC-3 followed the Apprenticeship Model, a D&I recommended framework for training non-specialists in mental health interventions (Murray et al., 2011). Within IPC-3, there were Master Trainers, holding expertise in intervention; SSs, providing clinical supervision; and PMs, delivering the intervention. Initial training provided foundational knowledge regarding IPC-3 as well as incorporated skills practice, which was followed-up by annual refresher trainings. Results

offered insights into SS and PM perceptions about aspects of the training that influenced the following D&I outcomes.

First, providers indicated that utilizing the D&I Apprenticeship Model for training positively affected Acceptability and Feasibility. Specifically, providers experienced the training as effective and well organized, with clear, straightforward, and accessibly presented content and materials. They also believed IPC-3 Master Trainers were professional, engaging, and affable. As designed, the Apprenticeship Model encouraged role plays and skills rehearsal, both of which PMs perceived to be relevant, useful, and critical to hardwire implementation skills (Murray, et al., 2011). Additionally, providers stated that the training format, which allowed them to engage in dialogue and questions throughout, promoted a sense of community and connection among the training group. This aligns with literature suggesting that peer networking enhances implementation, fostering a sense of support and belonging (Gates, 2007; Gillard, 2022). As such, continued utilization of the Apprenticeship Model in IPC-3 implementation is encouraged.

Second, providers shared that learning IPC-3 continued beyond the initial training, citing the annual refresher training and consultation meetings as access points for enhanced understanding and skill practice, which are key features of the Apprenticeship Model (Murray, 2011). However, after completing three training cases, PMs noted a desire for additional skills training, indicating that time dedicated for skills practice in weekly consultation meetings led to an increase in Acceptability. This mirrors existing literature that indicates peer mentor skill-development is a critical and continual process throughout implementation (Gillard, et al., 2022; Mancini, 2018), and that consultation is essential to successful implementation (Beidas & Kendall, 2010; Herschell, et al., 2010; Murray, et al., 2011). Given the desire for additional skills practice by providers in the present study, it is recommended that IPC-3 implementors prioritize

skills practice and role plays through weekly consultation meetings and in advanced trainings, which will offer providers the opportunity to ask questions and practice newly acquired skills under the guidance of Master Trainers and SSs.

Third, results suggest that Adoption was positively influenced by transparency surrounding the expectations of PM roles and responsibilities—from the selection process through training. Providers believed that clarifying and elucidating their tasks lessened anxiety when learning and executing IPC-3, finding the delineation of tasks between clinical supervisors and themselves as peer providers to be especially helpful. For example, during initial training, it was clarified that PMs would not be expected to take on clinical tasks, such as assessment for suicidality, which positively affected their intention to try IPC-3 following certification. In the presence of clear roles and responsibilities, literature suggests that peers are equipped with the parameters to excel within their role (Cronise, et al., 2016; Mancini, 2018). Considering this finding, it is recommended that candid and forthright reports of IPC-3 provider responsibilities take place from the start of the selection process and onward through the training period.

# Implementation by Providers

After proof of competency following initial training, IPC-3 PMs were assigned three training cases, which they completed under weekly consultation with their respective cohorts (i.e., New York, Utah). Meeting with SVs weekly, PMs were responsible for scheduling a mutually agreeable meeting time, reviewing symptom measures prior to the session, and then executing the tasks associated with each IPC-3 session. Master Trainers and SSs observed case progression, including provider adherence to IPC-3 and consumer symptom monitoring. Taking into consideration that the present study occurred during the COVID-19 pandemic, results

indicated several considerations when implementing a psychosocial support intervention delivered by peers.

First, some PMs reported challenges managing distress when engaging with clinical content in both session and consultation meetings. Providers stated that bearing witness to the challenges faced and the distress experienced by SVs exacerbated personal struggles to manage their own psychological distress. Relatedly, they found it difficult to maintain professional boundaries, noting a propensity to be overly empathetic or emotionally involved in cases. This led them to feel fatigued and overwhelmed. These barriers negatively influenced provider perceptions surrounding Adoption. Studies examining the impact of delivering mental health services indicated peer providers experienced a decrease in wellbeing (e.g., burnout, job dissatisfaction) roughly four to six months into delivery. However, those effects were not maintained at the one-year mark, with peers largely remaining well across service provision (Gillard, et al., 2022; Park, et al., 2016).

Notably, IPC-3 PMs stated that they felt comfortable discussing these barriers in the context of weekly consultations. They perceived Master Trainers and SSs to be responsive to their needs via case reassignment as well as in providing additional individual consultation, both of which decreased PM distress. Further, PMs noted that exposure to the psychoeducation and coping skills offered by IPC-3 taught them new skills for distress management, which positively influenced Adoption. This finding mirrors the existing literature, which suggests that supervision and support are important factors for the psychological wellbeing of peers (Gillard, et al., 2022; Mirbahaeddin & Chreim, 2022; Simpson, et al., 2018). Thus, it is recommended that future IPC-3 implementors consider dedicating additional time to discussing the impact of delivering psychosocial support and promote provider self-care across the course of implementation.

Second, PMs discussed the usefulness of the provider implementation toolkit, which was developed to assist in the delivery of IPC-3, which positively influenced Feasibility. The toolkit included items such as the manual, a checklist of tasks per session, templates for case conceptualization, and example scripts illustrating how to explain coping skills and address common questions about the intervention. Use of these tools in session provided a framework for implementation, which providers said freed up the requisite mental space to fully attend to the SV in vivo. The toolkit developed for IPC-3 was modeled after the World Health Organization's Group IPT for Depression manual, which includes similar tools for non-professional providers (World Health Organization, 2016). Given the perceived effectiveness of these tools by providers in the present study, treatment developers and implementors may consider utilizing implementation toolkits, such as the one described here, in both IPC-3 and other interventions delivered by peer providers.

Third, providers highlighted how a lack of support for IPC-3 by campus leadership acted as a barrier to Adoption. Organizationally, VITAL operates on campuses across 25 states, with programs housed in offices governed by the academic institution in which they are located (e.g., Columbia University). While providers believed that VITAL Program Coordinators were universally supportive of IPC-3, leaders within the campus offices in which PMs operated did not always have the same level of buy-in. These leaders were responsible for providing a range of services to SVs on campus (e.g., academic accommodations, GI Bill disbursement, housing placement, mental health). As such, VITAL peers often juggled implementation of IPC-3 with the management of other tasks and duties within these offices. Thus, a lack of time and resources to implement the intervention negatively influenced Adoption. Though not directly examined in this study, organizational leadership support (e.g., providing time for implementation and

supervision) is considered a necessary factor for positive D&I outcomes (McHugh & Barlow, 2010; Murray et al., 2011). Thus, it is recommended that future implementation teams work directly with campus leaders, providing information regarding IPC-3—both before sites are selected and throughout the duration of provision—in close collaboration with VITAL Program Coordinators. Cultivating the support of campus leaders may reduce this barrier to continued implementation.

### Intervention Characteristics

Finally, providers offered their perceptions of IPC-3 as a brief, evidence-based intervention adapted for Veteran populations. The aim of the intervention is to reduce SV psychological distress by equipping them with coping skills and facilitating long-term engagement with support services, when needed. IPC-3's design utilizes peer support and is delivered on campus instead of at medical treatment facilities. These unique intervention characteristics impacted several D&I outcome constructs.

First, providers overwhelmingly found IPC-3 to be an effective tool for decreasing psychological distress (e.g., depression, anxiety, post-traumatic stress, transition stress) and for increasing healthy coping skills, noting that these gains were still present at the one-month Follow-Up session. They also believed that IPC-3 promoted self-efficacy in distress management, with SVs learning to manage triggers and sustainers of distress outside of sessions. Further, providers believed that IPC-3 was treatment-orienting, offering a positive model for accessing care, especially for those SVs who had not previously accessed services and/or those who had negative experiences seeking care (e.g., invalidation, difficulty navigating services). On this point, providers believed positive experiences with IPC-3 would cultivate openness to engagement in future mental health services. Together, these impressions positively influenced

Acceptability and Appropriateness. Notably, IPC-3 was juxtaposed with mental health services provided at VAMCs, where SVs reported to have had negative past experiences accessing care. This result mirrors similar findings indicating that trouble scheduling appointments, long wait times, high staff turn-over, and limited follow-up in VA systems acted as a barrier to future help-seeking (Cheney, et al., 2018). Given these findings, it is recommended that IPC-3 implementors promote the effectiveness and treatment-orienting nature of IPC-3 across implementation.

Second, providers perceived IPC-3 to be an accessible avenue of support for SVs. Specifically, the intervention shifted the burden of seeking care from consumers to providers, offering a proactive stance towards engagement. Several factors informed this perception. SSs and PMs perceived IPC-3's location on campus to be both convenient and non-stigmatizing. IPC-3 was also delivered by peers with whom SVs naturally engaged through the VITAL Program. Further, this paradigm shift toward proactive engagement began at sign-up, whereby VITAL staff described IPC-3 to SVs, who, if interested, were then assisted in real-time enrollment for services. Providers believed this sign-up assistance removed barriers associated with finding and then navigating mental health services. These intervention characteristics inclusivity, proactivity, and accessibility of support—positively influenced Reach and Feasibility. This finding echoes similar calls to action, which advocate for innovative solutions to improve the mental health care of Veteran populations, such as utilizing peer support, bolstering social support, and pairing evidence-based treatments with consumer preferences (Hoge, 2011). As such, it may be useful for those supporting SVs to maintain a posture of proactive engagement, offering information about and sign-up assistance for services, as was done with IPC-3 through the VITAL Program.

Third, providers believed that IPC-3 could be tailored to meet the needs of individual SVs, offering flexibility and mutuality in treatment. These perceptions positively influenced Acceptability, Appropriateness, and Reach. Specifically, while IPC-3 provided a structure and cadence to sessions, SSs and PMs felt tasks could be accomplished in a fluid manner to adjust for emergent needs in each session. Providers also perceived a freedom to collaborate with SVs, such as working together to select an interpersonal problem area on which to focus their sessions (i.e., role transition, disputes, grief, loneliness). This approach stood in juxtaposition to traditional mental health services, which were thought to be more rigid and prescriptive. Given this consumer-centered stance, providers perceived IPC-3 to be more inclusive of minority populations, such as those who may not feel comfortable in traditional hospital settings (e.g., women). D&I informed frameworks, such as the Apprenticeship Model used in IPC-3, advise that interventions be delivered flexibly—allowing for adaption to meet the specific cultural needs of a given population—and with fidelity—adhering to core elements of the evidence-based practice (Murray, 2011). Thus, mental health care treatment developers and systems may consider how to adapt and deliver services, such as IPC-3, that reflect flexible, inclusive, consumer-centered approaches to care, as preferred by providers in the present study.

Fourth, providers believed that IPC-3 reduced stigma associated with accessing mental health services, which positively impacted Reach. Several factors contributed to this perception. Providers discussed the influence of military culture, which promoted a "mission mindset," whereby the task at hand must be completed despite any physical or mental distress sustained across its execution. They further described military culture as one in which performance was equated with value and worth. This culture also promoted self-reliance, which both providers and consumers believed interfered with help-seeking. These beliefs, inculcated while in service,

perseverated into SVs' transition to civilian life. In contrast, IPC-3 used non-clinical language (e.g., distress versus depression) and framed support as a way for SVs to refuel and fortify, allowing them to complete their current mission—school. Stigma is a well-documented barrier to care among both Service members and Veterans (Blais & Renshaw, 2013; Cheney, et al., 2018; Hoge et al., 2004; Newins, 2019; Vogt, 2011). Though more data are needed on the use of non-stigmatizing language, this linguistic shift has been preliminarily identified as an effective engagement strategy (Markel et al., 2010). As was done in IPC-3, future treatment developers may consider leveraging non-stigmatizing language that pivots from labeling those with mental health "disorders" and toward less stigmatizing, more inclusive idioms, such as "distress."

Fifth, providers believed strongly in the power of peer support to foster social connection and in its efficacy as a non-stigmatizing tool for recovery. Thus, IPC-3's use of peers as providers positively influenced Appropriateness. SSs and PMs viewed IPC-3 as a good fit to address psychological distress, since it offered an opportunity for Veterans to serve and be served by other Veterans, enacting the military ethos of "You are your brothers' keeper." Peers provided a sense of belongingness to SVs who felt alone and out-of-place during the military-to-civilian transition period. As such, they were critical in alleviating transition stress. Providers also perceived seeking care from peers as less stigmatizing than seeking it from traditional providers. Unlike mental health professionals, IPC-3's delivery by peers facilitated a natural and easy connection between provider and consumer. Common identities and lived experiences offered a foundation on which trust and alliance could be built. Providers believed that interventions delivered by peers would cultivate an openness to receiving present and future care (e.g., treatment orienting). While peer mentorship is a promising treatment strategy (Drebing et al., 2018; Elliott et al., 2011; Jain et al., 2016; Kees et al., 2017; Klaw et al., 2017; Mastrocola &

Flynn, 2017; Whiteman et al., 2013) and is utilized in military and Veteran mental health (Greden et al., 2010; Shepardson et al., 2018), findings of the present study suggest that it may be a particularly effective strategy when delivering IPC-3. It is recommended that future research further examine the efficacy of peer providers delivering IPC-3 or other support services to SVs.

Sixth, providers perceived a dearth of mental health systems, interventions, and providers equipped to address Veteran acculturation and to do so with sensitivity and humility. This status quo was juxtaposed with IPC-3, an intervention adapted *for* and delivered *by* Veterans.

Specifically, they believed the intervention acknowledged and incorporated the different demographics and lived experiences of SVs (e.g., older, married, working) and sought to address common challenges SVs faced (e.g., physical disabilities, transition stress). These perceptions regarding Veteran cultural competency positively influenced Reach. Tanielian, et al. (2014) discussed such competency as the ability of a provider to offer support in a manner that is sensitive and responsive to the unique needs of Veterans and is associated with the delivery of patient-centered care (Coll, 2012; Forgey & Young, 2014; Lunasco, 2010). Based on this finding, systems supporting SVs may consider this preference for providers with awareness of Veteran life, equipping them with the knowledge to practice with cultural humility and sensitivity, as was done in IPC-3.

