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TITLE: Building a Better Workplace: A Sexual Harassment and Assault Prevention Program for Active Duty Service Members

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14. ABSTRACT Sexual assault (SA) within the military is a major public health problem, impacting over 25,000 Service members. SA can have serious consequences for the victims and can negatively affect Service members' overall well-being. The number one factor that increases a Service member's risk for SA is having experienced sexual harassment (SH). No prevention program that utilizes behavior change theories, or other proven strategies, has been developed for the military. The goal of this 3-year study is to develop and test the usability of an innovative online SH and SA prevention program, named Code of Respect (X-CoRe). At the conclusion of this study, we will have developed a theory- and scientifically-based SH and SA prevention program that targets Junior Enlisted Services members (ranked E1-E4), Supervisors (ranked E5 or above), and Installation norms and can easily be used at other installations. X-CoRe will have an immediate and long-term impact on Service members' health and well-being, mission readiness, and productivity, ultimately reducing SH and SA in the military.					
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1. INTRODUCTION: *Narrative that briefly (one paragraph) describes the subject, purpose and scope of the research.*

The **goal** of this study is to develop and test the efficacy of an innovative, online sexual harassment (SH) and sexual assault (SA) prevention program named, *Code of Respect (X-CoRe)*, previously known as Building a Better Workplace 2.0) for deployment in military trainings at Joint Base McGuire-Dix-Lakehurst (JB-MDL). SH and SA can have serious consequences for victims and can negatively affect productivity, mission readiness, and overall well-being of Service members. Both SA and SH can be prevented through the implementation of effective sexual health programs; however, few prevention programs have been developed specifically for the military. *X-CoRe* will address the DoD's renewed Prevention Plan of Action (PPoA) for SA prevention, targeting multiple levels of the social-ecological model (Junior Enlisted Service Members, Supervisors, and Installation norms) while leveraging internet-based channels. **Specific Aims:** Our specific aims will occur in two phases. In Phase 1, we will develop the theoretically- and empirically-based *X-CoRe* prototype and test usability (e.g., ease of use, acceptability, credibility, and motivational appeal). In Phase 2, we will develop the full *X-CoRe* program informed from Phase 1 and test usability. **Design:** Using Intervention Mapping, a systematic approach to developing health promotion programs, and building from our previous effective dating violence prevention program, *Me & You*, our established research team will partner with JB-MDL to develop a multi-level (Junior Enlisted Service member, Supervisors, and Installation) SH and SA prevention program accessible on the internet. We will then evaluate the program's usability. We will recruit 20 Junior Enlisted Service members and 20 Supervisors to receive both the prototype and full program and participate in usability tests. **Hypotheses:** The primary hypothesis to be tested is: Service members who access the *X-CoRe* prototype and full program will perceive the prototype and fully developed program as easy to use, culturally acceptable, credible, and motivational appealing.

2. KEYWORDS: *Provide a brief list of keywords (limit to 20 words).*

Sexual assault; Sexual harassment; Primary prevention; Intervention development; Intervention Mapping; Air Force; JB-MDL; Technology-based interventions; Web-based; Multi-level intervention

3. ACCOMPLISHMENTS: *The PI is reminded that the recipient organization is required to obtain prior written approval from the awarding agency grants official whenever there are significant changes in the project or its direction.*

What were the major goals of the project?

List the major goals of the project as stated in the approved SOW. If the application listed milestones/target dates for important activities or phases of the project, identify these dates and show actual completion dates or the percentage of completion.

Specific Aim 1: Develop the theoretically- and empirically-based BBW 2.0 prototype and test usability. (Sept. 2020 – Mar. 2022)

- 1.1 - Identify attitudes and beliefs towards SH and SA among Junior Enlisted Service members (Sept. – Dec. 2020)
 - Milestone: IRB approval
 - UTHHealth IRB approval received February 1, 2021
 - HRPO approval received March 5, 2021
 - Milestone: In-depth interviews conducted
 - 100% of this milestone has been completed.
- 1.2 - Conduct a content analysis of Me & You intervention matrices to identify core content, methods, and strategies for BBW 2.0 design (Sept. 2020 – Mar. 2021)
 - Milestone: Content analysis completed
 - 100% of this objective has been completed. Completed March 2021.
- 1.3 - Conduct review of BBW 2.0 concepts and wireframes to test acceptability and perceived feasibility for use in the context of the military by the Joint Base McGuire-Dix-Lakehurst (MDL) Community Action Team to inform BBW 2.0 design (Mar. – Sept. 2021)
 - Milestone: Program concepts reviewed by CAT
 - Ongoing. First meeting completed October 2021. CAG Email correspondence. Second meeting completed May 2022. Third meeting completed March 2023.
- 1.4 - Develop BBW 2.0 design documents and develop the prototype including alpha testing (Feb. – Dec. 2021)
 - Milestone: Design documents developed
 - 99% of this milestone has been completed
 - Milestone: Prototype developed
 - 100% of this milestone has been completed
 - Milestone: Social marketing materials developed
 - 60% of this milestone has been completed
- 1.5 - Test usability of BBW 2.0 prototype (Jan. – Mar. 2022)
 - Milestone: Usability tests complete
 - 100% of this milestone has been completed
- 1.6 - Disseminate phase 1 findings (Apr. – May 2022)
 - Milestone: Written reports
 - 50% of this milestone has been completed

Specific Aim 2: Develop BBW 2.0 informed from Phase 1 and evaluate BBW 2.0's impact (Apr. 2022 – Sept. 2024)

- 2.1 - Revise BBW 2.0 design documents and obtain Action Team sign-off (Apr. – July 2022)
 - Milestone: Community Action Team Sign-off of revised design documents
 - 100% of this milestone has been completed
- 2.2 - Develop the fully theoretically- and empirically-based BBW 2.0 program (Aug. 2022 – Dec. 2023)
 - Milestone: Program fully developed
 - 95% of this milestone has been completed
- 2.3 - Test full BBW 2.0 functionality and content, and usability (November 2023)
 - Milestone: Usability test completed
 - 10% of this milestone has been completed
- 2.4 - Disseminate Phase 2 findings: Phase 2 report and peer reviewed publications (January– July 2023)
 - Milestone: Written reports and manuscripts
- 2.5 - Joint Base MDL prevention staff implement BBW 2.0 (Aug – Sept 2024)
 - Milestone: Implementation of BBW 2.0 at Joint Base MDL

What was accomplished under these goals?

For this reporting period describe: 1) major activities; 2) specific objectives; 3) significant results or key outcomes, including major findings, developments, or conclusions (both positive and negative); and/or 4) other achievements. Include a discussion of stated goals not met. Description shall include pertinent data and graphs in sufficient detail to explain any significant results achieved. A succinct description of the methodology used shall be provided. As the project progresses to completion, the emphasis in reporting in this section should shift from reporting activities to reporting accomplishments.

Objective 1.1 - Identify attitudes and beliefs towards sexual harassment (SH) and sexual assault (SA) and prevention among Junior Enlisted Service members.

