Supplement to the Technical Report No. S.0079120-20, November 2020

Behavioral Health Advisory Team – COVID-19 Survey Phase I Findings (Qualitative Data Summary)

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Supplement to the Technical Report No. S.0079120, Behavioral Health Advisory Team – COVID-19 Phase I Survey Findings, 4 May 2020 – 1 June 2020

TABLE OF CONTENTS

Tables

Figures

SUPPLEMENT TO THE
TECHNICAL REPORT NO. S. S.0079120
BEHAVIORAL HEALTH ADVISORY TEAM – COVID-19 PHASE I SURVEY FINDINGS
4 MAY 2020 - 1 JUNE 2020

S.1 INTRODUCTION

The Walter Reed Army Institute of Research (WRAIR) and Army Public Health Center (APHC) administered a survey measuring the behavioral and public health impact of the Coronavirus Disease 2019 (COVID-19) pandemic to Soldiers at I Corps, 8th Army, and U.S. Army Europe (USAREUR) from 4 MAY – 1 JUN 2020. The goal of the Behavioral Health Assessment Tool – COVID-19 (BHAT COVID-19) was to provide feedback and data-driven recommendations to local commands, and the Army more broadly, concerning the impact of the COVID-19 pandemic on behavioral health outcomes of Soldiers and their Families, as well as the role that leadership responses to the pandemic may have in affecting the behavioral health of Soldiers.

The BHAT COVID-19 was primarily a quantitative survey with three open-ended questions –

Overall, what is the biggest impact of the COVID-19 pandemic for you?

What do you feel the Army is doing well in response to the COVID-19 pandemic?

What would you like to see the Army do differently in response to the COVID-19 pandemic?

This supplement provides a detailed summary of the methodology used to systematically analyze the qualitative data collected from these open-ended questions, and summarizes the results that reflect the most salient contextual themes for each question. This supplement also provides a narrative summary overview of emergent themes, and links these findings to applicable data and recommendations contained within the larger Technical Report, No. S.0079120-20 (Behavioral Health Advisory Team – COVID-19 Survey Phase I Findings). The information contained in this supplement should be reported with reference to the report.

S.2 QUALITATIVE METHODS

S.2.1 Data Cleaning

About half of the 21,911 Soldiers who participated in the survey responded to each of the open-ended questions. Prior to analyses, the data were cleaned to remove blank responses, nonsensical responses (e.g. random numbers and letters that did not form meaningful words, punctuation marks and symbols), non-answers (e.g., *No response*, *N/A*, *No comment*), or ambiguous comments that analysts could not interpret accurately (e.g., *hey, jee red*). During the data-cleaning process, less than 10.0% of responses for each question were removed from the analytic dataset. Table 1 presents the total number of responses before and after data cleaning.

Table S-1. Number of Qualitative Responses by Question

	Before data cleaning (*n*)	After data cleaning (*n*)
Overall, what is the biggest impact of the COVID-19 pandemic for you?	11,755	11,016
What do you feel the Army is doing well in response to the COVID-19 pandemic?	11,467	10,503
What would you like to see the Army do differently in response to the COVID-19 pandemic?	10,995	10,898