# **Student Veterans Discussion of Findings**

As with providers, study findings highlight attitudes and beliefs regarding D&I outcome constructs among the study sample of SVs. Taken together, they provide insight for treatment developers seeking to bridge the research-to-practice gap, bringing evidence-based treatments to real-world delivery settings. Specific implications for supporting SVs experiencing

psychological distress, as well as recommendations, when appropriate, follow below. Appendix K provides an overview of the major discussion points and recommendations.

## **Enrollment Characteristics**

Recognizing that those who need care are often ill-equipped with the resources to reach out for help, IPC-3 took a proactive stance when engaging SVs—in both their awareness of and enrollment in services. SVs were made aware of support services through the VITAL Program, whose mission is to assist with Veteran transition to campus life and also to offer mental health support. VITAL often acts as a social hub for SV life on campus, with the VITAL Program Coordinator coordinating care and resource referrals. Leveraging this established program, VITAL staff presented SVs with information on IPC-3 as a potential source of support. If interested, SVs were assisted with enrollment for services. Consumers shared their perceptions regarding this proactive stance regarding awareness and enrollment, which impacted several D&I constructs.

First, SVs identified a lack of awareness of available services as a barrier to care, reinforcing the findings of previous studies (Cheney, et al., 2018; Pyne, et al., 2019; Washington, et al., 2015). Consumers believed active promotion of IPC-3 through VITAL provided easy access to information about the program, with SVs saying they would not have known about IPC-3 if not actively approached by VITAL staff. As it was for providers, this paradigm shift—proactively offering services via existing delivery pathways instead of passively waiting for those in need to reach out—made IPC-3 an attractive option for SV mental health support.

Further, this unique recruitment method facilitated both Adoption and Reach. While research is scant, a recent study showed that proactive outreach was effective in increasing smoking abstinence among Veterans (Hammett, et al., 2021). Thus, treatment developers and

implementors supporting SVs may consider how to leverage VITAL and other SV-focused campus programs in the promotion of mental health services, as was done in IPC-3.

Second, consumers indicated VITAL staff offered direct assistance with IPC-3 enrollment, which positively influenced Adoption and Reach. When discussing barriers to care, many SVs noted they would be willing to engage with mental health or support resources if they were readily available, and if enrollment was uncomplicated—echoing sentiments expressed by providers in this study. Specifically, SVs noted challenges when accessing care in traditional mental health care delivery systems, such as lengthy enrollment (e.g., VA medical benefits), evaluation (e.g., diagnosis, disability rating), and intake processes (e.g., burden of retelling history). Consumers juxtaposed IPC-3 with their previous experiences in the military and VA, noting that enrollment assistance facilitated easy access to support. Further, consumers acknowledged that their psychological distress (e.g., low energy, decreased motivation) made it even more challenging to navigate complex enrollment processes. Thus, real-time assistance helped SVs overcome this barrier to care. Studies assessing barriers to mental health care for Service members and Veterans suggest that real and perceived concerns about their ability to navigate the complex processes associated with accessing services is an influential barrier to care (Cheney, et al., 2018; Kim, et al., 2010; Tanielian, et al., 2016). Thus, IPC-3 implementors should continue to assist with service enrollment to facilitate SV access to care.

## **Provider Characteristics**

Trained and clinically supervised peers delivered IPC-3, as peer support has been shown to positively influence Veteran physical and mental health outcomes (Boothroyd & Fisher, 2010; Elliott et al., 2011). Further, there is a long history of leveraging peers to deliver mental health interventions in both military and Veteran mental health programming (Greden et al., 2010;

Shepardson et al., 2018). Consumers in this study shared a variety of perceptions influencing D&I outcomes related to their experiences receiving support for psychological distress from their peers, rather than from traditional mental health professionals.

First, SVs overwhelmingly believed that peers were uniquely suited to provide mental health support to their community. Specifically, consumers espoused a strong preference for peer providers over mental health professionals. Consumers in the present study believed that IPC-3 PMs allowed for ease of connection between provider and consumer as well as a natural kinship or camaraderie within the dyad, given their shared military experiences—echoing provider findings. Further, PMs were found to be more approachable and relatable than clinical providers. This led SVs to feel heard, seen, known, and understood. As peer support is associated with increased academic, social, and psychological functioning, utilizing peers as providers in psychosocial support interventions for SVs may be a promising practice (Drebing et al., 2018; Elliott et al., 2011; Jain et al., 2016; Mastrocola & Flynn, 2017; Whiteman et al., 2013).

Consumers also shared their perceptions of the stigma surrounding clinical providers, including the belief that it was more difficult to relate and feel connected to mental health professionals. Many saw traditional providers as lacking in genuine empathy or concern, stating that they were only there because they were being "paid to care." In previous studies assessing stigma among Service members, a lack of trust in mental health professionals was correlated with low service utilization (Kim, et al., 2011). In the present study, SVs perceived that peer providers came *without* a pre-existing stigma, possibly alleviating this barrier to care. This aligns with the literature suggesting that peers may be useful in service provision for groups that have experienced stigma when interacting with mental health professionals (Gillard et al., 2015). Thus, it is recommended that future studies continue assessing the efficacy of peer support when

addressing psychological distress among SVs, including IPC-3. Taken together, these beliefs regarding the use of peers as providers positively influenced Adoption, Acceptability, Appropriateness, and Feasibility.

Second, consumers not only discussed preferences for peers but also for diversity within and representation among providers. Specifically, SVs desired assignment to PMs with similar identities (e.g., gender) or lived experiences (e.g., Service branch), both of which positivity influenced Adoption. Consumers perceived that these common factors provided a natural foundation on which to build an alliance, which would be especially useful when serving SV minority populations, such as Veterans identifying as women. Literature suggests that commonalities in background among providers and consumers positively impacts access to mental health services (Solomon, 2004; Alergria, et al., 2008). Thus, it is recommended that IPC-3 implementors cultivate representation when recruiting SSs and PMs within the Apprenticeship Model.

Third, SVs believed that civilian providers would not be able to understand the unique, lived experiences and mental health challenges faced by those who had served in the military. This perceived lack of understanding acted as a barrier to care. Consumers also described a lack of connection with civilian providers who did not demonstrate Veteran cultural sensitivity and humility, which led to mistrust of and disengagement from services. For example, some SVs felt that providers at the VA better understood mental health challenges associated with military service in comparison to campus or private practice providers. This was juxtaposed with IPC-3 PMs—members of the Veteran community—with whom consumers experienced a strong connection, which positively influenced Reach. Mirroring both provider and consumer perceptions from this study, a RAND report demonstrated that only 13% of providers were ready

to deliver evidence-based care with military cultural competency, and, of this group, providers were more likely to be associated with Department of Defense or VA than civilian providers (Tanielian, et al., 2014, pg. 20). Taken together, these findings suggest providers serving SVs be equipped with Veteran cultural competencies through training and education, fostering engagement and practice with humility and sensitivity, as was done in IPC-3.

Fourth, SVs found IPC-3 to be consumer-centered, describing the intervention as a support service that welcomed collaboration and mutuality—a perception shared by providers in this study. This was in contrast with traditional, medical models promoting therapist- or treatment-driven agendas. Two primary factors influenced this perception—communication and flexible scheduling. Regarding communication, consumers noted that PMs proactively and reliably remained in contact with SVs across the duration of the intervention. Despite inconsistencies in SV communication, PMs were persistent in their follow-up, which lead SVs to feel cared for and fostered continued engagement. Regarding flexible scheduling, consumers noted that PMs were willing to schedule sessions to accommodate other aspects of the SV's schedule, such as academic or work life. Again, this was contrasted with traditional medical models in which sessions are typically arranged according to the provider's schedule. Consumers in this study most frequently noted scheduling as a barrier to care within VA healthcare systems, sometimes waiting up to a year to meet regularly with a provider, which is a documented barrier to care (Cheney, et al., 2018). Together, these perceptions of IPC-3's flexibility and accommodation in scheduling positively influenced Adoption, Acceptability, and Reach. In keeping with the literature, trauma-informed approaches to care promote a shift away from traditional medical models (e.g., hierarchical, power imbalance) toward therapeutic relationships that foster collaboration, empowerment, and self-efficacy (Sweeney, et al., 2018). Given this

preference for collaboration and shared decision-making in care, IPC-3 implementors should continue providing consumer-centered, trauma-informed support services to SVs. Further, it is recommended that treatment developers and implementors supporting SVs leverage and integrate these approaches into mental health services, when possible.

## **Setting Characteristics**

Recognizing barriers to accessing mental health care at VAMCs—such as stigma and difficulty navigating a bureaucratic healthcare system—IPC-3 was delivered on campuses via the VITAL Program (Cheney et al., 2018). Positioning services on campus and offering support through a program in which SVs naturally conversed with their peers, IPC-3 sought to facilitate access to care, potentially reducing barriers associated with seeking care through traditional healthcare settings. Consumers in the present study provided insights into how the location of services influenced perceptions surrounding the D&I constructs.

First, consumers preferred to receive psychosocial support on campus versus at a medical facility, which positively impacted Feasibility and Reach. They provided a multitude of reasons to support this preference, ranging from convenience to finding campus settings more approachable than traditional delivery pathways. Specifically, SVs found IPC-3's delivery on campus less stigmatizing than in medical settings, such as VAMCs. Many of the factors contributing to this view centered around the perception that hospitals were for "sick people." While they acknowledged the presence of distress, SVs did not identify with the diagnostic labels (e.g., PTSD) given in medical settings. This practice was juxtaposed with meeting an IPC-3 provider via the VITAL Program on campus, where support could be accessed without a formal diagnosis—a highly desired intervention characteristic. Additionally, IPC-3's campus location facilitated engagement in services as it eliminated barriers to care associated with travel,

such as transportation challenges and a lack of time, which are both documented barriers to care (Kim, et al., 2010; McCaslin, et al., 2013). Combined, these findings suggest that mental health care delivery systems should consider positioning services in convenient, accessible locations to reduce the burden of help-seeking as well as the stigma associated with accessing mental health care, as was done in IPC-3.

Second, SVs offered a variety of perspectives on the delivery of support services via a secure, online video-conferencing platform, which positively impacted Adoption, Feasibility, and Reach. Overall, consumers preferred IPC-3's virtual delivery, which increased their willingness to engage in and continue to attend sessions. The majority of SVs found that telehealth freed up valuable time and money needed for commuting to in-person sessions. This is consistent with findings that suggest telehealth is a facilitator to accessing care among Veterans (Mott, et al., 2015). However, some consumers were less satisfied, stating a preference for face-to-face delivery. These SVs believed that in-person services fostered a greater capacity for rapport and connection. Given these divergent preferences, it may behoove IPC-3 implementors—and other mental health care providers—to offer options for service delivery, allowing consumers to choose the best fit for their individual needs.

## Intervention Characteristics

Consumers held a variety of perceptions regarding the characteristics of IPC-3 as a psychosocial support intervention for SVs, which influenced several D&I outcome constructs.

First, SVs believed IPC-3 was effective in reducing their distress, as it equipped them with coping skills—including psychoeducation and stress-management techniques—which positively influenced Acceptability and Appropriateness. They found this aspect of IPC-3 appealing, as it enhanced their ability to self-manage current distress and equipped them with the

knowledge and skills to manage future challenges. Consumers also found that IPC-3 facilitated access to a variety of resources, providing a network of support located on campus (e.g., tutoring) and within their local communities (e.g., housing). Becoming aware of and knowing how to access resources to address challenges in daily living assisted SVs in decreasing associated distress. Additionally, after experiencing IPC-3 as an effective strategy for stress reduction, consumers believed the intervention acted as a treatment-orienting intervention, facilitating buy-in for future care because it "worked." In 2019, a one-site clinical trial assessed a brief version of IPT, which was adapted for SVs and delivered by clinicians. Findings indicated that this intervention reduced distress and facilitated long-term engagement with mental health services, when needed (Verdeli, et al., Manuscript in preparation). Based on the preferences of the consumers in the present study, those serving SVs may consider delivering psychosocial support that incorporates psychoeducation and coping skills for self-management of distress, as modeled in IPC-3.

Second, consumers noted IPC-3's adaptation for Veteran communities positively influenced Adoption and Acceptability. Most SVs expressed a preference for programs tailored to address the specific needs of their community (e.g., transition stress, disabilities). While the collegiate space offered many opportunities for expanded academic and career possibilities, SVs also discussed difficulties transitioning to student life, including feeling a lack of belonging. IPC-3 offered both peer and social support as well as facilitated access to resources to help SVs navigate their new setting, roles, and tasks—all of which provided stress relief. However, while the adaptation was seen as a facilitator to engagement, a minority of SVs described it as a potential barrier for those Veterans who desire separation from their prior military life.

Acknowledging that SVs are a heterogeneous group with divergent identities and preferences,

treatment developers and implementors may consider delivering services that directly address the unique identities, lived experiences, and challenges within Veteran communities, while also promoting the inclusion of and equity for each consumer.

Third, consumers described high levels of stigma surrounding accessing mental health services, which negatively influenced Adoption and Reach. Also reported by providers, SV perceptions about stigma were rooted in an aversion to help-seeking learned in military service and then reinforced by subsequent, negative experiences seeking and receiving care. Consumers highlighted that self-reliance and peak performance were prized in the military. Seeking help for a mental health "weakness" was discouraged, which has been mirrored in previous findings (Nash, 2009). Overall, consumers discussed feeling ashamed about seeking help, believing that being older, holding family roles, and experience in the military "should" have equipped them to handle the transition to academic life. When they did reach out for help, they reported trouble navigating large healthcare delivery systems (e.g., enrollment) and obtaining appointments with providers in both military and VA health care systems (e.g., scheduling)—all well-documented barriers to care (Cheney, et al., 2018). Taken together, these findings suggest that acknowledging and responding to the unique stigmas and barriers to care faced by SVs may be helpful in bridging the treatment gap for this population and as modeled in IPC-3. Specifically, treatment developers and implementors supporting SVs may consider offering services that seek to reduce stigma associated with accessing mental health services, such as utilizing non-stigmatizing language (e.g., "distress"), leveraging peers as providers, and locating services on campus preferences also espoused by providers in the present study.