This year we conducted one oral presentation and one scientific poster at the American Public Health Association's Annual Conference (November 2022). We presented findings from our in-depth interviews. Abstract titles include: 1) "It depends": Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active duty Airmen (poster), and 2) Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A mixed-methods study (oral). We also continued to develop these abstracts into manuscripts for publication. A third manuscript is also in development (Using intervention mapping to develop a sexual harassment and assault prevention program for Active duty Airmen). Lastly, we presented an overview of the Code of Respect program and results from our needs assessment work conducted in year 1 to the Cross-Service Prevention Research Group, a workgroup of military professionals across service branches who work to prevent harmful behaviors.

Major activities accomplished for Objective 1.1 this reporting period include:

1. Conducted an oral presentation at American Public Health Association's Annual Conference: Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A mixed-methods study
2. Presented a scientific poster at American Public Health Association's Annual Conference: "It depends": Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active duty Airmen
3. Continued developing a manuscript on Airmen's attitudes towards sexual harassment, sexual assault, and reporting incidents.
4. Continued developing a manuscript on attitudes and perceptions of current SH/SA prevention in the Air Force.
5. Continued developing a manuscript on using intervention mapping to develop a sexual assault prevention program

Major activities that are planned include:

1. Finalize three manuscripts of findings and submit to peer-reviewed journals

Objective 1.4 - Develop BBW 2.0 design documents and develop the prototype including alpha testing

Module Design Documents

This year we continued to develop and finalize the X-CoRe design documents for the Junior Enlisted track of X-CoRe, specifically for Modules 8 – 10. Each design document includes production and illustration notes, scripts for coaches, storyline content, and structured skill-building activities. The design document for modules 8 – 10 was finalized and sent to our software developer (Radiant Creative) for production. We reviewed and approved the initial sketches of the storyline for our illustrator to move forward, he then proceeded with full pencil sketches and coloring. We received an initial build of the

three modules to review for alpha testing. Alpha testing was conducted by project staff to determine inconsistencies with the module script. Any issues were logged into a Qualtrics form set up by our production team. Modules 8 – 10 topics include: 8) Alcohol Use – effects of excessive use on behavior and emotions, ability to give and obtain consent, health of relationships, work performance, and work status; 9) Reporting – reporting incidents of sexual harassment and sexual assault, and the types of reporting; 10) Bystander Intervention – how to respond to situations appropriately, demonstrating abilities to respond appropriately, and identifying resources and social support for victims. We also developed a video testimonial on consent which was incorporated into module 7.

Additionally, we completed the design documents for modules 8 - 10 of the Leadership track. Leadership Module 8 – 10 topics include: 8) Responding to incidents of sexual harassment and sexual assault, 9) Supporting survivors, bystanders, and positive behaviors, and 10) Preventing sexual harassment and assault and prioritizing prevention. To develop these modules, we met with our JBMDL advisory group to receive feedback and ensure the information and scenarios were appropriate for leaders. We expect final production for modules 9 and 10 to be complete next year.

End of Module Design Documents and Resources

Additionally, during this reporting period, the project team used Canva to design and produce several resources that will be provided after completing each of the modules. The resources will be module-specific and focus on important aspects addressed in each module, such as alcohol use and your health, a map of Joint Base McGuire-Dix-Lakehurst with resources, and tips on intervening. Each resource will be available in multiple size variations for downloading and printing purposes. The resources are intended to reinforce the module content, provide users with an opportunity for further practice, and serve as a reference for information related to respectful relationships. We have also continued to compile definition design documents for each module. This resource includes further information on key language in each module that expands the users' understanding outside of the information that is provided in the module. Definition design documents for Modules 8 -10 have been drafted and finalized this year.

Video Testimonials Design Documents

We received our videographer's initial drafts of three video testimonials that were recorded in year 2: boundaries, challenging boundaries, and consent. Edits were made to include backgrounds with a similar look and feel to the program, different fonts, longer fade times, the X-CoRe logo, and less upbeat music. All three were reviewed, finalized, and sent to our development team to include within the modules. Other testimonials scripts/design documents that were finalized and will be featured in the program include myths and misconceptions about alcohol use (module 8); the reporting process for sexual harassment, sexual assault, and domestic violence (module 9); and how and when to intervene as a good wingman and the leadership perspective for these topics (module 10). Our videographer sent initial drafts of the reporting and bystander testimonial. The reporting testimonial has been completed, while the bystander video is in the final stages of video editing. Once approved by our team, the videographer will start working on editing the alcohol use testimonial. Testimonials are one to two minutes long within the modules. However, due to the length of usable content we received from each testimonial session, we have decided to create additional supplemental resource videos that provide more in-depth information about each topic. These longer testimonials (4-5 minutes) will be included in their respective modules as a resource at the end of the module. They will go through the same design process as the shorter testimonial videos.

X-CoRe Logo

As we continued developing the program, we felt adapting the Code of Respect logo was necessary. In the previous version, we had the program's core themes listed at the top as “detect”, “protect”, and “respect”. We have decided to switch the themes at the top of the logo to “select”, “detect”, and “protect”, as this is the decision-making paradigm that is taught throughout the program. Each module uses select,

detect, and protect in various ways to emphasize the importance of each skill in preventing sexual harassment and sexual assault. We have also decided to include the word “respect” to align with the 10 stars representing the 10 modules of the program. Respect (and respectful relationships) is identified in the name of the program and ultimately is the overall theme of the program. This decision was made as it more accurately represents the program and the importance of each skill in preventing sexual harassment and sexual assault. We received an updated version of the logo from our developer and had our project team approve the final design. Following this, we updated all of the program components with the new logo, including the learning management platform, modules, resources, and testimonials.

Social Marketing Campaign Design Documents

We started initial design work on the social marketing campaign based on the CAG feedback we received last year. The social marketing campaign will include posters and social media content. The topics the CAG identified as important to address in the social marketing campaign include 1) Consent, 2) Respectful Relationships, and 3) Effective Communication. Key messages they recommended include understanding what consent is, how you know you have consent, and effective communication. We will be using the theoretical methods of framing (positive perspective) and modeling in our social marketing campaign. We will also include sexual harassment and assault resources that are available at JBMDL as part of the social marketing campaign since we found that very few Airmen knew of these resources during our in-depth interviews. This will include WHO is the Sexual Assault Response Coordinator (SARC), Equal Opportunity (EO), and Family Advocacy (FAP), WHERE are they located, and HOW can they help. Additionally, we will be using illustrations from the X-CoRe program in the social marketing campaign to reinforce concepts learned in the program. After developing initial mock-ups of the posters, we met with our full project team to receive feedback.