S.2.2   Summative Content Analysis

Due to the volume of qualitative data, the analytic team agreed that a summative content analysis was most appropriate for analyzing the responses to each of the three open-ended questions. The overarching goal of the summative content analysis was to explore and understand the contextual usage and meaning of select words within the responses to each question. This methodology is comprised of four steps that involve both quantitative and qualitative methods, assessing the face validity of the contextual themes identified, and finalizing the contextual themes (see Figure S-1 below).
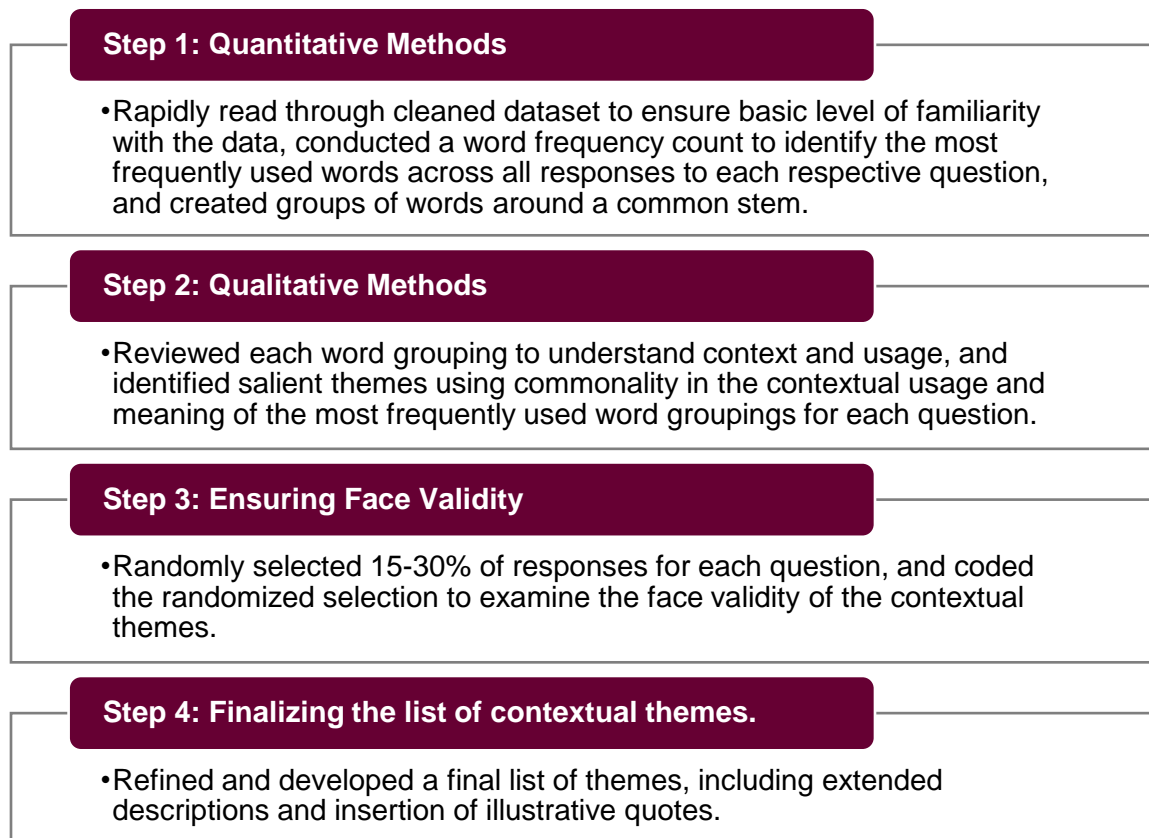
Step 1: Quantitative Methods

- Rapidly read through cleaned dataset to ensure basic level of familiarity with the data, conducted a word frequency count to identify the most frequently used words across all responses to each respective question, and created groups of words around a common stem.

Step 2: Qualitative Methods

- Reviewed each word grouping to understand context and usage, and identified salient themes using commonality in the contextual usage and meaning of the most frequently used word groupings for each question.

Step 3: Ensuring Face Validity

- Randomly selected 15-30% of responses for each question, and coded the randomized selection to examine the face validity of the contextual themes.

Step 4: Finalizing the list of contextual themes.

- Refined and developed a final list of themes, including extended descriptions and insertion of illustrative quotes.

Figure S-1. Summative Content Analysis

Each question was independently analyzed by two analysts. The analytic team used QSR International's NVivo 12 Plus® software to conduct a word frequency, identifying the most-to-least frequently used words for each question as part of the first step in this process.

S.3   QUALITATIVE RESULTS

The main body of the BHAT Survey Technical Report, No. S.0079120-20, provided an overview of findings and key recommendations from the quantitative data that were available from the survey. This section provides the most salient contextual themes and illustrative quotes for each open-ended question, which were not reported in the main report.

S.3.1   Question 1: Overall, what is the biggest impact of the COVID-19 pandemic for you?

When asked about the biggest impact of the COVID-19 pandemic, some Soldiers (13.4%, $n = 1,472$, $N = 11,016$) provided responses that indicated no impact. These responses consisted primarily of single word or few word answers, such as *none*, *nothing*, *don't know*, and *no impact*. Responses such as the number "0" or "ok" also seemed to indicate no impact or lack of impact, respectively.

Soldiers who reported impacts included those pertaining to the broad domains of: **travel restrictions, work schedules and stressors, family life, social life and activities, financial stressors, and physical and mental health**. Table S-2 summarizes the comments and some illustrative quotes provided for each of these domains.