Fourth, consumers held a variety of perceptions regarding IPC-3 as a time-limited intervention, which impacted Adoption, Acceptability, and Reach. Specifically, SVs noted that

the brief nature of the intervention positively influenced their intention to try IPC-3. Many lacked time in their daily schedules due to other roles and responsibilities (e.g., work, school, family). These competing obligations affected consumers' ability to engage in services, even if support was desired, which acted as a barrier to care. Unlike other evidence-based treatments, which run 12 to 16 weeks, IPC-3 was completed in three sessions. This was largely seen as desirable by SVs. However, not all consumers were satisfied with the intervention's brevity. A small number of SVs requested additional time with their PMs, with whom they had formed strong alliances. While the efficacy of IPC as a short-term treatment is established in the literature (Weissman, et al., 2014), Veteran retention in evidence-based psychotherapies for PTSD, specifically, is low in a variety of studies (Doren et al., 2017; Farmer, et al., 2020; Monson, et al., 2006; Schnurr, et al., 2007). A meta-analysis of dropout rates for PTSD outpatient treatment among Veterans showed attrition rates of roughly 36% across a variety of psychotherapies, including short- and long-term treatments (Goetter et al., 2015). Length of treatment was not specifically assessed as a factor in attrition in these previous studies. Thus, it is recommended that future research assess SV preferences for IPC-3 treatment length as well as how the length of treatment influences retention and attrition.

Fifth, consumers espoused a preference for interventions leveraging prosocial behaviors, which positively influenced Adoption and Appropriateness. SVs highlighted a value alignment based on their convictions about helping others, with a particular emphasis on assisting other Veterans—a value instilled while in service. Some disclosed they were hesitant to engage in IPC-3 to address their own distress. However, they felt compelled to participate, as they believed findings from the study could benefit future cohorts of SVs. Many consumers stated this as a primary motivator for completing the full course of IPC-3. This finding aligns with Joiner's

Eusocial Theory on suicide, which posits that Service members hold characteristics of "eusocial defenders," who view their roles as being the protecters and defenders of the greater community (Joiner, et al., 2016). Consequently, as a group, Veterans may have a biobehavioral tendency toward self-sacrifice for the benefit of the community at large. Thus, recognizing and leveraging the prosocial behaviors of SVs may be useful in the promotion of and access to IPC-3 and other mental health services delivered by peers.

Finally, consumers in this study reported social isolation and loneliness as barriers to care, both of which negatively affected Reach. SVs explained that being or feeling alone made reaching out difficult. This was compounded by the effects of the COVID-19 pandemic, which restricted physical access to campus life. Others discussed being geographically isolated from family and friends after moving away from home to pursue further education. In juxtaposition, SVs noted their satisfaction with IPC-3's emphasis on social support to provide distress relief, which positively influenced Acceptability and Appropriateness. Consumers said that consistently speaking with a PM and building interpersonal skills in sessions assisted them in feeling less distressed, breaking their social isolation. Social support is a key element of human life and is linked with positive physical and mental health effects (Cohen, et al., 2000; Kawachi & Berkman, 2001). Previous findings have suggested that, while SVs have trouble socially interacting with other students, they desire social connection and support (Olsen, et al., 2014). Moreover, despite high stress levels—including symptoms of PTSD and substance use—social support is a mitigating factor in SVs' psychological recovery as well as in academic adjustment (Campbell & Riggs, 2015; Love, et al., 2015; McAndrew, et al., 2019). This finding also aligns with the Interpersonal Theory of Suicide, which posits that suicidal behaviors develop when individuals experience thwarted belongingness (i.e., an unmet desire for connectedness) in

tandem with perceived burdensomeness (i.e., view of self as a burden to others) and access to lethal means (Joiner, 2005). Taken together with the findings of the present study, providers may consider leveraging interventions that prioritize and integrate social support for recovery, such as demonstrated in IPC-3, bolstering a sense of belonging and community for SVs.

#### Method Characteristics

The present study utilized deductive thematic analysis to examine the qualitative data. A deductive approach was selected as the study aims were focused on a specific theoretical interest—the D&I outcomes. This is juxtaposed with open ended approaches, such as inductive thematic analysis, whereby all emergent themes are identified and examined. Further, deductive thematic analysis allowed for the evaluation of data themes at multiple timepoints (i.e., pre- and post-intervention). As this was the first study of its kind, themes were assessed through a phenomenological lens—viewing participants' lived experiences in specific settings (i.e., SVs on campus) as the truth or observed phenomena—building a foundation of knowledge on which future studies could expand. However, this is not the only way in which to analyze the data. For example, future lines of inquire may utilize Consensual Qualitative Research (CQR)—an inductive approach—to further explore perceptions of IPC-3, peer support, mental health services, and the lived experiences of SVs on campus that were not captured by the deductive approach centered around the D&I constructs.

## **Limitations and Future Directions**

This exploratory study followed rigorous methods in both quantitative and qualitative collection and analysis. However, limitations regarding the applicability of findings beyond these samples should be considered.

First, providers and consumers self-selected into the study based on their interest in the IPC-3 program (e.g., peer providers, campus setting, psychosocial support). While the demographics of VITAL peers are unknown, the sample of SVs appears to roughly approximate the general population of SVs within the U.S. However, the participants were not randomly sampled, thus, may not reflect the general population of VITAL peers or SVs, whose perceptions surrounding Veteran experiences, adjustment to college life, mental health, peer support, and psychological support interventions may vary. This was an exploratory study, and future researchers may consider methods that would build and expand upon the knowledge accrued in the present study, such as utilizing a randomized design with a representative sample.

Second, the quantitative data rendered an inadequate sample to conduct a one-way, repeated-measures multivariate analysis of variance, which would have been useful to account for associations between the dependent variables (i.e., D&I outcome constructs). While the data analysis was modified to appropriately accommodate the size of both provider and consumer samples, it is possible that findings were minimized. Thus, results were interrupted with much care, relying heavily on a robust qualitative analysis. Future research utilizing the D&I survey measure should seek a sample size that allows for additional analysis.

Third, qualitative data were utilized adhering to the National Institutes of Mental Health best practices approach (Creswell et al., 2011). Further, a team-based, codebook-development approach was used to achieve consensus on identified codes and sub-codes as well as their definitions (MacQueen et al., 1998). Additionally, Cohen's Kappa—the most rigorous qualitative statistic available—was used to measure the degree of agreement between coders at the .60 level or higher, indicating substantial agreement (MacPhail et al., 2016). However, though the consistent qualitative coding team was uniformly trained and held a variety of identities (e.g.,

students, military expertise) to avoid false consensus, the team did not include Veterans or SVs. Future coding teams may find it useful to include these constituencies to guide lines of inquiry.

Fourth, qualitative data for SSs and PMs was consolidated for analysis, which allowed for perceptions surrounding the D&I outcome constructs to be assessed from the "provider" perspective, given the small sample (n= 2) of SSs. However, unique beliefs held by each distinctive group of supervisors and peers may have been marginalized in this consolidation. It may behoove future researchers to differentiate between the perceptions of both groups in relation to the D&I constructs as well as in their beliefs about help-seeking, peer mentorship, and mental health in general.

Fifth, providers were trained in IPC-3, and then consented for participant in the main study. Following consent, the pre-timepoint measures (i.e., pre- and post-intervention surveys, interviews) were administered. While this method allowed for PMs to acquire a basic understanding of the intervention, it is possible the initial training influenced perceptions surrounding the D&I constructs of interest. Future research might address this potential confounding variable, adjusting for this methodological consideration.

Sixth, the SV sample was recruited through the main study, which met inclusion criteria for moderate psychological distress. However, the principal investigator of the present study was blinded to participant identification due to involvement in both this research and the main study. Thus, the clinical characteristics of the sample are unknown beyond the inclusion criteria noted above. Future research might consider capturing these data, integrating information on diagnosis and/or symptom changes with potential alterations in perceptions surrounding D&I attitudes.

Seventh, the principal investigator of the present study was an IPT clinical practitioner and researcher. Further, they also held roles in the main study, including developing the IPC-3

manual and sitting in on weekly consultation meetings. While these overlapping identities were boundaried by the rigorous method set forth here, nonetheless, data analysis were filtered through these lived experiences. Future assessment efforts may consider utilizing a third-party evaluator to limit such potential biases.

Finally, this study was conducted during the COVID-19 pandemic. Thus, many students were taking classes remotely through their respective institutions of higher education. It is unknown the extent to which this change in setting may have influenced participants' awareness of services as well as their perception of IPC-3 or other mental health services offered "on" campus.

## **CHAPTER VI: CONCLUSION**

The goal of this study was to assess perceptions surrounding D&I science outcome constructs for providers (i.e., SSs, PMs) and consumers (i.e., SVs) of IPC-3, a psychosocial support intervention for SVs experiencing distress. IPC-3 was developed in recognition of the barriers to care encountered by SVs experiencing psychological distress, which impact their social and academic functioning. Acknowledging a treatment gap between those who need and receive care, IPC-3 was adapted for Veteran populations as a brief, non-stigmatizing psychosocial support service, teaching skills to manage current triggers and sustainers of distress. It leveraged peer support, a protective factor for mental health, and was delivered on campus, potentially reducing barriers to seeking care in formal healthcare settings. While a pilot study indicated that IPC-3 may be effective in reducing symptoms associated with PTSD and depression, D&I outcome constructs had not been used to assess this intervention nor other psychosocial support interventions for SVs to date. Thus, the present study sought to fill this gap in knowledge. Specifically, it examined potential barriers that, if removed, would help bridge the research-to-practice gap, increasing the likelihood that IPC-3 was ready for implementation in routine care settings, such as VAMCs.

Utilizing a mixed-method design, key D&I performance outcomes of Adoption,
Acceptability, Appropriateness, Feasibility, Reach, and Sustainability were measured among
both providers and consumers in an online survey as well as in semi-structured, key informant
interviews. To ensure the strengths and weaknesses of each individual method were balanced,
results were integrated using a concurrent triangulation design to compare findings of the
simultaneously collected and analyzed data. Among all groups (i.e., providers, consumers),
results from the survey indicated that participants did not experience a statistically significant

change in D&I outcome scores from pre- to post-intervention. Further analysis indicated a potential ceiling affect, whereby participant median scores began at or near the upper limit of the scale. As both providers and consumers self-selected to participate in IPC-3, the sample may have included individuals who were already committed to the intervention or to mental health services in general. However, the key informant interviews offered a more complex and nuanced view of the D&I constructs.

Among SSs and PMs, providers clarified barriers and facilitators influencing their intentions to try and to employ IPC-3; factors influencing satisfaction with IPC-3 as well as learning to provide it; perceptions of IPC-3's fit for SVs experiencing distress, including its value alignment and impact on distress; insight to providers' preparedness to provide IPC-3 and delivery by peers on campus via the VITAL Program; and context to barriers to accessing mental health care in general and IPC-3, specifically. As consumers, SVs discussed facilitators and barriers affecting their intentions to both try IPC-3 and continue participating in it at the intervention, provider, and consumer levels; factors influencing IPC-3's agreeableness and palatability; perceptions of IPC-3's fit for managing distress; factors relating to IPC-3's implementation for SVs via the VITAL Program on campus by peers; and finally, barriers to accessing IPC-3 at the environmental and individual levels.

The findings of this exploratory study provide useful information to assist treatment developers and providers supporting SVs experiencing psychological distress. Specific to providers, considerations should be made regarding the selection and training of peers as well as for the clinical supervision and implementation of IPC-3. For consumers, results indicate attention to specific characteristics of enrollment processes, providers, setting, and intervention that may improve D&I outcomes.

Taken together, both providers and consumers in the present study expressed a preference for psychosocial support services adapted for the SV community, delivered by peers who hold Veteran cultural competencies. They also desired services to be located accessibly and conveniently, such as on campus, shifting the help-seeking paradigm toward proactive engagement. Further, providers and consumers encouraged the use of non-stigmatizing language, moving away from diagnostic labels, and the incorporation of tools for self-directed management of distress. Finally, participants in this study advocated for services that integrate consumercentered, trauma-informed approaches to care, fostering collaborative care with mutability in treatment. An overview of these preferences for services can be found in Table 45 below.

**Table 45**Provider and Consumer Preferences for Service Provision

## Preferences

- Services that address the unique identities and challenges of the Veteran community
- Support delivered by peer providers
- Providers who hold Veteran cultural competencies
- Services that are accessibly and conveniently located on campus
- Paradigm shift toward proactive engagement and enrollment in services
- Use of non-stigmatizing language and movement away from diagnostic labels
- Incorporation of psychoeducation and coping skills for self-directed care
- Enact principles of consumer-centered, trauma-informed approaches to care

#### REFERENCES

- Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*(1), 4–23. https://doi.org/10.1007/s10488-010-0327-7
- Alegría, M., Chatterji, P., Wells. K., Cao, Z., Chen, C., Takeuchi, D., Jackson, J., & Meng, X. (2008). Disparity in depression treatment among racial and ethnic minority populations in the United States. *Psychiatric Services*, *59*(11), 1264–1272. https://doi.org/10.1176/appi.ps.59.11.1264
- Allen, T. D. (2003). Mentoring others: A dispositional and motivational approach. *Journal of Vocational Behavior*, 62(1), 134–154. https://doi.org/10.1016/S0001-8791(02)00046-5
- Barry, A. E., Whiteman, S. D., & MacDermid Wadsworth, S. (2014). Student service members/veterans in higher education: A systematic review. *Journal of Student Affairs Research and Practice*, *51*(1), 30–42. https://doi.org/10.1515/jsarp-2014-0003
- Beidas, R. S., & Kendall, P. C. (2010). Training therapists in evidence-based practice: A critical review of studies from a systems-contextual perspective. *Clinical Psychology: Science and Practice*, 17(1), 1–30. https://doi.org/10.1111/j.1468-2850.2009.01187.x
- Blais, R. K., & Renshaw, K. D. (2013). Stigma and demographic correlates of help-seeking intentions in returning service members. *Journal of Traumatic Stress*, 26(1), 77–85. https://doi.org/10.1002/jts.21772
- Bleiberg, K. L., & Markowitz, J. C. (2005). A pilot study of interpersonal psychotherapy for posttraumatic stress disorder. *American Journal of Psychiatry*, *162*(1), 181–183. https://doi.org/10.1176/appi.ajp.162.1.181

- Blosnich, J. R., Kopacz, M. S., McCarten, J., & Bossarte, R. M. (2015). Mental health and self-directed violence among student service members/veterans in postsecondary education.