Below is the scope and sequence of the social marketing campaign:

- Month 1: Respectful Relationships (Module 1) – Introducing/6 the program, Why is it important to prevent SH/SA
- Months 2-4: Selecting Boundaries (Module 2) – Defining boundaries, Setting and keeping boundaries
- Month 5: Detecting Boundaries (Module 2) – Defining risky situations, warning signs for challenging situations
- Month 6: Protecting Boundaries (Module 3/6) – Identify actions and communication skills to protect boundaries
- Month 7: Protecting Boundaries (Module 3/5) – Managing emotions to protect boundaries
- Month 8-9: Protecting Boundaries (Module 7) – Protecting boundaries through respecting others’ boundaries
- Month 10: Protecting Boundaries (Module 10) – Protecting boundaries as a bystander
- Month 11: Protecting Boundaries (Module 9) – Protecting boundaries by getting out of disrespectful relationships

Roll-out will begin when program implementation starts. We have determined that our social marketing campaign will take place in common areas around JBMDL for optimum exposure. This includes on-base housing (e.g., dorms), dining halls, and recreational areas on base. While the focus will be on printed posters and flyers, we also intend to develop social media posts to be featured on the JBMDL’s app and social media platforms. Social media posts will be used to reinforce the skills that the users learned throughout the program.

Based on the framework, we have drafted design documents for the social marketing campaign with multiple approaches including using our illustrative style of the program or a more generic marketing

style. We will review them with our full project team and edit based on their feedback. We also plan to receive feedback from our advisory group before finalizing materials.

Major activities accomplished for Objective 1.4 include:

1. Completion of design documents for Junior Enlisted track (Modules 8-10)
2. Completion of resources and definitions for Junior Enlisted track (Modules 8-10)
3. Received final product of the Boundaries, Challenging Boundaries, Consent, and Reporting testimonial from videographer
4. Conducted initial edits of the Bystander (Why/How to Intervene) testimonial video with the videographer
5. Finalized Myths and Misconceptions of Alcohol Use testimonial scripts/design documents
6. Drafted initial social marketing campaign materials
7. Drafted a framework/timeline for the social marketing campaign
8. Finalized design documents for Leadership track (Modules 8-9)
9. Drafted design documents for Leadership track (Module 10)

Major activities that are planned include:

1. Expand and finalize the development of social marketing campaign messages
2. Finalize additional resource videos for X-CoRe
3. Finalize design documents for the Leadership track (Module 10)
4. Finalize resources and definitions for Leadership track (Modules 8 – 10)

Objective 1.5 - Test usability of BBW 2.0 prototype

We conducted a usability test of the X-CoRe prototype with 9 Junior Enlisted Airmen and 15 mid- to senior-ranked Airmen at the beginning of the year (September 20, 2022). Testing occurred in a private room and was separated by rank (E4 and below and E5 or above). Airmen were asked to complete a consent form, pre-survey, and the first four modules of the program (which serve as the prototype of the program) using their mobile phones. After each module was completed, Airmen were asked to complete a short paper and pencil evaluation asking about what they liked or disliked about the module. After completing all four modules, Airmen were given an electronic usability survey to assess the prototype's perceived ease of use, credibility, trustworthiness, and motivational appeal. Two members of the research team then facilitated a discussion with participants to elicit further feedback about the modules. The usability test findings will inform the full program's development.

We then finalized our analysis plan for the usability test of the prototype. This included creating a data codebook, which included creating a variable name for each item, categorizing it into its respective construct, and identifying the coding Qualtrics (UTHealth's secure surveying platform) has for each item and its scale of responses. We completed a preliminary analysis on the usability data and submitted one abstract to the American Public Health Association's Annual Conference (November 2023) with our preliminary findings titled: Code of Respect (X-CoRe): Can phone-based sexual harassment and sexual assault prevention offer an appealing solution for the U.S. Air Force?

Upon finalizing our analyses of the data, our results indicated that the X-CoRe prototype has high acceptability among Airmen and significantly increased negative attitudes toward sexual harassment among Airmen ($p < 0.02$), and thus a usability test of the full 10-module program is warranted. The results are summarized below.

As shown in Table 1, the majority of participants were female, White, aged 19-24 years, and ranked E9 or below. An equal proportion of Airmen who were single were also married.

Table 1: Demographic Profile of the Sample

	Study Sample n = 26 n (%)
Gender	
Female	16 (61.5)
Male	9 (34.6)
Race^a	
White	10 (38.5)
Black	6 (23.1)
Hispanic	5 (19.2)
Other	5 (19.2)
Age	
19-24	10 (38.5)
25-29	5 (19.2)
30-35	6 (23.1)
36-40	3 (11.5)
41-50	2 (7.7)
Rank	
E1-E4	10 (38.5)
E5-E9	13 (50.0)
O1-O3	3 (11.5)
O4 or above	0 (0)
Marital Status	
Married	11 (42.3)
Single, never married	11 (42.3)
Single/Divorced; Married/Separated	4 (15.4)
Cohabiting	0 (0)
Widowed	0 (0)

Usability ratings for the X-CoRe prototype are presented in Table 2. As shown, X-CoRe received high usability ratings on many factors, including creditability, acceptability, overall usefulness, perceived impact, and motivational appeal.

**Table 2. Participants' Usability Ratings for the X-CoRe Prototype and Specific Features
Post Survey (n = 25)**

Usability construct	Gradient	Participant Agreement n (%)
Overall X-CoRe Prototype		
Credibility	'Information I received from this program was correct.'	22 (95.7)
	'Information I received from this program can be trusted.'	23 (95.8)
Look and Feel	'Everything goes together in this program.'	19 (79.2)
	'The layout is pleasantly varied.'	13 (54.2)
	'The colors used are attractive.'	16 (66.7)
	'The layout is professionally designed.'	21 (87.5)
Acceptability	'The program's length was just right.'	21 (87.5)
Overall Usefulness	'More useful than other sexual harassment and sexual assault prevention training I have taken'	13 (54.2)
	'More useful than other computer-based trainings I have had.'	11 (45.8)
Perceived Impact	'Information communicated in this program will help Airmen select and protect boundaries to have and maintain respectful relationships'	20 (83.3)
	'Information communicated in this program will help Airmen have respectful social, work, and intimate relationships.'	21 (87.5)
	'Information communicated in this program will improve my communication within relationships'	24 (100)
Motivational appeal	'Would like to do this program again.'	20 (83.3)
	'Would tell another Airman or leader to try this program.'	20 (83.3)
Specific X-CoRe Features		'Like at little' or 'Like a lot'
Acceptability	'Program introduction'	22 (91.6)

The X-CoRe prototype significantly increased negative attitudes toward sexual harassment ($p < 0.02$; Table 3). Knowledge of sexual harassment, attitudes about relationship violence and cyberbullying, and self-efficacy for relationships and personal boundaries also improved; however, these results were not statistically significant due to sample size limitations (Table 3).