Table S-2. Themes Emerging from Soldiers' Comments and Illustrative Quotes for Question 1, Source: BHAT COVID-19 Survey

Themes	Illustrative Quotes
Travel Restrictions	
• Restrictions or bans on travel and movement, travel cancellations and impacts on travel plans • Restrictions hindered travel pertaining to work, such as deployment and permanent change of station (PCS) • Restrictions hindered personal travel plans • Inability to visit home to see family	*"The biggest impact would be that I couldn't fly home to see my grandmother get buried."* *"The biggest [impact] would be flight delays. All military movement had been ceased to prevent the spread but that leaves those who are overseas to worry about coming back home to loved ones that may need assistance in daily issues."*
Impact on Work Schedules	
• *Work schedule* or *work schedule changes* were mentioned without explanation of the nature and extent of these schedules and changes • Changes to training schedules • Longer work hours due to the COVID-19 pandemic and/or other mission requirements • Reduced work hours or working the same hours as prior to the pandemic	*"Having to work long hours and most weekends while the majority of our formations are teleworking."* *"It's really been a badly needed break from work. The hours are less so it's finally like a normal job. I get to sleep more and rarely miss meals because of being to [sic] busy."*

Onsite Work Stressors and Working from Home	
• Greater workloads due to the COVID-19 pandemic and increased stress on the job • Lack of enforcement of social distancing and safety guidelines on the job • Balancing the mission with adherence to safety protocols • Working from home, without qualified directionality of the impact • Teleworking challenges include difficulties of balancing work and family, and increased isolation • Telework benefits include enhanced productivity, and more time to oneself	*"The reality is that there are greater number of soldiers coming in because it is impossible to accomplish the tasks that are being given. Soldiers are congregating in offices without wearing masks and no one is enforcing the standards. The focus is not on the welfare of the soldiers creating significant stress on the soldiers as they attempt to keep their home life from falling apart while trying to meet the insurmountable task placed on them."*
Time with Family and Quality of Family Life	
• Spending more time with family members due to teleworking and staying home • Spending less time with family due to greater work demands and travel restrictions • More stress and strain on families, marriages, and relationships with significant others • Lack of or loss of childcare, school closures, and challenges of homeschooling children	*"Staying home and spending time with family is great, also relieved a lot of stress I had and helped my physical fitness working out more."* *The biggest impact has been getting my children through the end of their school year while also trying to be an effective part of my organization and office."*
Social Life and Activities	
• Impacts on social life, such as social distancing, restrictions on social activities and interactions, and the need to wear masks • Feelings of isolation due to restrictions, being stuck at home, and lack of contact with others; accompanied by feeling bored or depressed • Daily or routine activity impacts such as recreational, personal, family, and work-related activities	*"As stated before, I am concerned that we are causing more damage by isolating people in their homes. People are lacking clean air, sun light and vitamin D, all things they can get by going outside. They are also lacking very much needed social interactions with others."*
Financial Stressors and Impacts	
• *Finances* or *financial* were mentioned without explanation • Negative impacts, such as spouse losing his/her job or financial strain on families • Positive impacts, such as financial savings and financial assistance (e.g., stimulus check)	*"Financial. Pregnant spouse lost job due to COVID-19"* *"Financial and access to essential resources. My daughter attends a private school. Prior to COVID-19, I had no worries about tuition. But now with the unknown with my work schedule I am not confident that I will be able to keep her in school next year."*
Physical Health and Activity	
• Gym closures impacted physical training, activity, and fitness, which ultimately impacted Soldier readiness • Store closures limited access to food and other supplies • Positive impacts, such as more time to exercise and take care of physical health	*"Gym closures and travel restrictions. The lack of gyms impacts Soldier readiness, in addition to both physical and mental health."*

S.3.1.1   Summary and alignment with quantitative results

The key COVID-19 stressors, concerns, and fears that emerged from the quantitative data were highly consistent with these Soldier accounts. Specifically, the most frequently reported concerns from the quantitative data were: spending time with friends and family (69.1%), limited ability to engage in social activities (65.5%), changing rules, regulations, and guidance related to COVID-19 (63.6%), someone close to them getting COVID-19 (61.4%), and opportunities for exercise (60.3%). Financial concerns were endorsed by 50.7% of Soldiers (of n = 17,041).