  \*Journal of American College Health, 63(7), 418–426.\*

  https://doi.org/10.1080/07448481.2014.931282
- Bolton, P., Bass, J., Neugebauer, R., Verdeli, H., Clougherty, K. F., Wickramaratne, P., Speelman, L., Ndogoni, L., & Weissman, M. (2003). Group interpersonal psychotherapy for depression in rural Uganda: A randomized controlled trial. *JAMA*, 289(23), 3117–3124. https://doi.org/10.1001/jama.289.23.3117
- Bonar, E. E., Bohnert, K. M., Walters, H. M., Ganoczy, D., & Valenstein, M. (2015). Student and nonstudent National Guard service members/veterans and their use of services for mental health symptoms. *Journal of American College Health*, 63(7), 437–446. https://doi.org/10.1080/07448481.2014.975718
- Boothroyd, R. I., & Fisher, E. B. (2010). Peers for progress: Promoting peer support for health around the world. *Family Practice*, 27(suppl\_1), i62–i68. https://doi.org/10.1093/fampra/cmq017
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Brownson, R. C., Colditz, G. A., & Proctor, E. K. (Eds.). (2017). Dissemination and implementation research in health: Translating science to practice (2nd ed.). Oxford University Press. https://doi.org/10.1093/oso/9780190683214.001.0001
- Bryan, C. J., Bryan, A. O., Hinkson, K., Jr., Bichrest, M., & Ahern, D. A. (2014). Depression, posttraumatic stress disorder, and grade point average among student servicemembers

- and veterans. *Journal of Rehabilitation Research and Development*, *51*(7), 1035–1046. https://doi.org/10.1682/JRRD.2014.01.0012
- Campbell, R., & Riggs, S. A. (2015). The role of psychological symptomatology and social support in the academic adjustment of previously deployed student veterans. *Journal of American College Health*, 63(7), 473–481. https://doi.org/10.1080/07448481.2015.1040408
- Cheney, A. M., Koenig, C. J., Miller, C. J., Zamora, K., Wright, P., Stanley, R., Fortney, J., Burgess, J. F., & Pyne, J. M. (2018). Veteran-centered barriers to VA mental healthcare services use. *BMC Health Services Research*, *18*(1), 1–14. https://doi.org/10.1186/s12913-018-3346-9
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, *59*(8), 676–684. https://doi.org/10.1037/0003-066X.59.8.676
- Coll, J. E., Weiss, E. L., Draves, P., & Dyer, D. (2012). The impact of military cultural awareness, experience, attitudes, and education on clinician self-efficacy in the treatment of veterans. *Journal of International Continuing Social Work Education*, *15*(1), 39–48.
- Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Clegg Smith, K. (2011). Best practices for mixed methods research in the health sciences. National Institutes of Health, Office of Behavioral and Social Sciences Research.

  https://obssr.od.nih.gov/sites/obssr/files/Best\_Practices\_for\_Mixed\_Methods\_Research.pdf
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). An expanded typology for classifying mixed methods research into designs. In A. Tashakkori & C.

- Teddlie (Eds.), Handbook of mixed methods in social and behavioral research (pp. 209–240). Sage.
- Cronise, R., Teixeira, C., Rogers, E. S., & Harrington, S. (2016). The peer support workforce:

  Results from a national survey. *Psychiatric Rehabilitation Journal*, *39*, 211–221.

  https://doi.org/10.1037/prj0000222
- Daley, J. (1999). Understanding the military as an ethnic identity. In C. Munson & J. Daley (Eds.), *Social work practice in the military* (pp. 291–303). New York, NY: Routledge.
- Doran, J. M., Pietrzak, R. H., Hoff, R., & Harpaz-Rotem, I. (2017). Psychotherapy utilization and retention in a national sample of veterans with PTSD. *Journal of Clinical Psychology*, 73(10), 1259–1279. https://doi.org/10.1002/jclp.22445
- Drebing, C. E., Reilly, E., Henze, K. T., Kelly, M., Russo, A., Smolinsky, J., Gorman, J., & Penk, W. E. (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
- Elliott, M., Gonzalez, C., & Larsen, B. (2011). U.S. military veterans transition to college: Combat, PTSD, and alienation on campus. *Journal of Student Affairs Research and Practice*, 48(3), 279–296. https://doi.org/10.2202/1949-6605.6293
- Elnitsky, C. A., Blevins, C., Findlow, J. W., Alverio, T., & Wiese, D. (2018). Student veterans reintegrating from the military to the university with traumatic injuries: How does service use relate to health status? *Archives of Physical Medicine and Rehabilitation*, 99(2), S58–S64. https://doi.org/10.1016/j.apmr.2017.10.008

- Farmer, C. C., Rossi, F. S., Michael, E. M., & Kimerling, R. (2020). Psychotherapy utilization, preferences, and retention among women veterans with post-traumatic stress disorder.

  Women's Health Issues, 30(5), 366–373. https://doi.org/10.1016/j.whi.2020.06.003
- Forgey, M. A., & Young, S. L. (2014). Increasing military social work knowledge: An evaluation of learning outcomes. *Health & Social Work*, *39*(1), 7–15. https://doi.org/10.1093/hsw/hlu003
- Fortney, J. C., Curran, G. M., Hunt, J. B., Cheney, A. M., Lu, L., Valenstein, M., & Eisenberg, D. (2016). Prevalence of probable mental disorders and help-seeking behaviors among veteran and non-veteran community college students. *General Hospital Psychiatry*, 38, 99–104. https://doi.org/10.1016/j.genhosppsych.2015.09.007
- Gates, L. B., & Akabas, S. H. (2007). Developing strategies to integrate peer providers into the staff of mental health agencies. *Administration and policy in mental health and mental health services research*, *34*, 293–306. https://doi.org/10.1007/s10488-006-0109-4
- Gillard, S., Foster, R., White, S., Barlow, S., Bhattacharya, R., Binfield, P., Eborall, R., Faulkner,
  A., Gibson, S., Goldsmith, L. P., Simpson, A., Lucock, M., Marks, J., Morshead, R.,
  Patel, S., Priebe, S., Repper, J., Rinaldi, M., Ussher, M. & Worner, J. (2022). The impact of working as a peer worker in mental health services: A longitudinal mixed methods study. *BMC Psychiatry*, 22(1), 373. https://doi.org/10.1186/s12888-022-03999-9
- Gillard, S., Gibson, S. L., Holley, J., & Lucock, M. (2015). Developing a change model for peer worker interventions in mental health services: a qualitative research study. *Epidemiology* and psychiatric sciences, 24(5), 435–445. https://doi.org/10.1017/S2045796014000407
- Glasgow, R. E. (2007, September 10). *The RE-AIM model for planning, evaluation and reporting on implementation and dissemination research* [Conference presentation]. NIH

- Conference on Building the Science of Dissemination and Implementation in the Service of Public Health, Bethesda, MD, United States.
- Greden, J. F., Valenstein, M., Spinner, J., Blow, A., Gorman, L. A., Dalack, G. W., Marcus, S., & Kees, M. (2010). Buddy-to-Buddy, A citizen soldier peer support program to counteract stigma, PTSD, depression, and suicide. *Annals of the New York Academy of Sciences*, 1208(1), 90–97. https://doi.org/10.1111/j.1749-6632.2010.05719.x
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274. https://doi.org/10.3102/01623737011003255
- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, *3*(1), 42–55. https://doi.org/10.1177/160940690400300104
- Hammett, P. J., Japuntich, S. J., Sherman, S. E., Rogers, E. S., Danan, E. R., Noorbaloochi, S.,
  El-Shahawy, O., Burgess, D. J., Fu, S. S. (2021). Proactive tobacco treatment for veterans with posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy*, 13(1), 114–122.
- Haroz, E. E., Bolton, P., Nguyen, A. J., Lee, C., Bogdanov, S., Bass, J., Singh, N. S., Doty, S. B., & Murray, L. (2019). Measuring implementation in global mental health: Validation of a pragmatic implementation science measure in eastern Ukraine using an experimental vignette design. *BMC Health Services Research*, 19(1), 1–11.
  https://doi.org/10.1186/s12913-019-4097-y
- Herschell, A. D., Kolko, D. J., Baumann, B. L., & Davis, A. C. (2010). The role of therapist training in the implementation of psychosocial treatments: A review and critique with

- recommendations. *Clinical Psychology Review*, *30*(4), 448–466. https://doi.org/10.1016/j.cpr.2010.02.005
- Hoge, C. W. (2011). Interventions for war-related posttraumatic stress disorder: Meeting veterans where they are. *JAMA*, *306*(5), 549–551. https://doi.org/10.1001/jama.2011.1096
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004).

  Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, *351*(1), 13–22. https://doi.org/10.1056/NEJMoa040603
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis.

  \*Qualitative Health Research, 15(9), 1277–1288.

  https://doi.org/10.1177/1049732305276687
- Jain, S., McLean, C., Adler, E. P., & Rosen, C. S. (2016). Peer support and outcome for Veterans with posttraumatic stress disorder (PTSD) in a residential rehabilitation program.
  Community Mental Health Journal, 52(8), 1089–1092. https://doi.org/10.1007/s10597-015-9982-1
- Johnson, D. R., & Creech, J. C. (1983). Ordinal measures in multiple indicator models: A simulation study of categorization error. *American Sociological Review*, 48(3), 398–407. https://doi.org/10.2307/2095231
- Joiner, T. E. (2005). Why people die by suicide. Harvard University Press.
- Joiner, T. E., Hom, M. A., Hagan, C. R., & Silva, C. (2016). Suicide as a derangement of the self-sacrificial aspect of eusociality. *Psychological Review*, *123*(3), 235. https://psycnet.apa.org/doi/10.1037/rev0000020

- Karlin, B. E., & Cross, G. (2014). From the laboratory to the therapy room: National dissemination and implementation of evidence-based psychotherapies in the US
   Department of Veterans Affairs Health Care System. *American Psychologist*, 69(1), 19–33. https://doi.org/10.1037/a0033888
- Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban health*, 78, 458–467. https://doi.org/10.1093/jurban/78.3.458
- Kees, M., Risk, B., Meadowbrooke, C., Nellett, T., & Spinner, J. (2017). Peer Advisors for Veteran Education (PAVE): Implementing a sustainable peer support program for student veterans on college campuses. *Metropolitan Universities*, 28(3), 30–49. https://doi.org/10.18060/21541
- Klaw, E., Diaz, J., Avalos, R., & Li, K. (2017). VET Connect: An emerging peer leadership program for Veterans on campus. *Journal of Military, Veteran, and Family Health*, *3*(1), 70–76. https://doi.org/10.3138/jmvfh.4116
- Kim, P. Y., Britt, T. W., Klocko, R. P., Riviere, L. A., & Adler, A. B. (2011). Stigma, negative attitudes about treatment, and utilization of mental health care among soldiers. *Military Psychology*. 23:65–81. https://doi.org/10.1080/08995605.2011.534415
- Kim, P. Y., Thomas, J. L., Wilk, J. E., Castro, C. A., & Hoge, C. W. (2010). Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatric Services*, 61(6), 582–588.
  http://dx.doi.org/10.1176/appi.ps.61.6.582
- Love, S. M., Levin, A., & Park, H. S. (2015). Exploring student service members/veterans social support and campus climate in the context of recovery. *Social Sciences*, *4*(4), 909–924. https://doi.org/10.3390/socsci4040909

- Lunasco, T. K., Goodwin, E. A., Ozanian, A. J., & Loflin, E. M. (2010). One shot-one kill: A culturally sensitive program for the warrior culture. *Military Medicine*, *175*(7), 509–513. 10.7205/milmed-d-09-00182
- MacPhail, C., & Khoza, N., Abler, L., & Ranganathan, M. (2016). Process guidelines for establishing intercoder reliability in qualitative studies. *Qualitative Research*, *16*(2), 198–212. https://doi.org/10.1177/1468794115577012
- MacQueen, K., McLellan, E., Kay, K., & Milstein, B. (1998). Codebook development for teambased qualitative analysis. *Cultural Anthropology Methods*, *10*(2), 31–36. https://doi.org/10.1177/1525822X980100020301
- Mancini, M. A. (2018). An exploration of factors that effect the implementation of peer support services in community mental health settings. *Community Mental Health Journal*, *54*, 127–137. https://doi.org/10.1007/s10597-017-0145-4
- Markel, N., Trujillo, R., Callahan, P., & Marks, M. (2010). Resiliency and retention in veterans returning to college: Results of a pilot study [Paper presentation]. Veterans in Higher Education Conference: Listening, Responding, Changing for Student Success, Tucson, AZ, United States. https://doi.org/10.1037/e689352011-001
- Mastrocola, S. S., & Flynn, D. P. (2017). Peer emotional support, perceived self-efficacy, and mental health morbidities among student-veterans at a public university. *Journal of Continuing Higher Education*, 65(3), 187–198.
  https://doi.org.10.1080/07377363.2017.1368776
- McAndrew, L. M., Slotkin, S., Kimber, J., Maestro, K., Phillips, L. A., Martin, J. L., ... & Eklund, A. (2019). Cultural incongruity predicts adjustment to college for student