Table 3. Change in Psychosocial Determinants of Healthy Relationships

	Mean (SD)		Mean difference	Paired t- test (p- value)
	Pre-test (n=24)	Post-test (n=24)		
Knowledge of sexual harassment and sexual assault ^a	0.85 (0.09)	0.87 (0.10)	0.02	0.48
Attitudes about sexual harassment^b	3.65 (0.45)	3.75 (0.48)	0.10	0.02
Attitudes about relationship violence ^c	3.90 (0.23)	3.93 (0.22)	0.04	0.21
Attitudes about cyberbullying ^b	4.66 (0.53)	4.72 (0.51)	0.06	0.47
Relationship skills self-efficacy: with a romantic partner ^c	4.03 (0.69)	4.12 (0.73)	0.08	0.20
Relationship skills self-efficacy: with a friend ^c	3.81 (0.98)	3.97 (0.99)	0.16	0.08
Relationships skills self-efficacy: Healthy relationships ^d	3.46 (0.46)	3.53 (0.49)	0.07	0.48
Personal Boundaries Scale	3.46 (0.46)	3.52 (0.49)	0.07	0.48

^aResponse options were “Yes” or “No”

^bResponse options on a 5-point Likert scale of “Strongly agree”, “Agree”, “Neither agree or disagree”, “Disagree”, “Strongly disagree”

^cResponse options on a 5-point Likert scale of “I’m poor at this”, “I’m only fair at this”, “I’m ok at this”, “I’m good at this”, “I’m extremely good at this”

^dResponse options on a 4-point Liker scale of “Not at all confident,” “Somewhat confident,” “Confident”, and “Very confident;”

Lastly, when asked what they liked the most about the modules, participants enjoyed the interactive and comic book style of the program, the variety of scenarios, the testimonial, the practical applications, and the diversity of the program. Additionally, they thought the program was current, the scenarios were realistic, and was impactful. Qualitative data indicated positive reactions to the program, particularly regarding the realistic scenarios, which many Airmen liked the best about the program:

“I enjoyed the realistic scenarios I could see either myself, peers, or subordinates in, with great questions and problems being asked.”; “It is modern for a modern user interface. It has realistic examples and definitions.”; “When the program covered relationship basics, I think it was very important that both heterosexual and LGBTQ relationships were discussed. I also enjoyed that the characters were very diverse.”; “It was clear, direct, and to the point.”

Major activities accomplished for Objective 1.5 include:

1. Recruited Airmen for the usability test
2. Conducted usability test of the X-CoRe prototype with 9 Junior Airmen and 15 Leaders
3. Developed codebook and draft tables for the X-CoRe usability test analysis
4. Submitted an abstract to the APHA 2023 Annual Conference
5. Completed data analysis of the usability test of the prototype.

Objective 1.6 - Disseminate phase 1 findings

This year we continued working on three manuscripts to disseminate our research findings: 1) “It depends”: Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active duty Airmen, 2) Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A mixed-methods study, and 3) Using Intervention Mapping to develop a sexual harassment and assault prevention program for Active duty Airmen. We conducted one oral presentation (Manuscript #2) and presented one scientific poster (Manuscript #1) at the American Public Health Association’s Annual Conference (November 2022). We will use the quantitative and qualitative analyses to draft a report plan and manuscript from the prototype results. This will be disseminated to our project team, Joint Base McGuire-Dix-Lakehurst, and appropriate peer-reviewed journals. We also presented an overview of the Code of Respect program and the results from our needs assessment work conducted in year 1 to the Cross-Service Prevention Research Group.

Major activities accomplished for Objective 1.6 this reporting period include:

1. Conducted an oral presentation at the American Public Health Association's Annual Conference: Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A mixed-methods study
2. Presented a scientific poster at the American Public Health Association's Annual Conference: "It depends": Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active duty Airmen
3. Continued developing a manuscript on Airmen's attitudes towards sexual harassment, sexual assault, and reporting incidents.
4. Continued developing a manuscript on attitudes and perceptions of current SH/SA prevention in the Air Force.
5. Continued developing a manuscript on using intervention mapping to develop a sexual assault prevention program

Major activities that are planned include:

1. Finalize three manuscripts of findings and submit them to peer-reviewed journals.

Objective 2.1 - Revise BBW 2.0 design documents and obtain Action Team sign-off

As part of our usability test with the X-CoRe prototype, we obtained qualitative data in two formats: 1) A short paper/pencil evaluation asking about likes and dislikes after each module; and 2) A facilitated discussion with participants. We used the feedback from both these methods to inform the revisions to Modules 1-4 and the development of the full program. We also accounted for user experience within the platform to identify bugs, glitches, and issues within the X-CoRe prototype. Our project team assessed the feedback we received for each module to determine what revisions were necessary and feasible to enhance the user experience and improve the program. We also made revisions to the look and feel of the program when sections of the program were too lengthy for one page and within the learning management platform to eliminate unnecessary features and pages that may cause confusion. Lastly, we have discussed with our software developer back-end logic issues that are incorrect and bugs that we encountered during the usability test of the prototype.

For Modules 1-4, our project team assessed the feedback we received for each module to determine what revisions were necessary and feasible to enhance the user experience and improve the program. We also made revisions to the look and feel of the program when sections of the program were too lengthy for one page and within the learning management platform to eliminate unnecessary features and pages that may cause confusion. Lastly, we discussed with our software developer back-end logic issues that are incorrect and bugs that we encountered during the usability test of the prototype. At least two project team members reviewed each script to confirm the necessary revisions before being submitted to our developer and illustrator. The revisions were added to each module script and identified by whom the item belonged to (developer vs. illustrator) and what changes needed to be made. Our developer and illustrator received the updated versions of Modules 1-4 to start working through. We have received all the changes and confirmed the correctness from our illustrator for Modules 1-4. We expect our developer to have finalized the changes to Modules 1-4 early next year.

We met with Joint Base McGuire-Dix-Lakehurst's Lead Sexual Assault Response Coordinator and the acting Superintendent of the Equal Opportunity Office to confirm that the reporting information featured in Module 9 was accurate. Topics included third-party reporting, mandatory reporters, types of reporting, and differences between sexual harassment and sexual assault reporting. We also asked about scenarios in Modules 1 and 10 to confirm that we were creating realistic scenarios for hostile work environments and sexual harassment. Based on their feedback, we edited the module content and updated the scenarios in modules 1 and 10 to accurately represent the current Air Force definitions and regulations.

We conducted a CAG meeting through Zoom to obtain feedback and sign-off on new module illustrations that were not tested during the usability, specifically in modules 7-8. The scenarios discussed with our CAG are crucial to the program as they depict explicit incidents of sexual harassment and sexual assault. Specifically, we asked CAG members to identify if they knew what was happening in each scenario, if they thought the scenarios were realistic, if the characters' facial expressions were appropriate, and if there was anything that could make each scene better. We also asked questions related to the specific scenarios, including the characters' intoxication level and body positioning. Overall, the CAG had positive feedback for the scenarios and illustrations. They felt that each scenario was realistic, and the facial expressions were appropriate. They identified that intoxication level didn't particularly matter in either scenario as it would still be considered sexual harassment or assault. Some Airmen did feel that each scenario was a bit choppy and needed illustrations that included what happened in the middle of each scenario; however, other Airmen felt that it was unnecessary and recommended leaving it as is. We discussed the feedback with our illustrator and ultimately decided to leave the scenarios as is, as we had positive feedback overall. Our illustrator finalized the illustrations with color (Modules 7-8), and updated any illustrations based on the script changes required to fit the testimonial for Modules 7.