Soldiers' accounts of financial impacts and the impact of the pandemic on spouse employment and earning potential was evident here, which is consistent with approximately 50% of the population endorsing at least some financial or work impact from the quantitative portion. Specifically, 35.8% reported that their spouse/partner had work hours reduced and 14.6% reported that their spouse/partner had to take an unpaid leave of absence/furlough. These reports were most evident among male Soldiers and Junior Enlisted (E1-E4). The quantitative data also suggested that almost half of Soldiers reported some financial impact of the COVID-19 pandemic. Those with the biggest financial impact were Soldiers who reported that their spouse was no longer employed outside of the home or had to take unpaid leave/furlough. Having a financial impact was also related to Families reporting difficulty coping with the pandemic. Finally, there was a positive link between reports of an impact of the COVID-19 pandemic on financial and work status and increased likelihood of behavioral health difficulties, such as anxiety and hazardous drinking.

S.3.2   Question 2: What do you feel the Army is doing well in response to the COVID-19 pandemic?

When asked about what they felt the Army is doing well in response to the COVID-19 pandemic, many Soldiers (10.6%, *n* = 1,116, *N* = 10,503) appear to have interpreted this question as, *"Is the Army doing well in its response"?* This yielded three contextual themes to describe **Soldiers' (1) dissatisfaction, (2) mixed opinion, or (3) satisfaction with the Army's response** (Table S-3 below). Overall, Soldiers more commonly provided responses indicating they were satisfied with the Army's response to the COVID-19 pandemic.

Table S-3. Themes Emerging from Soldiers' Comments and Illustrative Quotes for Question 2 interpreted as, *Is the Army doing well in its response?,* **Source: BHAT COVID-19 Survey**

Themes	Illustrative Quotes
Dissatisfaction with the Army's Response	
• Single-word responses or combination with another short descriptor (e.g., *absolutely nothing*) • Perceived inaction: nothing meaningful is being done, impacts on readiness • Frustration with implementing and enforcing preventive measures at local levels (e.g., companies, units, installations) • Impression that local leadership is willing to sacrifice the safety of Soldiers and their Families in favor of gaining recognition for completed mission work • Absence of workable processes for Soldiers to gain access to needed resources during the pandemic (e.g., groceries, healthcare)	*"Nothing at all; they say one thing and then do the opposite"*
Mixed Opinion of the Army's Response	
• Favorable: Army leaders who consistently sought to limit Soldiers' risk of exposure, adjusting mission work while simultaneously ensuring that preventive measures were appropriately followed (e.g., *taking it seriously*) • Unfavorable: ineffective implementation and inconsistent enforcement of preventive measures at the local level • Desire for local compliance with broadly defined guidelines as experiences noted exceptions where guidelines were selectively enforced at local levels	*"Big army is doing a good job, but at the Battalion and company level. NO. They do what they want and only follow rules that are convenient for their NCOER/OER billets"*
Satisfaction with the Army's Response	
• Single-word responses (e.g., *sure, well, yes*) • Satisfaction with the Army's multifaceted response regarding: implementing guidance from the Centers for Disease Control and Prevention (CDC) and local government, adjusting to new or updated guidelines, communicating effectively, and providing telework opportunities • Favorable responses regarding: travel restrictions, social distancing, and the Army's efforts to mitigate inconveniences to Soldiers and their Families • Challenges related to ensuring a more robust response at local levels	*"Army is doing everything well to keep the force protected"*

Soldiers who more directly answered the question responded about **(1) the implementation of preventive measures, (2) communication, providing up-to-date information, and (3) sustaining operations** (Table S-4 below).

Table S-4. Themes Emerging from Soldiers' Comments and Illustrative Quotes for Question 2, Source: BHAT COVID-19 Survey