- veterans. *Journal of Counseling Psychology*, 66(6), 678–689. https://psycnet.apa.org/doi/10.1037/cou0000363
- McCaslin, S. E., Leach, B., Herbst, E., & Armstrong, K. (2013). Overcoming barriers to care for returning veterans: Expanding services to college campuses. *Journal of Rehabilitation*\*Research and Development, 50(8), VII–XIV.
- McHugh, R. K., & Barlow, D. H. (2010). The dissemination and implementation of evidence-based psychological treatments: a review of current efforts. *American Psychologist*, 65(2), 73–84. https://doi.org/10.1037/a0018121
- Milliken, C. S., Auchterlonie, J. L., & Hoge, C. W. (2007). Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *JAMA*, 298(18), 2141–2148. https://doi.org/10.1001/jama.298.18.2141
- Mirbahaeddin, E., & Chreim, S. (2022). A narrative review of factors influencing peer support role implementation in mental health systems: implications for research, policy and practice. *Administration and Policy in Mental Health and Mental Health Services*\*Research\*, 49(4), 596–612. https://doi.org/10.1007/s10488-021-01186-8
- Mobbs, M. C., & Bonanno, G. A. (2018). Beyond war and PTSD: The crucial role of transition stress in the lives of military veterans. *Clinical Psychology Review*, *59*, 137–144. https://doi.org/10.1016/j.cpr.2017.11.007
- Monson, C. M., Schnurr, P. P., Resick, P. A., Friedman, M. J., Young-Xu, Y., & Stevens, S. P. (2006). Cognitive processing therapy for veterans with military-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 74(5), 898–907. https://doi.org/10.1037/0022-006X.74.5.898

- Mott, J. M., Grubbs, K. M., Sansgiry, S., Fortney, J. C., & Cully, J. A. (2015). Psychotherapy utilization among rural and urban veterans from 2007 to 2010. *The Journal of Rural Health*, 31(3), 235–243. https://doi.org/10.1111/jrh.12099
- Murray, L. K., Dorsey, S., Bolton, P., Jordans, M. J., Rahman, A., Bass, J., & Verdeli, H. (2011).

  Building capacity in mental health interventions in low resource countries: An apprenticeship model for training local providers. *International Journal of Mental Health Systems*, *5*(1), 1–12. https://doi.org/10.1186/1752-4458-5-30
- Murray, L. K., Tol, W., Jordans, M., Zangana, G. S., Amin, A. M., Bolton, P., Bass, J., Bonilla-Escobar, F. J., & Thornicroft, G. (2014). Dissemination and implementation of evidence based, mental health interventions in post conflict, low resource settings. *Intervention*, 12(Suppl 1), 94–112. https://doi.org/10.1097%2FWTF.0000000000000000000
- Nash, W. P., Silva, C., & Litz, B. (2009). The historic origins of military and veteran mental health stigma and the stress injury model as a means to reduce it. *Psychiatric Annals*, 39(8), 789–794. DOI: https://doi.org/10.3928/00485713-20090728-05
- Norman, S. B., Rosen, J., Himmerich, S., Myers, U. S., Davis, B., Browne, K. C., & Piland, N. (2015). Student Veteran perceptions of facilitators and barriers to achieving academic goals. *Journal of Rehabilitation Research & Development*, 52(6), 701–712. https://doi.org/10.1682/jrrd.2015.01.0013
- Olsen, T., Badger, K., & McCuddy, M. D. (2014). Understanding the student veterans' college experience: an exploratory study. *U.S. Army Medical Department Journal*.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage Publications, Inc.

- Park, S. G., Chang, B. H., Mueller, L., Resnick, S. G., & Eisen, S. V. (2016). Predictors of employment burnout among VHA peer support specialists. *Psychiatric Services*, 67(10), 1109–1115. https://doi.org/10.1176/appi.ps.201500239
- Proctor, E. K., & Brownson, R. C. (2012). Measurement issues in dissemination and implementation research. In R. C. Brownson, G. A. Colditz, & E. K. Proctor (Eds.), 

  Dissemination and implementation research in health: Translating science to practice 
  (pp. 261–280). Oxford University Press.

  https://doi.org/10.1093/acprof:oso/9780199751877.001.0001
- Proctor, E. K., Landsverk, J., Aarons, G., Chambers, D., Glisson, C., & Mittman, B. (2009).

  Implementation research in mental health services: An emerging science with conceptual, methodological, and training challenges. *Administration and Policy in Mental Health and Mental Health Services Research*, *36*(1), 24–34. https://doi.org/10.1007/s10488-008-0197-4
- Proctor, E. K., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 65–76. https://doi.org/10.1007/s10488-010-0319-7
- Pyne, J. M., Kelly, P. A., Fischer, E. P., Miller, C. J., Wright, P., Zamora, K., ... & Fortney, J. C. (2019). Development of a perceived access inventory for community care mental healthcare Services for Veterans. *Military Medicine*, *184*(7–8), e301–e308. https://doi.org/10.1093/milmed/usy429

- Rabin, B. A., Brownson, R. C., Haire-Joshu, D., Kreuter, M. W., & Weaver, N. L. (2008). A glossary for dissemination and implementation research in health. *Journal of Public Health Management and Practice*, *14*(2), 117–123. https://doi.org/10.1097/01.phh.0000311888.06252.bb
- Ray, R. D., & Webster, R. (2010). Group interpersonal psychotherapy for veterans with posttraumatic stress disorder: A pilot study. *International Journal of Group Psychotherapy*, 60(1), 131–140. https://doi.org/10.1521/ijgp.2010.60.1.131
- Rogers, E. M. (1995). Diffusion of innovations (4th ed.). The Free Press.
- Rudd, M. D., Goulding, J., & Bryan, C. J. (2011). Student veterans: A national survey exploring psychological symptoms and suicide risk. *Professional Psychology: Research and Practice*, 42(5), 354–360. https://doi.org/10.1037/a0025164
- Rumann, C., & Hamrick, F. A. (2010). Student Veterans in transition: Re-enrolling after war zone deployments. *The Journal of Higher Education*, 81(4), 431–458. https://doi.org/10.1080/00221546.2010.11779060
- Rumann, C., Rivera, M., & Hernandez, I. (2011). Student veterans and community colleges. *New Directions for Community Colleges*, (155), 51–58. https://doi.org/10.1002/cc.457
- Rye, C. B., & Kimberly, J. R. (2007). The adoption of innovations by provider organizations in health care. *Medical Care Research and Review*, 64(3), 235–278. https://doi.org/10.1177/1077558707299865
- Schnurr, P. P., Friedman, M. J., Engel, C. C., Foa, E. B., Shea, M. T., Chow, B. K., Resick, P. A., Thurston, V., Orsillo, S. M., Haug, R., Turner, C., & Bernardy, N. (2007). Cognitive behavioral therapy for posttraumatic stress disorder in women: A randomized controlled trial. *JAMA*, 297(8), 820–830. https://doi.org/10.1001/jama.297.8.820

- Shepardson, R. L., Johnson, E. M., Possemato, K., Arigo, D., & Funderburk, J. S. (2018).

  Perceived barriers and facilitators to implementation of peer support in Veterans Health

  Administration Primary Care–Mental Health Integration settings. *Psychological Services*,

  16(3), 433–444. https://doi.org/10.1037/ser0000242
- Simpson, A., Oster, C., & Muir-Cochrane, E. (2018). Liminality in the occupational identity of mental health peer support workers: A qualitative study. *International Journal of Mental Health Nursing*, 27(2), 662–671. https://doi.org/10.1111/inm.12351
- Solomon, P. (2004). Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal*, 27(4), 392–401. https://doi.org/10.2975/27.2004.392.401
- Student Veterans of America. (2021). The 2020 SVA census survey: Student Veteran general breakdowns. https://studentveterans.org/wp-content/uploads/2021/04/SVA-Census-2020-Report.pdf
- Sweeney, A., Filson, B., Kennedy, A., Collinson, L., & Gillard, S. (2018). A paradigm shift:

  Relationships in trauma-informed mental health services. *BJPsych Advances*, 24(5), 319–333. https://doi.org/10.1192/bja.2018.29
- Swenson, L. M., Nordstrom, A., & Hiester, M. (2008). The role of peer relationships in adjustment to college. *Journal of College Student Development*, 49(6), 551–567. https://doi.org/10.1353/csd.0.0038
- Tanielian, T., Farris, C., Epley, C., Farmer, C. M., Robinson, E., Engel, C. C., & Jaycox, L. H. (2014). Ready to serve. *Community-based provider capacity to deliver culturally competent, quality mental health care to veterans and their families*. RAND Corporation, 10.

- Tabak, R. G., Khoong, E. C., Chambers, D. A., & Brownson, R. C. (2012). Bridging research and practice: Models for dissemination and implementation research. *American Journal of Preventive Medicine*, 43(3), 337–350. https://doi.org/10.1016/j.amepre.2012.05.024
- Tanielian, T. L., Tanielian, T., & Jaycox, L. (2008). *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery* (Vol. 1). Rand Corporation.
- Tanielian, T., Woldetsadik, M. A., Jaycox, L. H., Batka, C., Moen, S., Farmer, C., & Engel, C.
  C. (2016). Barriers to engaging service members in mental health care within the US military health system. *Psychiatric Services*, 67(7), 718–727.
  https://doi.org/10.1176/appi.ps.201500237
- Terrion, J. L., & Leonard, D. (2007). A taxonomy of the characteristics of student peer mentors in higher education: Findings from a literature review. *Mentoring & Tutoring*, 15(2), 149–164. https://doi.org/10.1080/13611260601086311
- U.S. Department of Health and Human Services. (2016). National projections of supply and demand for selected behavioral health practitioners: 2013–2025. Health Resources and Services Administration, Bureau of Health Workforce. https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/behavioral-health-2013-2025.pdf
- U.S. Department of Veterans Affairs. (2019). *Benefits for Veterans education*. Veterans Benefits Administration. https://www.benefits.va.gov/REPORTS/abr/docs/2019-education.pdf
- U.S. Department of Veterans Affairs. (2020). Characteristics of Student Veterans: VA college toolkit. https://www.mentalhealth.va.gov/student-veteran/docs/VAM-061-VITAL-Characteristics-of-Student-Veterans-1-0-508.pdf

- Verdeli, H., Clougherty, K., Onyango, G., Lewandowski, E., Speelman, L., Betancourt, T. S., Neugebauer, R., Stein, T. R., & Bolton, P. (2008). Group interpersonal psychotherapy for depressed youth in IDP camps in Northern Uganda: Adaptation and training. *Child and Adolescent Psychiatric Clinics of North America*, 17(3), 605–624. https://doi.org/10.1016/j.chc.2008.03.002
- Verdeli, H., Hinrichsen, G., Branson, Y., Rosa, D., Cheng, B., Scott-McLaughlin, R., Mobbs,
  M., Arenz, J. M., & Lake, K. N. (2021). Three-session interpersonal psychotherapy as a promising symptom reduction strategy with Student Veterans [Manuscript in preparation].
  Department of Clinical Psychology, Teachers College, Columbia University.
- Vogt, D. (2011). Mental health-related beliefs as a barrier to service use for military personnel and veterans: A review. *Psychiatric Services*, 62(2), 135–142. https://doi.org/10.1176/ps.62.2.pss6202\_0135
- Washington, D. L., Farmer, M. M., Mor, S. S., Canning, M., & Yano, E. M. (2015). Assessment of the healthcare needs and barriers to VA use experienced by women veterans: Findings from the national survey of women Veterans. *Medical Care*, *53*(4), S23–S31. https://www.jstor.org/stable/26417957
- World Health Organization and Columbia University. (2016). *Group interpersonal therapy (ipt)* for depression. Geneva, WHO.
- Weissman, M., Markowitz, J., & Klerman, G. L. (2007). *The clinician's quick guide to interpersonal psychotherapy*. Oxford University Press.
- Weissman, M., & Verdeli, H. (2012). Interpersonal psychotherapy: Evaluation, support, triage.

  \*\*Clinical Psychology & Psychotherapy, 19(2), 106–112.\*\*

  https://doi.org/10.1002%2Fcpp.1775

- Weissman, M. M., Hankerson, S. H., Scorza, P., Olfson, M., Verdeli, H., Shea, S., Lantgua, R., & Wainberg, M. (2014). Interpersonal counseling (IPC) for depression in primary care. American Journal of Psychotherapy, 68(4), 359–383. https://doi.org/10.1176%2Fappi.psychotherapy.2014.68.4.359
- Whiteman, S. D., Barry, A. E., Mroczek, D. K., & Macdermid Wadsworth, S. (2013). The development and implications of peer emotional support for student service members/veterans and civilian college students. *Journal of Counseling Psychology*, 60(2), 265–278. https://doi.org/10.1037/a0031650
- Wurster, K. G., Rinaldi, A. P., Woods, T. S., & Liu, W. M. (2013). First-generation student veterans: Implications of poverty for psychotherapy. *Journal of Clinical Psychology*, 69(2), 127–137. https://doi.org/10.1002/jclp.21952
- 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

APPENDIX A: Student Veteran Demographic Overview and Comparisons

Unfortunately, there is no national database on the demographics of VA VITAL peers or SVs to which the sample in the present study can be compared. However, SVA conducts a census of its SV members annually. Using this data, the sample of SVs in both the survey and key informant interviews roughly approximates the general population. For example, the majority of SVs are between the ages of 24 and 40, and over 90% are 25 or older (U.S. Department of Veterans Affairs, 2020; SVA, 2021). In comparison, the mean ages of SVs in the survey and key informant interviews were 31.33 and 28.29, respectively. Sixty-nine percent of the general SV population identify as men and 31% identify as women (SVA, 2021). In the survey, over 83% identified as men, while roughly 17% identified as women; in the key informant interviews, 88.2% identified as men and 11.8% as women. Over 90% of SVs identify as straight (SVA, 2021). In this study, all SVs identified as heterosexual. In the general SV population, 55% identified as White, 18% as Hispanic/Latino, 13% as Black, 8% as Asian/Pacific Islander, 3% as Native American/Alaskan Native, 2% as Other, and 1% as Middle Eastern (SVA, 2021). While the SV sample in the present study roughly mirrored these demographics, there were some differences. SVs identifying as White were overrepresented in the survey (66.7%) and underrepresented in the key informant interviews (37.5%). In the general population of SVs, 53% were married, 31% single, 12% in a committed relationship, 3% separated, and 1% preferred not to say (SVA, 2021). In this study, over 50% of the sample were single. As a group, 53% of SVA Consensus respondents nationwide have children and 46% do not, with the remaining preferring not to say (SVA, 2021). In comparison, a larger portion of SVs in the survey and key informant interviews reported having children, 75% and 92.3%, respectively.