Major activities accomplished for Objective 2.1 this reporting period include:

1. Finalized revisions for Modules 1-4
2. Met with CAG and obtained sign-off for SH/SA illustrations

Objective 2.2 - Develop the fully theoretically- and empirically-based BBW 2.0 program

Junior Enlisted Component

We have been developing and finalizing the full X-Core program this year. Revisions to Modules 1-4 were sent to our developer and illustrator for final changes before completion. Additionally, with input from our CAG, we worked on Modules 5-10 and sent them to our developer and illustrator. We signed off on the final sketches for Modules 9-10 and our illustrator finalized the sketches by adding color. We have completed alpha testing of Modules 5-10 and informed our developer of the necessary changes. As we are still pending development changes for Modules 1-10, we created a prioritization list of the changes for our developer. This list includes specifications of the remaining issues and identifies each issue by priority (high, medium, low). Our developer has been instructed to resolve changes based on priority level. High priority includes major bugs, questions with wrong answers, or back-end coding issues; medium priority includes removal of the buzzer sounds and illustrations that are replicated in questions; low priority includes grammatical errors.

Our illustrator worked on revising our coaches to have different facial expressions and body movements throughout the program to account for the sensitivity of the program. He also used this as an opportunity to enhance the coaches to be more realistic and match the look and feel of the storyline and activity illustrations. Several rounds of edits were made to keep the overall aspects of the old coaches that the CAG identified as important. The entire program was updated with the new coaches. Our project team then re-reviewed the coach scenarios to determine if the appropriate body positions and facial expressions were used in each illustration. Revisions were sent to our illustrator and updated.

In our initial design of the program, we had hoped to have a facilitator-led follow-up component to reinforce the strategies that users learned throughout X-CoRe. After speaking with our JBMDL partners, it was quickly identified that a follow-up session would be difficult to implement due to overall work conflicts and mission responsibilities. We shifted that initial thought to conclude the project with a quick "outro" module to review the skills learned during X-CoRe by critically analyzing examples of disrespectful behaviors/relationships. Users will use the select, detect, protect concept to identify warning signs that personal boundaries are being challenged and select the skills they've previously learned to

protect the boundary and avoid/manage disrespectful relationships. We will include four scenarios that were introduced in Modules 1-10 of the program as the foundation of the learning activities. The user will be required to select two of the four scenarios, review the boundary the character has selected, detect signs that the boundary is being challenged, and choose a skill from the “Protect Toolbox” that they can use to protect this boundary.

Lastly, we met with our CAG to obtain feedback on scenarios that required their perspective to identify how realistic they were. We used that feedback to inform our development as we finalized X-CoRe program development.

Leadership Component

The leadership track of the program will include the same Modules 1-7 that the Junior Enlisted are receiving. This was deemed important by our JBMDL partners so that mid- and senior-ranked Airmen understand what the junior Airmen were receiving and promote healthy and respectful work environments based on the Code of Respect program. The last three modules (8-10) will focus on responding to an incident of sexual harassment or assault, supporting victims and bystanders, and preventing sexual harassment and assault. The coaches' narrative will also be adapted to help leadership understand that these are concepts that are important for their Airmen to understand as they may have been or are currently in similar situations. An outline for each module was developed to reflect the performance and behavior objectives identified through the Intervention Mapping process. We discussed the outline with our project team and revised it into a final version. We used the final version of the outline to develop the storyline, learning activities, and resources for modules 8-10.

We developed and finalized Modules 8 and 9, which are focused on responding and referring to incidents of sexual assault and sexual harassment. These were sent to our developer and illustrator to begin production work. We reviewed and approved the initial sketches of the storyline for our illustrator to move forward for Module 8-9, he then proceeded with full pencil sketches and coloring. He has completed all illustrations for Module 8 and is in the last stages of coloring for Module 9. We are expecting to receive the modules from our developer early next year. We have also drafted the definitions for these two modules and are beginning to work on the resources for each. We have received positive initial feedback from our project team for Module 10. Following this, we revised the module to decrease the overall time and be able to include a testimonial. It will go through an additional round of approvals and be sent to our developer and illustrator.

Major activities accomplished for Objective 2.2 this reporting period include:

1. Finalized Junior Enlisted Modules 8-10
2. Finalized revisions for Modules 1-4 based on prototype feedback
3. Developed draft of Junior Enlisted Outro Module
4. Completed alpha testing of Modules 5-10 of the Junior Enlisted Track
5. Finalized design documents for Leadership X-CoRe Modules 8-9
6. Drafted design documents for Leadership X-CoRe Module 10
7. Finalize resources and definitions for Leadership track (Modules 8 – 10)

Major activities that are planned include:

1. Finalize development of Leadership X-CoRe Modules 10
2. Finalize revisions for Junior Enlisted Modules from alpha testing

Objective 2.3 - Test full BBW 2.0 functionality and content, and usability

To prepare for the full X-CoRe usability test, we revised our consent form and pre and post-survey to submit for IRB approval. The consent form was adapted from the version used for the prototype to

identify the completion of the full X-CoRe program, completion of a pre- and post-survey, and additional language to address feelings of discomfort when completing the program. The pre- and post-survey was adapted to include additional scales that address new psychosocial outcomes in Modules 5-10. Scales include the ARC3/Sexual Consent Scale, ARC3/Bystander Awareness/Campus Safety Scale, and Bystander Self-Efficacy Scale. These scales will be used to assess the following psychosocial outcomes: attitudes/knowledge of effective consent, perceptions of sexual misconduct as part of military life, and bystander self-efficacy. Both the consent form and survey were submitted to UTHealth IRB for approval.

Major activities accomplished for Objective 2.3 this reporting period include:

1. Revised usability survey for X-CoRe full program
2. Revised consent form for X-CoRe full program
3. Submitted the usability survey and consent form to UTHealth IRB

Major activities that are planned include:

1. Received approval for the usability survey and consent form by UTHealth IRB
2. Recruited Airmen for the usability test
3. Conduct a usability test of the X-CoRe full program with 10 Junior Airmen and 10 Leaders

What opportunities for training and professional development has the project provided?

If the project was not intended to provide training and professional development opportunities or there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project. “Training” activities are those in which individuals with advanced professional skills and experience assist others in attaining greater proficiency. Training activities may include, for example, courses or one-on-one work with a mentor. “Professional development” activities result in increased knowledge or skill in one’s area of expertise and may include workshops, conferences, seminars, study groups, and individual study. Include participation in conferences, workshops, and seminars not listed under major activities.

Professional development activities were held in the form of training sessions/meetings for the research coordinator and two research assistants. All training sessions were conducted by the PI. Topics included Intervention Mapping; identifying and selecting theoretical methods and strategies; developing program design documents; program evaluation including researching psychosocial outcomes and scales; abstract and poster development; and in-house alpha testing. Additional opportunities included quantitative analysis, writing manuscripts, participation in professional conferences, and developing impactful campaigns.