Themes	Illustrative Quotes
Effective Implementation of Preventive Measures	
• Favorable opinion related to the implementation of preventive measures • Challenges with implementing, enforcing, and complying with higher level Army guidance at local levels • Challenges with implementing, enforcing, and complying with higher level Army guidance at local levels, including: maintaining social distance while doing mission work, effectively applying cleanliness and hygiene measures, and consistently following protective measures such as personal protective equipment (PPE) and face mask use • Concerns included, mental health impact of social isolation, distrust if protective measures were actually useful (e.g., using neck garters vs. N95 masks), and concern if preventive measures may actually harm individuals (e.g., decreasing immunity or resilience)	*"Army great. Unit horrid. Going against guidelines like 14 day quarantine and only doing 3 days…Supposed to keep social distancing yet we are on a bus less then [sic] 2 feet from one another. Horrific latrine/port-o-potty"*
Effective Communication of Updates	
• Favorable opinion related to the Army's communication strategy as well as earnest efforts for regular updates throughout the pandemic • Praise for Commanders' use of social media outlets • Challenges with consistently disseminating information down to local levels, with frequent reference to information or updates in a broad sense, without greater detail	*"Disseminating information across multiple platforms, frequent leader engagement with community, service members, families"*
Mixed Opinion on Sustaining Operations (e.g., mission-essential designation)	
• Favorable opinion related to sustaining operations (e.g., education, training activities) • Concerns related to maintaining a balance between keeping Soldiers and Families safe (i.e., effectively implementing preventive measures) and conducting activities which might require interpersonal contact • Confusion related to classifying activities and/or personal as mission essential vs. non-essential • Praise for telework as a way to keep Soldiers and Families safe • Preventive measures helped Soldiers feel safe, valued, and cared for by Army leadership	*"Allowing telework to occur and giving us the resources needed to stay safe and isolated"*

S.3.2.1   Summary and alignment with quantitative results

Although the quantitative portion of the survey did not measure Soldiers' level of satisfaction with the Army's COVID-19 response, results relevant to leadership behaviors and information sources for COVID-19 updates from the quantitative data were consistent with these Soldier accounts. Specifically, more than half of Soldiers reported that their immediate supervisor: *encourages us to report any symptoms of COVID-19 we might have* (70.4%), *leads by example by following health guidelines to reduce the spread of COVID-19* (63.0%), *has shared useful and accurate information about the COVID-19 pandemic* (62.9%), *provides updates about recent COVID-19 pandemic-related developments* (60.5%), and *takes steps to keep us socially connected as a unit during the COVID-19 pandemic* (58.7%). The quantitative data also demonstrated a significant association between Soldier reports that their supervisor engaged in COVID-19 leadership and Soldier reports that they frequently or always engaged in a range of preventive health behaviors. Soldiers who reported that their supervisor engaged in high levels of COVID-19 leadership were also more likely to report that they frequently or always engaged in each preventive health behavior assessed (e.g., using hand sanitizer; covering coughs and sneezes). These relationships held even after accounting for covariates such as Soldier ratings of supervisors on general leadership, as well as Soldiers' potential exposure to COVID-19

Lastly, Soldiers' accounts of effective communication of COVID-19 updates with reference to social media was also consistent with the quantitative data, which showed that Soldiers most commonly used social media (38.9%), followed by online sources other than news sites (36.9%), and news aggregators (30.9%). This finding was most evident for Junior and Senior Enlisted Soldiers who reported using social media or online sources only relative to Officers/Warrant Officers.

S.3.3   Question 3: What would you like to see the Army do differently in response to the COVID-19 pandemic?

When asked about what they would like to see the Army do differently in response to the COVID-19 pandemic, some Soldiers (26%, $n = 2,832$, $N = 10,878$) noted that they were satisfied with the Army's response and they would not suggest changes. These responses included comments such as, *no change*, *N/A*, *all is well*, and that *the response worked*.

Soldiers who provided recommendations frequently responded within the following broad domains to change the Army's: **Change the Army's COVID-19 guidelines, Change the Army's response in the workplace, Better support for Soldiers and their families, and Change the Army's restrictions that negatively affected Soldiers**. Table S-5 summarizes the comments provided for each of these domains.

Table S-5. Comments from Soldiers for Question 3, Source: BHAT COVID-19 Survey

Themes	Illustrative Quotes
Change the Army's COVID-19 Response/Guidelines	
- Need for resources to prevent COVID-19 - Better enforcement of preventive measures - Increased COVID-19 testing - Better understanding of mission essential vs. non-essential personnel - Clearer leadership response	*"Keep standing definitions of categories of personnel applicable during a health crisis. Ensure these definitions are accompanied by clearly articulable practical restrictions to which personnel are subject."* *"Use the orders process to publish guidance in a timely manner. Do not produce guidance through medical channels that conflicts with guidance from higher or that is promulgated through the orders process. Be clear about what is an order and what is guidance and what is directive."*
Change the Army's Response in the Workplace	
- Change communication in the form of information exchange - Change the policies and guidelines for the workplace - Change how training is conducted - Change workload - Need to adjust to changes in the Army environment and structure - Improve workplace morale	*"Higher commands need to stop leaving room for interpretation and stop saying everything is at the local commander's discretion."* *"The Army needs to start equipping leadership with the education and tools needed to prepare any form of training for multiple soldiers from home. This is something that leadership in units fail to observe… The result is that more mistakes are often made and the uncertainty factor only detracts Soldiers' attention from the overall purpose as to why we conduct that type of training from home."* *"Issue very specific guidance on what qualifies as a "mission essential" person/position."*
Better Support for Soldiers and their Families	
Considerations for increased workload and hours, mental health resources, and family time concerns	*"Command should mobilize resources to ensure accountability and welfare of personnel who are to remain at home for long periods of time in ordered isolation."* *"Focus on caring for solider and not their OER. Have soldier stay with family and not have them expose their family due to making then do unimportant task."* *"Care more for soldiers who live in the barracks that have no family's here"*