As the largest of the military services, 53% of SVs in the SVA annual survey were in the Army, 26% in the Navy, 19% in the Air Force, and 2% in the Coast Guard (SVA, 2021). While the sample largely mirrored these demographics, the SVA Consensus did not include any consumers from the U.S. Marine Corps, one of the four major Service Branches. The survey and key informant interviews of the present study consisted of 25% and 23.5% Marines, respectively. Ninety percent of the SVA Consensus population were made up of members of the enlisted ranks, with 10% comprising non-enlisted members (i.e., non-commissioned officers, warrant officers, commissioned officers) (SVA, 2021). The study sample closely paralleled this breakdown, with 91.7% of survey and 88.2% of key informant interview participants reporting to be among the enlisted ranks. Table 42 below provides a comparison of demographics.

Table A1

Student Veterans: Demographic Comparisons

Characteristic	National Survey	Survey	Key Informant
	Percentage	Percentage	Interview Percentage
	(SVA, 2021)		
Age	90% 25≥years old	31.33 (M)	28.39 (M)
Gender Identity			
Men	69%	83.3%	88.2%
Women	31%	16.7%	11.8%
Sex			
Heterosexual	91%	100%	100%
LGBTQ	9%	0%	0%
Race/Ethnicity			
White	55%	66.7%	37.5%
Hispanic/Latino	18%	8.3%	18.8%
Black	13%	8.3%	12.5%
Asian/Pacific	8%	0.0%	18.8%
Islander			
Native American/	3%	16.7%	12.5%
Alaskan Native			
Other	2%	0.0%	0.0%
Middle Eastern	1%	0.0%	0.0%
Marital Status			
Married	53%	16.7%	11.8%

Characteristic	National Survey	Survey	Key Informant
	Percentage	Percentage	Interview Percentage
	(SVA, 2021)		
Single	31%	50%	52.9%
Partnered	12%	0.0%	17.6%
Divorced/	3%	33.3.%	17.6%
Separated			
Other	1%	0.0%	0.0%
Children			
Yes	53%	75%	92.3%
No	46%	25%	7.7%
Military Service			
Branch			
Army	53%	41.7%	52.9%
Navy	26%	25%	17.6%
Air Force	19%	8.3%	5.9%
Coast Guard	2%	0%	0%
Marine Corps	0%	25%	23.5%
Highest Rank at			
Discharge			
Enlisted	90%	91.7%	88.2%
Non-Enlisted	10%	8.3%	11.8%

## APPENDIX B: Construct Correlations at the Pre-Intervention Timepoint

Kendall's Tau-b correlation was run to determine the relationship between the construct scores at the pre-intervention timepoint for providers. Overall, the constructs were not correlated. However, there was a strong positive association between Adoption and Appropriateness scores, which was statistically significant,  $\tau b = .76$ , p = .01.

**Table B1**Provider: Construct Correlations

### **Correlations**

			PreAdoption	PreAcceptability	PreAppropriateness	PreFeasibility	PreReach
Kendall's	PreAcceptability	Correlation	.566				
Tau-b		Coefficient					
		Sig. (2-tailed)	.058				
		N	8				
PreAppropriateness	PreAppropriateness	Correlation Coefficient	.764**	.519			
		Sig. (2-tailed)	.009	.079			
		N	8	8			
	PreFeasibility	Correlation	.444	.264	.546		
		Coefficient					
		Sig. (2-tailed)	.132	.376	.061		
		N	8	8	8		
PreRead	PreReach	Correlation	.333	.098	.143	.143	
		Coefficient					
		Sig. (2-tailed)	.293	.761	.652	.652	
		N	7	7	7	7	

PreSustainability	Correlation	036	222	.071	.473	048
	Coefficient					
	Sig. (2-tailed)	.901	.451	.805	.105	.881
	N	8	8	8	8	7

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

For consumers, a Kendall's Tau-b correlation was run to determine the relationship between the construct scores at the preintervention timepoint. As with providers, the majority of constructs among SVs were not correlated. However, there was a strong, positive association between Feasibility and Appropriateness scores, which was statistically significant,  $\tau b = .69$ , p = .02.

Table B2

Consumer: Construct Correlations

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			PreAdoption	PreAcceptability	PreAppropriateness	PreFeasibility
Kendall's	PreAcceptability	Correlation	.371			
Tau-b		Coefficient				
		Sig. (2-tailed)	.209			
		N	8			
	PreAppropriateness	Correlation	222	.143		
		Coefficient				
		Sig. (2-tailed)	.451	.621		
		N	8	8		
	PreFeasibility	Correlation	113	.327	.691*	
		Coefficient				
	_	Sig. (2-tailed)	.704	.262	.018	

	N	8	8	8	
PreReach	Correlation Coefficient	308	098	.293	.390
	Sig. (2-tailed)	.351	.761	.362	.224
	N	7	7	7	7

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

# APPENDIX C: Peer Mentor Survey Demographics

**Table C1**Peer Mentor: Age

Characteristic		N	M	Median	SD	Min	Max
Age	Valid	Missing					
	8	0	38.88	36.50	5.842	33	47

**Table C2**Peer Mentor: Gender Identity

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Men	4	50.0	50.0	50.0
	Women	3	37.5	37.5	87.5
	Nonbinary	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Table C3

Peer Mentor: Sexual Orientation

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Heterosexual	7	87.5	87.5	87.5
	Bisexual	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table C4**Peer Mentor: Race/Ethnicity

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	White	5	62.5	62.5	62.5
	Black	3	37.5	37.5	100.0
	Total	8	100.0	100.0	

**Table C5**Peer Mentor: Marital Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Married	3	37.5	37.5	37.5
	Single	1	12.5	12.5	50.0
	Divorced	3	37.5	37.5	87.5
	Separated	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Table C6

Peer Mentor: Domicile Status

Charac	Characteristic		Percent	Valid	Cumulative
				Percent	Percent
Valid	With Spouse/Partner	4	50.0	50.0	50.0
	Alone	3	37.5	37.5	87.5
	With Roommates	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

 Table C7

 Peer Mentor: Geographic Location

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Northeast	3	37.5	37.5	37.5
	West	4	50.0	50.0	87.5
	South	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table C8**Peer Mentor: Highest Level of Education

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Associate's	2	25.0	25.0	25.0
	Bachelor's	3	37.5	37.5	62.5
	Master's	2	25.0	25.0	87.5
	Doctorate	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table C9**Peer Mentor: Employment Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Full-Time	3	37.5	37.5	37.5
	Part-Time	3	37.5	37.5	75.0
	Unemployed	2	25.0	25.0	100.0
	Total	8	100.0	100.0	
		8	100.0	100.0	

Table C10

Peer Mentor: Student Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Full-Time	3	37.5	37.5	37.5
	Part-Time	2	25.0	25.0	62.5
	Not a Student	3	37.5	37.5	100.0
	Total	8	100.0	100.0	-

**Table B11**Peer Mentor: Military Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Veteran	5	62.5	62.5	62.5
	Retired	2	25.0	25.0	87.5
	Dependent	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table C12**Peer Mentor: Military Service Branch

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Army	4	50.0	57.1	57.1
	Navy	1	12.5	14.3	71.4
	Marine Corps	1	12.5	14.3	85.7
	Air Force	1	12.5	14.3	100.0
	Total	7	87.5	100.0	
Missing	N/A	1	12.5		
Total		8	100.0		

**Table C13**Peer Mentor: Highest Rank at Discharge

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	E-1-4	4	50.0	57.1	57.1
	E-5-7	3	37.5	42.9	100.0
	Total	7	87.5	100.0	
Missing	N/A	1	12.5		
Total		8	100.0		

Table C14

Peer Mentor: Deployment History

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	0	5	62.5	62.5	62.5
	1	1	12.5	12.5	75.0
	2	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Table C15

Peer Mentor: Religion

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Christian	5	62.5	62.5	62.5
	Catholic	2	25.0	25.0	87.5
	Jewish	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table C16**Peer Mentor: Currently Receiving Mental Health Care

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	4	50.0	50.0	50.0
	Yes	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

**Table C17**Peer Mentor: Previously Received Mental Health Care

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	2	25.0	25.0	25.0
	Yes	6	75.0	75.0	100.0
	Total	8	100.0	100.0	-

Table C18

Peer Mentor: Current Medical Illness

	cent
Volid No. 2 25.0 25.0 2	CCIII
Valid NO 2 25.0 25.0 2.	5.0
Yes 6 75.0 75.0 10	0.00
Total 8 100.0 100.0	

**Table C19**Peer Mentor: Previous Medical Illness

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	2	25.0	25.0	25.0
	Yes	6	75.0	75.0	100.0
	Total	8	100.0	100.0	

## APPENDIX D: Peer Mentors Changes in Adoption, Acceptability, Appropriateness, Feasibility, and Reach (Aim 1)

**Hypothesis 1.1:** Peer Mentors will find IPC-3 to be more Adoptable, Acceptable, Appropriate, Feasible, and Reachable at the post-intervention timepoint (e.g., after completing three supervised training cases) than at the pre-intervention timepoint (i.e., prior to the first case assignment).

**Table D1**Peer Mentor: Demographic Frequencies

Mea	asure	Pre- Adoption	Post- Adoption	Pre- Acceptability	Post- Acceptability	Pre- Appropriateness	Post- Appropriateness	Pre- Feasibility	Post- Feasibility	Pre- Reach	Post- Reach
N	Valid	8	6	8	6	8	6	8	6	7	5
	Missing	1	3	1	3	1	3	1	3	2	4
M		3.2170	3.0519	3.5521	3.1098	3.3221	2.9753	3.3226	3.0000	2.5714	2.4800
Med	lian	3.1667	3.0444	3.7083	3.3523	3.2882	3.1357	3.2222	3.2273	2.4000	2.4000
SD		.48227	.70085	.49589	.93709	.46394	.77652	.42098	.80462	.53418	.17256
Min	imum	2.63	2.00	2.50	1.45	2.65	1.67	2.83	1.55	2.00	2.33
Max	kimum	4.00	4.00	4.00	4.00	4.00	4.00	3.92	3.75	3.60	2.67

Table D2 Peer Mentor: Rank Order from Pre- and Post-Intervention Timepoints

Measure		N	Mean Rank	Sum of Ranks
PostAdoption -	Negative	2 <sup>a</sup>	2.00	4.00
PreAdoption	Ranks			
	Positive Ranks	1 <sup>b</sup>	2.00	2.00
	Ties	2°		
	Total	5		
PostAcceptability -	Negative	2 <sup>d</sup>	4.50	9.00
PreAcceptability	Ranks			
	Positive Ranks	3 <sup>e</sup>	2.00	6.00
	Ties	$0^{\mathrm{f}}$		
	Total	5		
PostAppropriateness -	Negative	2 <sup>g</sup>	3.00	6.00
PreAppropriateness	Ranks			
	Positive Ranks	$2^{h}$	2.00	4.00
	Ties	1 <sup>i</sup>		
	Total	5		
PostFeasibility -	Negative	$2^{j}$	3.50	7.00
PreFeasibility	Ranks			
	Positive Ranks	$3^k$	2.67	8.00
	Ties	$0^{l}$		
	Total	5		
PostReach -	Negative	3 <sup>m</sup>	2.83	8.50
PreReach	Ranks			
	Positive Ranks	1 <sup>n</sup>	1.50	1.50
	Ties	1º		
	Total	5		

 $<sup>\</sup>label{eq:postAdoption} \begin{subarray}{l} $^a$ PostAdoption < PreAdoption. \\ $^b$ PostAdoption > PreAdoption. \\ \end{subarray}$ 

<sup>&</sup>lt;sup>c</sup> PostAdoption = PreAdoption.

d PostAcceptability < PreAcceptability.
PostAcceptability > PreAcceptability.
PostAcceptability = PreAcceptability.

<sup>&</sup>lt;sup>g</sup> PostAppropriateness < PreAppropriateness.

<sup>&</sup>lt;sup>h</sup> PostAppropriateness > PreAppropriateness.

<sup>&</sup>lt;sup>i</sup> PostAppropriateness = PreAppropriateness.

PostFeasibility < PreFeasibility.</li>
 PostFeasibility > PreFeasibility.
 PostFeasibility = PreFeasibility.

m Post Reach < PreReach.

<sup>&</sup>lt;sup>n</sup> Post Reach > PreReach.

<sup>&</sup>lt;sup>o</sup> Post Reach = PreReach.

Table D3 Peer Mentor: Wilcoxon Signed-Ranks Test

Test Statistics <sup>a</sup>								
Measure	PostAdoption -	PostAcceptability -	PostAppropriateness -	PostFeasibility -	Post Reach -			
	PreAdoption	PreAcceptability	PreAppropriateness	PreFeasibility	PreReach			
Z	535 <sup>b</sup>	405 <sup>b</sup>	365 <sup>b</sup>	135°	-1.289 <sup>b</sup>			
Asymp. Sig. (2-tailed)	.593	.686	.715	.893	.197			

 <sup>&</sup>lt;sup>a</sup> Wilcoxon Signed-Ranks Test.
 <sup>b</sup> Based on positive ranks.
 <sup>c</sup> Based on negative ranks.