How were the results disseminated to communities of interest?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how the results were disseminated to communities of interest. Include any outreach activities that were undertaken to reach members of communities who are not usually aware of these project activities, for the purpose of enhancing public understanding and increasing interest in learning and careers in science, technology, and the humanities.

We disseminated our findings from Objective 1.1 at the American Public Health Association’s Annual Conference: 1) “It depends”: Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active duty Airmen (poster), and 2) Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A mixed-methods study (oral). We currently have three manuscripts in development to be published in peer-reviewed journals: 1) “It depends”: Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active duty Airmen, 2) Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A mixed-methods study, and 3) Using Intervention Mapping to develop a sexual harassment and assault prevention program for Active duty Airmen. We plan on finalizing these manuscripts during our no-cost extension. We also presented an overview of the Code of Respect program and the results from our needs assessment work conducted in year 1 to the Cross-Service Prevention Research Group.

What do you plan to do during the next reporting period to accomplish the goals?

If this is the final report, state “Nothing to Report.”

Describe briefly what you plan to do during the next reporting period to accomplish the goals and objectives.

Objective 1.4 - Develop BBW 2.0 design documents and develop the prototype including alpha testing

Major activities that are planned include:

1. Expand and finalize the development of social marketing campaign messages
2. Finalize additional resource videos for X-CoRe
3. Finalize design documents for the Leadership track (Module 10)
4. Finalize resources and definitions for Leadership track (Modules 8 – 10)

Objective 1.5 - Test usability of BBW 2.0 prototype

Major activities that are planned include:

1. Conduct data analysis on data collected from the usability test

Objective 1.6 – Disseminate phase 1 findings

Major activities that are planned include:

1. Finalize three manuscripts of findings and submit them to peer-reviewed journals.

Objective 2.2 - Develop the fully theoretically- and empirically-based BBW 2.0 program

Major activities that are planned include:

1. Finalize development of Leadership X-CoRe Modules 10
2. Finalize revisions for Junior Enlisted Modules from alpha testing

Objective 2.3 - Test full BBW 2.0 functionality and content, and usability

1. Received approval for the usability survey and consent form by UTHealth IRB
2. Recruited Airmen for the usability test
3. Conduct usability test of the X-CoRe full program with 10 Junior Airmen and 10 Leaders

4. IMPACT: *Describe distinctive contributions, major accomplishments, innovations, successes, or any change in practice or behavior that has come about as a result of the project relative to:*

What was the impact on the development of the principal discipline(s) of the project?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how findings, results, techniques that were developed or extended, or other products from the project made an impact or are likely to make an impact on the base of knowledge, theory, and research in the principal disciplinary field(s) of the project. Summarize using language that an intelligent lay audience can understand (Scientific American style).

The findings from our in-depth interviews will have a major contribution to the field of sexual assault prevention in the military. This was the first study, to our knowledge, to assess active-duty Airmen’s attitudes and beliefs regarding reporting incidents of SH and SA. Our study also identified Airmen’s perceptions of current sexual harassment (SH) and sexual assault (SA) prevention training and areas for improvement. The findings from the in-depth interviews highlight areas to target within primary prevention programs and advance our knowledge on the factors that may facilitate or prevent reporting incidents of SH and SA among active duty service members.

Our results from the usability test of the X-CoRe prototype identified that the program has high acceptability among Airmen and significantly increased negative attitudes toward SH among Airmen ($p < 0.02$). Knowledge of SH, attitudes about relationship violence and cyberbullying, and self-efficacy for relationships and personal boundaries also improved; however, these results were not statistically significant due to sample size limitations. These results indicate that the usability test of the full 10-module program is warranted. Further, a randomized controlled trial of the program is the next step to determine the efficacy of our innovative, multi-level SA and SH prevention intervention.

What was the impact on other disciplines?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how the findings, results, or techniques that were developed or improved, or other products from the project made an impact or are likely to make an impact on other disciplines.

Findings from our in-depth interviews will also make significant contributions to the field of sexual assault prevention in the general population. Few studies have identified factors associated with reporting incidents of SA. Our study population included a significant number of young adults/college-aged youth, who are most at risk for SA in the general population. Thus, the findings from our study could be generalized to civilian populations of similar ages.

What was the impact on technology transfer?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe ways in which the project made an impact, or is likely to make an impact, on commercial technology or public use, including:

- *transfer of results to entities in government or industry;*
- *instances where the research has led to the initiation of a start-up company; or*
- *adoption of new practices.*

Nothing to Report

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how results from the project made an impact, or are likely to make an impact, beyond the bounds of science, engineering, and the academic world on areas such as:

- *improving public knowledge, attitudes, skills, and abilities;*
- *changing behavior, practices, decision making, policies (including regulatory policies), or social actions; or*
- *improving social, economic, civic, or environmental conditions.*

Sexual assaults in the military have gained national and local attention due to recent high-profile cases. Our study is the first step to understanding attitudes towards SH and SA, reporting incidents, and prevention strategies among a military population. Thus, our findings will increase the public’s knowledge as to the factors associated with reporting incidents and what factors primary prevention efforts should target. At the

end of the study, we will have a 'turn-key' multi-level prevention program to prevent sexual assaults among active duty Airmen. If effective, the program can be disseminated to other Air Force bases.

- 5. CHANGES/PROBLEMS:** *The PD/PI is reminded that the recipient organization is required to obtain prior written approval from the awarding agency grants official whenever there are significant changes in the project or its direction. If not previously reported in writing, provide the following additional information or state, "Nothing to Report," if applicable:*

Changes in approach and reasons for change

Describe any changes in approach during the reporting period and reasons for these changes. Remember that significant changes in objectives and scope require prior approval of the agency.

Nothing to Report

Actual or anticipated problems or delays and actions or plans to resolve them

Describe problems or delays encountered during the reporting period and actions or plans to resolve them.

We have experienced delays from our software developer building Modules 5-10 (junior enlisted), and Modules 8-9 (leadership) which has ultimately led to a delay in conducting the full program usability test. Despite the delays, we have attempted to remedy them by creating a prioritization list for our developer to focus their efforts on issues that are the highest priority and would be required to solve prior to the usability test. Additionally, we have begun to start prep for the usability test by submitting the consent form and pre- and post-survey for IRB approval. While we do not expect further delays, we will begin a no-cost extension after this year to finish the remaining production, usability test, and finalizing of manuscripts.

Changes that had a significant impact on expenditures

Describe changes during the reporting period that may have had a significant impact on expenditures, for example, delays in hiring staff or favorable developments that enable meeting objectives at less cost than anticipated.

While our initial plans were to travel to JBMDL for our usability test of the full program, those costs have not been made due to production delays. We also wanted to be efficient with our time and budget and thus, obtained feedback from our CAG through email versus in-person at various points during the year. Also, our Graduate Research Assistant, M. Brayden Bowie, resigned in December 2022 as she graduated. We hired a new research assistant for this year.

Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents

Describe significant deviations, unexpected outcomes, or changes in approved protocols for the use or care of human subjects, vertebrate animals, biohazards, and/or select agents during the reporting period. If required, were these changes approved by the applicable institution committee (or equivalent) and reported to the agency? Also specify the applicable Institutional Review Board/Institutional Animal Care and Use Committee approval dates.