Change the Army's Restrictions that Negatively Affected Soldiers	
• Change restrictions that affected the life on the installation, Soldier isolation, and inability to travel	*"The Army officially has to say that we will continue to maintain fitness, training and readiness; but this is simply not possible when we are all in isolation. For a month and half I was not able to run"."* *"Hold everyone at the same level of accountability. Enlisted soldiers in the barracks should have the same freedom of maneuver as soldiers residing off post… The increase in on-post incidents is [an] effect to the cause of unfair, draconian measures emplaced on single soldiers."* *"Let people travel, redeploy brigades on time, not quarantine soldiers in their barracks after an extended deployment (due to covid 19) without their household goods for 14 days and treat them like prisoners. Let the commanders at the installations manage their formations because each situation is different."*

S.3.3.1   Summary and alignment with quantitative results

Although the quantitative data informed recommendations to improve the Army's response to the COVID-19 pandemic, the survey did not include close-ended items that directly aligned with Soldiers' open-ended recommendations for improvement. The consistency between recommendations informed by the quantitative data and Soldiers' accounts is summarized in Section S.5 below.

S.4   SUMMARY OF FINDINGS

The COVID-19 pandemic impacted Soldiers and their Families in many ways. Soldiers perceive that the Army has responded well by implementing preventive measures, communicating up-to-date information about the pandemic, and sustaining operations. Soldiers recommended targeted changes to clarify the Army's guidance about COVID-19 and workplace operations, and better support Soldiers and their Families.

S.5 RECOMMENDATIONS

Soldiers' recommendations to improve the Army's response to the COVID-19 pandemic were largely consistent with the recommendations that were informed by the quantitative data. Specific Soldier recommendations for how the Army can support them during the pandemic are summarized in Section S.3 and Table S-5 above.

Overarching recommendations informed by the qualitative data are as follows:

- New recommendation based on qualitative findings presented in this supplement:
  - Ensure preventive measures related to stopping the spread of COVID-19 are available at the local/unit level and are consistent with those promoted at the enterprise level.

- Recommendations made in the initial BHAT Survey Technical Report, No. S.0079120-20, further supported by qualitative findings:
  - Prioritize understanding and addressing top-level concerns about the COVID-19 pandemic. Leaders, organizations, and public health messaging can provide information and identify gaps in guidance and solutions.
  - Continue to make sure that Soldiers are aware of the resources that are available to them if they are experiencing distress and related interference in social or occupational functioning.
  - Encourage Soldiers to engage in adaptive coping or stress management skills to manage distress related to the COVID-19 pandemic. For example, reinforce the importance of sleep, exercise, and social connection to the greatest extent possible.
  - Disseminate information to leaders at all levels about the importance of engaging in healthy COVID-19-specific behaviors (leverage resources such as the WRAIR/APHC Quick Guide for COVID-19 Leadership –see Appendix B), and other resources available through the Uniformed Services University of Health Sciences (USUHS) Center for Traumatic Stress Studies (CTSS).
  - Acknowledge the impacts that COVID-19 is having on Families, particularly the financial impacts, as financial impacts are associated with increased likelihood of behavioral health difficulties.
  - Consider ways to support spouses seeking employment opportunities if they have been furloughed or are no longer working away from the home due to COVID-19.
  - Leverage social media sources to distribute up-to-date information coordinated and organized through Public Affairs Officers (PAO).
  - Continue to disseminate and distribute COVID-19 guidance through multiple communication channels. This increases the likelihood COVID-19 guidance will reach its intended audience.
  - Utilize two-way communication platforms (e.g., virtual Town Halls with question and answer sessions) when content is complex, guidance is changing, or confusion or uncertainty is likely to be high.