#### APPENDIX E: Peer Mentor Changes in Sustainability (Aim 1)

**Hypothesis 1.5:** Peer Mentors will experience diminished changes in Sustainability in relation to Adoption, Acceptability, Appropriateness, Feasibility, and Reach at the pre-intervention and post-intervention timepoints.

Table E1 Peer Mentor: Rank Order Changes in Sustainability

Item		N	Mean Rank	Sum of Ranks
DiffAdoption -	Negative Ranks	3 <sup>a</sup>	2.67	8.00
DiffSustainability	Positive Ranks	$2^{b}$	3.50	7.00
	Ties	$0^{c}$		
	Total	5		
DiffAcceptability -	Negative Ranks	$3^{d}$	3.33	10.00
DiffSustainability	Positive Ranks	$2^{\rm e}$	2.50	5.00
	Ties	$0^{\rm f}$		
	Total	5		
DiffAppropriateness -	Negative Ranks	2 <sup>g</sup>	4.50	9.00
DiffSustainability	Positive Ranks	3 <sup>h</sup>	2.00	6.00
	Ties	$0^{i}$		
	Total	5		
DiffFeasibility -	Negative Ranks	3 <sup>j</sup>	3.00	9.00
DiffSustainability	Positive Ranks	$2^k$	3.00	6.00
	Ties	$0^1$		
	Total	5		
DiffReach -	Negative Ranks	3 <sup>m</sup>	3.33	10.00
DiffSustainability	Positive Ranks	2 <sup>n</sup>	2.50	5.00
	Ties	$0^{\rm o}$		
	Total	5		

<sup>&</sup>lt;sup>a</sup> DiffAdoption < DiffSustainability.

<sup>&</sup>lt;sup>b</sup> DiffAdoption > DiffSustainability.

<sup>&</sup>lt;sup>c</sup> DiffAdoption = DiffSustainability.

<sup>&</sup>lt;sup>d</sup> DiffAcceptability < DiffSustainability.

<sup>&</sup>lt;sup>e</sup> DiffAcceptability > DiffSustainability.

<sup>&</sup>lt;sup>f</sup> DiffAcceptability = DiffSustainability.

<sup>&</sup>lt;sup>g</sup> DiffAppropriateness < DiffSustainability.

<sup>&</sup>lt;sup>h</sup> DiffAppropriateness > DiffSustainability.

<sup>&</sup>lt;sup>i</sup> DiffAppropriateness = DiffSustainability.

<sup>&</sup>lt;sup>j</sup> DiffFeasibility < DiffSustainability.

<sup>&</sup>lt;sup>k</sup> DiffFeasibility > DiffSustainability.

<sup>&</sup>lt;sup>1</sup> DiffFeasibility = DiffSustainability.

<sup>&</sup>lt;sup>m</sup> DiffReach < DiffSustainability.

<sup>&</sup>lt;sup>n</sup> DiffReach > DiffSustainability.

<sup>&</sup>lt;sup>o</sup> DiffReach = DiffSustainability.

Table E2 Peer Mentor: Wilcoxon Signed-Rank Test

		T	est Statistics <sup>a</sup>		
	DiffAdoption -	DiffAcceptability -	DiffAppropriateness	DiffFeasibility -	DiffReach -
	DiffSustainability	DiffSustainability	- DiffSustainability	DiffSustainability	DiffSustainability
Z	135 <sup>b</sup>	674 <sup>b</sup>	405 <sup>b</sup>	405 <sup>b</sup>	674 <sup>b</sup>
Asymp. Sig. (2-tailed)	.893	.500	.686	.686	.500

<sup>&</sup>lt;sup>a</sup> Wilcoxon Signed-Ranks Test <sup>b</sup> Based on positive ranks.

Table E3 Peer Mentor: Sustainability Difference Frequencies

				Statistics			
		DiffSustainability	DiffAdoption	DiffAcceptability	DiffAppropriateness	DiffFeasibility	DiffReach
N	Valid	5	5	5	5	5	5
	Missing	4	4	4	4	4	4
M		.0507	1694	4848	2910	3429	2533
Median	1	.2581	.0000	.0833	.0000	.1136	1667
SD		.75339	.93708	1.36230	1.01509	1.10542	.42335
Minimu	um	-1.12	-1.67	-2.55	-1.98	-2.29	93
Maxim	um	.90	.93	.95	.55	.36	.17

# APPENDIX F: Student Veteran Survey Demographics

**Table F1**Student Veteran: Age

	Age	
N	Valid	12
	Missing	0
M		31.33
Med	ian	33.50
SD		5.105
Mini	mum	25
Max	imum	39

**Table F2**Student Veteran: Gender Identity

Characteristic		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Men	10	83.3	83.3	83.3
	Women	2	16.7	16.7	100.0
	Total	12	100.0	100.0	

**Table F3**Student Veteran: Sexual Orientation

Characteristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Heterosexual	12	100.0	100.0	100.0

Table F4

Student Veteran: Race/Ethnicity

Charac	teristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White	8	66.7	66.7	66.7
	Native	2	16.7	16.7	83.3
	American				
	Hispanic	1	8.3	8.3	91.7
	Black	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

**Table F5**Student Veteran: Marital Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Married	2	16.7	16.7	16.7
	Single	6	50.0	50.0	66.7
	Divorced	4	33.3	33.3	100.0
	Total	12	100.0	100.0	

**Table F6**Student Veteran: Number of Children

Characte	eristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	6	50.0	75.0	75.0
	Yes	2	16.7	25.0	100.0
	Total	8	66.7	100.0	
Missing	, N/A	4	33.3		
Total		12	100.0		

**Table F7**Student Veteran: Domicile Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Spouse/Partner	3	25.0	25.0	25.0
	Alone	5	41.7	41.7	66.7
	Roommates	4	33.3	33.3	100.0
	Total	12	100.0	100.0	

**Table F8**Student Veteran: Geographic Location

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Northeast	7	58.3	58.3	58.3
	West	3	25.0	25.0	83.3
	Midwest	2	16.7	16.7	100.0
	Total	12	100.0	100.0	

**Table F9**Student Veteran: Highest Level of Education

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	High	4	33.3	33.3	33.3
	School				
	Associates	4	33.3	33.3	66.7
	Bachelors	4	33.3	33.3	100.0
	Total	12	100.0	100.0	

**Table F10**Student Veteran: Employment Status

Charac	teristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	4	33.3	33.3	33.3
	Sole Income GI Bill or	5	41.7	41.7	75.0
	VA Disability				
	Part-Time	2	16.7	16.7	91.7
	Full-Time	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

**Table F11**Student Veteran: Student Status

Charac	teristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full-Time	9	75.0	75.0	75.0
	Part-Time	2	16.7	16.7	91.7
	Not a	1	8.3	8.3	100.0
	Student				
	Total	12	100.0	100.0	

**Table F12**Student Veteran: Military Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Veteran	10	83.3	83.3	83.3
	Retired	1	8.3	8.3	91.7
	Guard	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

**Table F13**Student Veteran: Military Service Branch

Charac	teristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Army	5	41.7	41.7	41.7
	Navy	3	25.0	25.0	66.7
	Marine	3	25.0	25.0	91.7
	Corps				
	Air Force	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

**Table F14**Student Veteran: Highest Rank at Discharge

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	E-1-4	6	50.0	50.0	50.0
	E-5-7	5	41.7	41.7	91.7
	O-1-3	1	8.3	8.3	100.0
	Total	12	100.0	100.0	

**Table F15**Student Veteran: Deployment History

Nu	Number of Deployments					
N	Valid	12				
	Missing	0				
M		1.25				
Med	ian	1.00				
SD		1.357				
Mini	mum	0				
Max	imum	4				

**Table F16**Student Veteran: Religion

Charac	teristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christian	5	41.7	41.7	41.7
	Agnostic	3	25.0	25.0	66.7
	Atheist	2	16.7	16.7	83.3
	Other	2	16.7	16.7	100.0
	Total	12	100.0	100.0	

**Table F17**Student Veteran: Currently Receiving Mental Health Care

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	6	50.0	50.0	50.0
	Yes	6	50.0	50.0	100.0
	Total	12	100.0	100.0	

Table F18

Student Veteran: Previously Received Mental Health Care

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	1	8.3	8.3	8.3
	Yes	11	91.7	91.7	100.0
	Total	12	100.0	100.0	

**Table F19**Student Veteran: Completed Last Recommended Treatment

Charac	teristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	4	33.3	33.3	33.3
	Yes	8	66.7	66.7	100.0
	Total	12	100.0	100.0	

**Table F20**Student Veteran: Where Received Mental Health Care

Characteristic		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VA	6	50.0	50.0	50.0
	Private	3	25.0	25.0	75.0
	Practice				
	Other	3	25.0	25.0	100.0
	Total	12	100.0	100.0	

**Table F21**Student Veteran: Currently Receiving Medication

Charac	teristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	10	83.3	83.3	83.3
	Yes	2	16.7	16.7	100.0
	Total	12	100.0	100.0	

**Table F22**Student Veteran: Previously Received Medication

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	5	41.7	41.7	41.7
	Yes	7	58.3	58.3	100.0
	Total	12	100.0	100.0	

Table F23

Student Veteran: Current Medical Illness

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	2	16.7	16.7	16.7
	Yes	10	83.3	83.3	100.0
	Total	12	100.0	100.0	

Table F24

Student Veteran: Previous Medical Illness

Characteristic		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	41.7	41.7	41.7
	Yes	7	58.3	58.3	100.0
	Total	12	100.0	100.0	

# APPENDIX G: Student Veteran Changes in Adoption, Acceptability, Appropriateness, Feasibility, and Reach (Aim 1)

**Hypothesis 1.2:** Student Veterans will find IPC-3 to be more Adoptable, Acceptable, Appropriate, Feasible, and Reachable at the post-intervention timepoint (i.e., after completing the Follow-Up Session) than at the pre-intervention timepoint (i.e., prior to Session 1).

**Table G1**Student Veteran: Rank Order Changes in Constructs

Construct	Condition	N	Mean Rank	Sum of Ranks
Adoption	Pre	8	7.50	60.00
	Post	5	6.20	31.00
	Total	13		
Acceptability	Pre	8	5.94	47.50
	Post	5	8.70	43.50
	Total	13		
Appropriateness	Pre	8	6.69	53.50
	Post	5	7.50	37.50
	Total	13		
Feasibility	Pre	8	6.63	53.00
	Post	5	7.60	38.00
	Total	13		
Reach	Pre	7	6.86	48.00
	Post	5	6.00	30.00
	Total	12		

Table G2  ${\it Student Veteran: Mann-Whitney UTest}$ 

		Test Statis	tics <sup>a</sup>		
Measure	Adoption	Acceptability	Appropriateness	Feasibility	Reach
Mann-Whitney	16.000	11.500	17.500	17.000	15.000
U					
Wilcoxon W	31.000	47.500	53.500	53.000	30.000
Z	587	-1.253	366	442	409
Asymp. Sig. (2-tailed)	.557	.210	.714	.659	.683
Exact Sig. [2*(1-tailed Sig.)]	.622 <sup>b</sup>	.222 <sup>b</sup>	.724 <sup>b</sup>	.724 <sup>b</sup>	.755 <sup>b</sup>

<sup>&</sup>lt;sup>a</sup> Grouping Variable: Condition <sup>b</sup> Not corrected for ties.

Table G3 Student Veteran: Construct Frequencies

				Statistics			
Condi	tion		Adoption	Acceptability	Appropriateness	Feasibility	Reach
Pre	N	Valid	8	8	8	8	7
		Missing	0	0	0	0	1
	M		3.2213	3.3313	3.3825	3.3975	1.7143
	Medi	an	3.2850	3.3200	3.5200	3.5250	1.6700
	SD		.32930	.47727	.59509	.60106	.65845
	Minir	num	2.63	2.50	2.17	2.14	1.00
	Maxi	mum	3.57	4.00	4.00	4.00	2.83
Post	N	Valid	5	5	5	5	5
		Missing	0	0	0	0	0
	M		2.9940	3.6580	3.3000	3.5600	1.5540
	Medi	an	3.1300	3.8700	3.7700	3.8500	1.4000
	SD		.52979	.41626	.82180	.51716	.50851
	Minir	num	2.25	3.13	2.36	2.83	1.00
	Maxi	mum	3.63	4.00	4.00	4.00	2.17

# APPENDIX H: Site Supervisor Key Informant Interview Demographics

**Table H1**Site Supervisor: Age

	Age	
N	Valid	2
	Missing	1
M		49.00
Med	ian	49.00
SD		14.142
Mini	mum	39
Max	imum	59

**Table H2**Site Supervisor: Gender Identity

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Men	1	33.3	50.0	50.0
	Women	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

**Table H3**Site Supervisor: Sexual Orientation

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Heterosexual	1	33.3	50.0	50.0
	Gay/Lesbian	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

**Table H4**Site Supervisor: Race/Ethnicity

Character	ristic	Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	White	2	66.7	100.0	100.0
Missing	99	1	33.3		
Total		3	100.0		

Table H5

Site Supervisor: Marital Status

Character	ristic	Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Married	2	66.7	100.0	100.0
Missing	99	1	33.3		
Total		3	100.0		

### Table H6

Site Supervisor: Domicile Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	With Spouse/Partner	2	66.7	100.0	100.0
Missing	99	1	33.3		
Total		3	100.0		

## Table H7

Site Supervisor: Geographic Location

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Northeast	1	33.3	50.0	50.0
	West	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

**Table H8**Site Supervisor: Highest Level of Education

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Doctorate	2	66.7	100.0	100.0
Missing	99	1	33.3		
Total		3	100.0		

**Table H9**Site Supervisor: Employment Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Full-Time	1	33.3	50.0	50.0
	Part-Time	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

Table H10

Site Supervisor: Student Status
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Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Not a Student	2	66.7	100.0	100.0
Missing	99	1	33.3		
Total		3	100.0		

Table H11

Site Supervisor: Military Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Veteran	1	33.3	50.0	50.0
	Dependent	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

Table H12
Site Supervisor: Military Branch

Characte	ristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Marine Corps	1	33.3	50.0	50.0
	N/A	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

**Table H13**Site Supervisor: Highest Rank at Discharge

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	E-5-7	1	33.3	50.0	50.0
	N/A	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

Site Supervisor: Number of Deployments

Nu	Number of Deployments					
N	Valid	2				
	Missing	1				
M		1.00				
Med	ian	1.00				
SD		1.414				
Mini	mum	0				
Max	imum	2				

Table H14

**Table H15**Site Supervisor: Religion

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Jewish	1	33.3	50.0	50.0
	Atheist	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

**Table H16**Site Supervisor: Currently Receiving Mental Health Care

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	1	33.3	50.0	50.0
	Yes	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

**Table H17**Site Supervisor: Previously Received Mental Health Care

Characte	ristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	66.7	100.0	100.0
Missing	99	1	33.3		
Total		3	100.0		

Table H18
Site Supervisor: Current Medical Illness

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	1	33.3	50.0	50.0
	Yes	1	33.3	50.0	100.0
	Total	2	66.7	100.0	
Missing	99	1	33.3		
Total		3	100.0		

**Table H19**Site Supervisor: Previous Medical Illness

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Yes	2	66.7	100.0	100.0
Missing	99	1	33.3		
Total		3	100.0		

# APPENDIX I: Peer Mentor Key Informant Interview Demographics

**Table I1**Peer Mentor: Age

	Age	
N	Valid	8
	Missing	0
M		38.88
Med	ian	36.50
SD		5.842
Mini	mum	33
Max	imum	47

**Table I2**Peer Mentor: Gender Identity

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Men	4	50.0	50.0	50.0
	Women	3	37.5	37.5	87.5
	Nonbinary	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table I3**Peer Mentor: Sexual Orientation

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Heterosexual	7	87.5	87.5	87.5
	Bisexual	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table I4**Peer Mentor: Race/Ethnicity

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	White	5	62.5	62.5	62.5
	Black	3	37.5	37.5	100.0
	Total	8	100.0	100.0	

**Table I5**Peer Mentor: Marital Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Married	3	37.5	37.5	37.5
	Single	1	12.5	12.5	50.0
	Divorced	3	37.5	37.5	87.5
	Separated	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table I6**Peer Mentor: Domicile Status

Charac	teristic	Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	With	4	50.0	50.0	50.0
	Spouse/Partner				
	Alone	3	37.5	37.5	87.5
	With Roommates	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table I7**Peer Mentor: Geographic Location

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Northeast	3	37.5	37.5	37.5
	West	4	50.0	50.0	87.5
	South	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table I8**Peer Mentor: Highest Level of Education

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Associate's	2	25.0	25.0	25.0
	Bachelor's	3	37.5	37.5	62.5
	Master's	2	25.0	25.0	87.5
	Doctorate	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table 19**Peer Mentor: Employment Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Full-Time	3	37.5	37.5	37.5
	Part-Time	3	37.5	37.5	75.0
	Unemployed	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

**Table I10**Peer Mentor: Student Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Full-Time	3	37.5	37.5	37.5
	Part-Time	2	25.0	25.0	62.5
	Not a	3	37.5	37.5	100.0
	Student				
	Total	8	100.0	100.0	

**Table I11**Peer Mentor: Military Status

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Veteran	5	62.5	62.5	62.5
	Retired	2	25.0	25.0	87.5
	Dependent	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table I12**Peer Mentor: Military Service Branch

Character	ristic	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Army	4	50.0	57.1	57.1
	Navy	1	12.5	14.3	71.4
	Marine	1	12.5	14.3	85.7
	Corps				
	Air Force	1	12.5	14.3	100.0
	Total	7	87.5	100.0	
Missing	N/A	1	12.5		
Total		8	100.0		

**Table I13**Peer Mentor: Highest Rank at Discharge

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	E-1-4	4	50.0	57.1	57.1
	E-5-7	3	37.5	42.9	100.0
	Total	7	87.5	100.0	
Missing	N/A	1	12.5		
Total		8	100.0		

**Table I14**Peer Mentor: Deployment History

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	0	5	62.5	62.5	62.5
	1	1	12.5	12.5	75.0
	2	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

**Table I15**Peer Mentor: Religion

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Christian	5	62.5	62.5	62.5
	Catholic	2	25.0	25.0	87.5
	Jewish	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

**Table I16**Peer Mentor: Currently Receiving Mental Health Care

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	4	50.0	50.0	50.0
	Yes	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

**Table I17**Peer Mentor: Previously Received Mental Health Care

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	2	25.0	25.0	25.0
	Yes	6	75.0	75.0	100.0
	Total	8	100.0	100.0	

Table I18

Peer Mentor: Current Medical Illness

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	2	25.0	25.0	25.0
	Yes	6	75.0	75.0	100.0
	Total	8	100.0	100.0	

**Table I19**Peer Mentor: Previous Medical Illness

Characteristic		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	2	25.0	25.0	25.0
	Yes	6	75.0	75.0	100.0
	Total	8	100.0	100.0	

## APPENDIX J: Student Veteran Key Informant Interview Demographics

**Table J1**Student Veteran: Age

	Λ σο	
	Age	
N	Valid	17
	Missing	1
M		28.29
Med	ian	27.00
SD		4.858
Mini	mum	21
Max	imum	36

**Table J2**Student Veteran: Gender Identity

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Men	15	83.3	88.2	88.2
	Women	2	11.1	11.8	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J3**Student Veteran: Sexual Orientation

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Heterosexual	17	94.4	100.0	100.0
Missing	99	1	5.6		
Total		18	100.0		

**Table J4**Student Veteran: Race/Ethnicity

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	White	6	33.3	37.5	37.5
	Hispanic/Latino	3	16.7	18.8	56.3
	Black	2	11.1	12.5	68.8
	Asian/Pacific	3	16.7	18.8	87.5
	Islander				
	Native American	2	11.1	12.5	100.0
	Total	16	88.9	100.0	
Missing	99	2	11.1		
Total		18	100.0		

**Table J5**Student Veteran: Marital Status

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Single	9	50.0	52.9	52.9
	Divorced	3	16.7	17.6	70.6
	Partnered	3	16.7	17.6	88.2
	Married	2	11.1	11.8	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J6**Student Veteran: Number of Children

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	12	66.7	92.3	92.3
	Yes	1	5.6	7.7	100.0
	Total	13	72.2	100.0	
Missing	99	5	27.8		
Total		18	100.0		

**Table J7**Student Veteran: Domicile Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Living with	7	38.9	41.2	41.2
	Roommates				
	Living with	6	33.3	35.3	76.5
	Spouse/Partner				
	Living Alone	4	22.2	23.5	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J8**Student Veteran: Geographic Location

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Northeast	14	77.8	82.4	82.4
	West	3	16.7	17.6	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J9**Student Veteran: Highest Level of Education

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	High School	6	33.3	35.3	35.3
	Associate's Degree	6	33.3	35.3	70.6
	Bachelor's Degree	5	27.8	29.4	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J10**Student Veteran: Employment Status

Measure		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	3	16.7	17.6	17.6
	Sole Income: GI Bill and/or VA Disability	10	55.6	58.8	76.5
	Part-Time (i.e., Less than 40 hours/week)	4	22.2	23.5	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J11**Student Veteran: Student Status

Measure		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full-Time	14	77.8	82.4	82.4
	Part-Time	2	11.1	11.8	94.1
	Not a Student	1	5.6	5.9	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J12**Student Veteran: Military Status

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Veteran	15	83.3	88.2	88.2
	Retired	2	11.1	11.8	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J13**Student Veteran: Military Service Branch

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Army	9	50.0	52.9	52.9
	Navy	4	22.2	23.5	76.5
	Marine	3	16.7	17.6	94.1
	Corps				
	Air Force	1	5.6	5.9	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J14**Student Veteran: Highest Rank at Discharge

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	E-1-4	9	50.0	52.9	52.9
	E-5-7	6	33.3	35.3	88.2
	O-1-3	2	11.1	11.8	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J15**Student Veteran: Deployment History

Number of Deployments							
N	Valid	17					
	Missing	1					
M		.88					
Median		.00					
SD		1.166					
Minimum		0					
Maximum		3					

**Table J16**Student Veteran: Religion

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Christian	5	27.8	29.4	29.4
	Agnostic	4	22.2	23.5	52.9
	Atheist	3	16.7	17.6	70.6
	Other	4	22.2	23.5	94.1
	Catholic	1	5.6	5.9	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J17**Student Veteran: Currently Receiving Mental Health Care

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	7	38.9	41.2	41.2
	Yes	10	55.6	58.8	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J18**Student Veteran: Previously Received Mental Health Care

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	4	22.2	23.5	23.5
	Yes	13	72.2	76.5	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J19**Student Veteran: Completed Last Recommended Treatment

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	7	38.9	41.2	41.2
	Yes	10	55.6	58.8	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

Table J20
Student Veteran: Where Received Mental Health Care

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	Department of Veterans Affairs	9	50.0	52.9	52.9
	Private Practice	2	11.1	11.8	64.7
	Other	6	33.3	35.3	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J21**Student Veteran: Currently Receiving Medication

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	13	72.2	76.5	76.5
	Yes	4	22.2	23.5	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J22**Student Veteran: Previously Received Medication

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	9	50.0	52.9	52.9
	Yes	8	44.4	47.1	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

Table J23

Student Veteran: Current Medical Illness

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	3	16.7	17.6	17.6
	Yes	14	77.8	82.4	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		

**Table J24**Student Veteran: Previous Medical Illness

Measure		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	No	9	50.0	52.9	52.9
	Yes	8	44.4	47.1	100.0
	Total	17	94.4	100.0	
Missing	99	1	5.6		
Total		18	100.0		-

## APPENDIX K: Treatment Development and Implementation Recommendations

 Table K1

 Site Supervisors & Peer Mentors: Key Findings, Influenced Constructs, and Recommendations

Selection	Construct	Recommendation
- Needed adequate interest, time, and skills for implementation	Adoption, Feasibility	<ul> <li>Engage in targeted recruitment of VITAL peers</li> </ul>
- Offered career development and	Appropriateness	- Highlight opportunity for
capacity building	11 1	professional development
- Aligned with VITAL roles and responsibilities	Sustainability	<ul> <li>Promote as complementary to existing VITAL role</li> </ul>
- Adapted for Veterans by	Acceptability	- Emphasize adaptation for
Veterans		Veterans delivered by peers
Training	Construct	Recommendation
<ul> <li>Found training accessible, trainers engaging, and practice critical</li> </ul>	Acceptability, Feasibility	<ul> <li>Utilize the D&amp;I Apprenticeship Model</li> </ul>
<ul> <li>Desired additional skills practice and role plays</li> </ul>	Acceptability	<ul> <li>Provide space for continued learning and skills practice</li> </ul>
- Required delineation of clinical and peer roles and responsibilities	Adoption	<ul> <li>Maintain transparency of roles and responsibilities</li> </ul>
Implementation	Construct	Recommendation
- Experienced challenges managing personal distress	Adoption	<ul> <li>Provide psychoeducation and promote self-care</li> </ul>
- Found implementation toolkit useful	Feasibility	<ul> <li>Utilize provider implementation toolkit</li> </ul>
- Lacked support by campus leadership	Adoption	<ul> <li>Cultivate campus leadership support</li> </ul>
Intervention	Construct	Recommendation
- Found as effective tool,	Acceptability,	- Promote as effective, treatment
cultivating openness to services	Appropriateness	orienting service
- Took proactive stance on	Reach,	- Shift help-seeking paradigm to
engagement and enrollment	Feasibility	proactive outreach
<ul> <li>Provided structure but also flexibility and collaboration</li> </ul>	Acceptability, Appropriateness,	<ul> <li>Offer consumer-centered support</li> </ul>
,	Reach	11
- Reduced stigma, using non- clinical language	Reach	- De-stigmatize services, when possible
- Believed in peer support for recovery	Appropriateness, Feasibility	Utilize peer support for connection and recovery
- Perceived lack of providers with Veteran cultural competency	Reach	- Equip providers with knowledge to practice with sensitivity and humility

**Table K2**Student Veterans: Key Findings, Influenced Constructs, and Recommendations

Enrollment	Construct	Recommendation
- Made aware of IPC-3 through	Acceptability,	- Leverage campus programs to
VITAL	Reach	promote services
- Provided direct assistance with	Adoption,	- Assist with service enrollment
enrollment	Reach	
Provider	Construct	Recommendation
- Believed peers were suited to	Adoption,	- Utilize trained, supervised peers
provide mental health support	Acceptability,	as providers
	Appropriateness,	
	Feasibility	
- Preferred diversity among	Adoption	- Cultivate representation among
providers		providers
- Lacked connection with providers	Reach	- Equip providers with knowledge
without Veteran cultural		to practice with sensitivity and
competency		humility
- Desired collaboration and	Adoption,	- Integrate principles of
mutuality in services	Acceptability,	consumer-centered, trauma-
~ .	Reach	informed care
Setting	Construct	Recommendation
- Desired support on campus	Feasibility,	- Position services for
	Reach	accessibility and reduced stigma
- Espoused a variety of preferences	Adoption,	- Offer options for in-person or
for service delivery	Feasibility,	virtual delivery
	Reach	
Intervention	Construct	Recommendation
- Reduced distress by equipping	Acceptability,	- Offer psychoeducation and skills
with skills for self-managed care	Appropriateness	for self-management of distress
- Adapted for Veterans to address	Adoption,	- Tailor services for Veteran
common challenges	Acceptability	communities
- Experienced high levels of stigma	Adoption,	- Offer non-stigmatizing avenues
accessing services	Reach	of support
- Described varying preferences for	Adoption,	- Provide options for time-limited
service length	Acceptability,	services
	Reach	
- Espoused prosocial beliefs	Adoption,	- Leverage prosocial values
	Appropriateness	
- Reported social isolation and	Reach	- Incorporate social support into
loneliness as barriers to care		services