Significant changes in use or care of human subjects

Not applicable

Significant changes in use or care of vertebrate animals

Not applicable

6. PRODUCTS: *List any products resulting from the project during the reporting period. If there is nothing to report under a particular item, state “Nothing to Report.”*

- Publications, conference papers, and presentations**

Report only the major publication(s) resulting from the work under this award.

Journal publications. *List peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Identify for each publication: Author(s); title; journal; volume; year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).*

Nothing to Report.

Books or other non-periodical, one-time publications. *Report any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like. Identify for each one-time publication: author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (e.g., book, thesis or dissertation); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).*

Nothing to Report.

Other publications, conference papers and presentations. *Identify any other publications, conference papers and/or presentations not reported above. Specify the status of the publication as noted above. List presentations made during the last year (international, national, local societies, military meetings, etc.). Use an asterisk (*) if presentation produced a manuscript.*

1 . Hernandez, B., Li, A., Shegog, R., Markham, C., Emery, S., Thormaehlen, L., Bowie, M., Teixeira, R., Witherspoon, I., Doss, J., Jones, V., and Peskin, M. “It depends”:

Attitudes and Perceptions of Sexual Harassment and Assault and Intentions to Report Incidents among Active-Duty Airmen. Poster presentation, American Public Health Association's Annual Conference, November 2022.

2. Bowie, M., Li, A., Peskin, M., Shegog, R., Markham, C., Emery, S., Thormaehlen, L., Teixeira, R., Witherspoon, I., Doss, J., Jones, V., and Hernandez, B. Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A Mixed Methods Study. Oral presentation, American Public Health Association's Annual Conference, November 2022.

- **Website(s) or other Internet site(s)**

List the URL for any Internet site(s) that disseminates the results of the research activities. A short description of each site should be provided. It is not necessary to include the publications already specified above in this section.

Nothing to Report

- **Technologies or techniques**

Identify technologies or techniques that resulted from the research activities. Describe the technologies or techniques were shared.

The X-CoRe prototype and program is housed in a learning management system, Opigno. This platform allows the users to progress through the program while tracking their completion. On the back-end, we are able to determine how long a user spends in each module.

- **Inventions, patent applications, and/or licenses**

Identify inventions, patent applications with date, and/or licenses that have resulted from the research. Submission of this information as part of an interim research performance progress report is not a substitute for any other invention reporting required under the terms and conditions of an award.

Nothing to Report

- **Other Products**

Identify any other reportable outcomes that were developed under this project. Reportable outcomes are defined as a research result that is or relates to a product, scientific advance, or research tool that makes a meaningful contribution toward the understanding,

prevention, diagnosis, prognosis, treatment and /or rehabilitation of a disease, injury or condition, or to improve the quality of life. Examples include:

- *data or databases;*
- *physical collections;*
- *audio or video products;*
- *software;*
- *models;*
- *educational aids or curricula;*
- *instruments or equipment;*
- *research material (e.g., Germplasm; cell lines, DNA probes, animal models);*
- *clinical interventions;*
- *new business creation; and*
- *other.*

- Scientific poster: “It depends”: Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active duty Airmen
- Oral/PowerPoint presentation: Attitudes and Perceptions of Current Sexual Harassment and Assault Prevention Training among Airmen: A mixed-methods study
- X-CoRe Modules 8-10 design document (finalized)
- Challenging Boundaries Testimonial script (received final from videographer)
- Consent Testimonial Script (received final from videographer)
- Alcohol Use Myths and Misconceptions Testimonial Script (sent to videographer for editing)
- Reporting Testimonial Script (received final from videographer)
- Why/How to Intervene Testimonial script (sent to videographer for editing)
- Abstract: *Code of Respect (X-CoRe): Can phone-based sexual harassment and sexual assault prevention offer an appealing solution for the U.S. Air Force?*
- Usability Test Data Codebook
- X-CoRe Leadership Outline (finalized)
- Data from the usability test of the X-CoRe prototype
- X-CoRe Leadership Modules 8-9 (finalized)
- X-CoRe Leadership Module 10 (draft)
- Social Marketing Framework/Timeline
- Social Marketing Campaign initial concept drafts
- X-CoRe Production Issue Prioritization document
- X-CoRe full program Usability Pre- and Post-Survey
- X-CoRe full program Usability Consent Form

7. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

What individuals have worked on the project?

Provide the following information for: (1) PDs/PIs; and (2) each person who has worked at least one person month per year on the project during the reporting period, regardless of the source of compensation (a person month equals approximately 160 hours of effort). If information is unchanged from a previous submission, provide the name only and indicate “no change”.

Example:

Name: Mary Smith
Project Role: Graduate Student
Researcher Identifier (e.g. ORCID ID): 1234567
Nearest person month worked: 5

Contribution to Project: Ms. Smith has performed work in the area of combined error-control and constrained coding.
Funding Support: The Ford Foundation (Complete only if the funding support is provided from other than this award.)

Name: Belinda Hernandez, PhD
Project Role: Principal Investigator
Researcher Identifier: 0000-0002-9368-2623
Nearest person month worked: 1
Contribution to Project: No change

Name: Melissa Peskin, PhD
Project Role: Co-Investigator
Researcher Identifier: 0000-0003-0771-9336
Nearest person month worked: 1
Contribution to Project: No change.

Name: Christine Markham, PhD
Project Role: Co-Investigator
Researcher Identifier: 0000-0003-0587-894X
Nearest person month worked: 1
Contribution to Project: No change.

Name: Ross Shegog, PhD
Project Role: Co-Investigator
Researcher Identifier: 0000-0003-2750-0817
Nearest person month worked: 1
Contribution to Project: No change.

Name: Susan Tortolero Emery, PhD
Project Role: Co-Investigator
Researcher Identifier: 0000-0003-1721-8607
Nearest person month worked: 1
Contribution to Project: No change.

Name: Robert Addy, PhD
Project Role: Data Manager
Researcher Identifier: 0000-0002-8690-497X
Nearest person month worked: 1
Contribution to Project: No change.

Name: Laura Thormaehlen, MPH

Project Role: Research Coordinator
Researcher Identifier: N/A
Nearest person month worked: 1
Contribution to Project: No change.

Name: Rejane Andina Texeira, MPH
Project Role: Research Assistant
Researcher Identifier: N/A
Nearest person month worked: 1
Contribution to Project: No change.

Name: Mary B. Bowie
Project Role: Graduate Research Assistant
Researcher Identifier: N/A
Nearest person month worked: 0.7
Contribution to Project: No change.

Name: Tasha Etheridge
Project Role: Research Coordinator
Researcher Identifier: N/A
Nearest person month worked: 1
Contribution to Project: No change.

Name: Elizabeth Baumler, PhD
Project Role: Statistician
Researcher Identifier: 0000-0002-2691-2062
Nearest person month worked: 0.5
Contribution to Project: No change.

Name: Yanneth Rivera
Project Role: Research Associate
Researcher Identifier: N/A
Nearest person month worked: 1.0
Contribution to Project: No change.

Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

If there is nothing significant to report during this reporting period, state "Nothing to Report."

If the active support has changed for the PD/PI(s) or senior/key personnel, then describe what the change has been. Changes may occur, for example, if a previously active grant has closed and/or if a previously pending grant is now active. Annotate this information so it is clear what has changed from the previous submission. Submission of other support information is not necessary for pending changes or for changes in the level of effort for active support reported previously. The awarding agency may require prior written approval if a change in active other support significantly impacts the effort on the project that is the subject of the project report.

There have been several changes in the active support of key personnel. These changes are outlined below.

The changes have not impacted their effort on the current project.

Belinda Hernandez, PhD

The following studies have closed since the last report for Dr. Hernandez:

NIH R21 Markham, Shegog, Peskin (PIs)

Native iCHAMPS: An innovative online decision support system for increasing implementation of effective sexual health education in tribal communities.

The goal of this R21 study is to adapt and assess the feasibility of an innovative online decision support system, Native iCHAMPS, to facilitate the adoption and implementation of culturally-relevant effective sexual health education interventions in AIAN communities.

Role: Co-I

NIH/NICHD
(PIs)

McLaughlin, Peskin, Shegog

Me & You-Tech: A socio-ecological solution to teen dating violence for the digital age.

This Fast Track STTR application proposes to develop an internet-based dating violence prevention program called "Me and You-Tech," targeted to 6th-grade middle school students, their parents, and school staff to reduce dating violence victimization and improve factors related to healthy relationships.

Role: Co-I

***Title: Toward Planning A Cross-Sector Strategy Addressing Pregnancy Prevention and Parenting Supports Among Foster Youth**

Major Goals: The goal of this project is to conduct a needs assessment to inform the development of curricula for youth, trainings for adults, and other possible individual- and systems-level strategies to reduce pregnancies among youth in care.

*Status of Support: Active

Project Number: CLYC

Name of PD/PI: Peskin, Melissa

*Source of Support: The Texas Campaign to Prevent Teen Pregnancy / The Houston Endowment

*Primary Place of Performance: Houston, Texas

Project/Proposal Start and End Date: (MM/YYYY) (if available): 08/01/2019 – 02/28/2022

* Total Award Amount (including Indirect Costs):

* Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
2. 2022 (Current)	1.68 CM

The following studies have become active for Dr. Hernandez:

A Cluster Randomized Controlled Trial of X-CoRe: A Multi-Level Sexual Assault Prevention Intervention for Active Duty Airmen

HT94252310763 DOD (Belinda Hernandez, PI)

Belinda Hernandez, PI

16%

09/01/2023 – 08/31/2027

Major Goals: The goal of this four-year cluster randomized controlled trial is to determine the efficacy of an innovative, multi-level sexual assault and sexual harassment prevention intervention for Active duty Airmen, named Code of Respect (X-CoRe).

Specific aims:

Our **specific aims** are to:

1. Examine the efficacy of X-CoRe in improving psychosocial determinants related to respectful/disrespectful relationships at the 6- and 12-month follow-up among Junior Enlisted Airmen at JBMDL.
2. **(Primary)** Examine the efficacy of X-CoRe in reducing SA and SH victimization among Junior Enlisted Airmen at the 12-month follow-up.
3. Examine the efficacy of X-CoRe in improving unit cohesion and mission readiness by increasing bystander behavior and overall health functioning and decreasing secondary risk and harmful behaviors (e.g., alcohol misuse, intimate partner violence, suicide ideation) at the 6- and 12-month follow-up.

Hypotheses: Compared with Junior Airmen in the comparison group (X-CoRe's Installation + Leadership Components), Junior Airmen who receive all three X-CoRe components will demonstrate significantly:

1. Improved psychosocial determinants related to respectful/disrespectful relationships (e.g., knowledge, skills, self-efficacy, attitudes) at the 6- and 12-month follow-ups
2. Reduced victimization of SA and SH at the 12-month follow-up (**primary outcomes**)
3. Increased bystander behavior, health functioning, unit cohesion, and reduced secondary risk and harmful behaviors at the 6 and 12-month follow-ups

Contracting Grants Officer:

Teresa Parker-Reeser, Grants Officer

Teresa.M.ParkerReeser.civ@health.mil

Overlap with proposed project: None

Feasibility and acceptability of a father-based intervention to support adolescents' reproductive health 1R21HD109744-01A1 Wellesley College / NIH (Jennifer Grossman, PI) Belinda Hernandez, subcontract-PI 8% 08/10/2023-07/31/2026

Major Goals: Provide expert guidance on intervention development, feasibility & acceptability assessment, and preliminary effectiveness, particularly for the Intervention Mapping process.

Specific Aims:

Specific Aim 1: To develop a 3-module online program prototype to support father-teen health-promoting talk about sex, addressing topics of sexual risk & protection, healthy & unhealthy relationships, and consent. Each module will include 1) an online lesson, 2) a father-teen activity, and 3) an online father support group. Using Intervention Mapping, we will select theory-based

behavior change methods to create matrices of proximal program objectives for fathers and teens, and develop prototype modules based on feedback from our Family Advisory Board (FAB) throughout the development process (10 fathers and 6 teens).

Specific Aim 2: To evaluate the program's acceptability, feasibility, and preliminary efficacy. Fifty father-teen pairs from diverse racial/ethnic backgrounds, stratified by teen gender, will be enrolled in the program. 2a) To assess program feasibility and acceptability, brief acceptability and feasibility survey questionnaires, data on participants' enrollment and number of modules completed, module feedback, debrief interviews with a purposive sample (5 fathers, 5 teens), and FAB input on feasibility (e.g., approach and timing for pilot recruitment, intervention ease of use) and acceptability (e.g., intervention usefulness and favorability) will be collected. 2b) Preliminary efficacy will be explored through pre- and post-intervention surveys to assess directionality of change in correlates of teens' sexual behavior: knowledge, self-efficacy, and outcome expectations related to sex and communication, using matched pair t-tests, and t-tests to assess effects of teen gender on outcomes.

Replicating Evidence-Based Teen Pregnancy Prevention (TPP) Programs to Scale in Multiple Settings to Advance Equity through the Adolescent Lifespan

1TP1AH000324-01-00 OPA (Melissa Peskin, PI)

Belinda Hernandez, Co-I

12%

07/01/2023 – 06/30/2028

Major Goals: This project seeks to replicate evidence-based teen pregnancy prevention programs in high need and overlooked settings throughout the Harris County area.

Specific aims

The goal of this 5-year project is to improve sexual and reproductive health outcomes, promote positive youth development, and advance health equity for adolescents, their families, and communities through the replication of medically accurate and age-appropriate evidence-based teen pregnancy prevention programs (EBPs).

Contracting Grants Officer:

Dixie Perez, Grants Management Specialist

Dixie.Perez@hhs.gov

Overlap with proposed project: None

Christine Markham, PhD

The following studies have closed for Dr. Markham:

VITAL Start (Video-intervention to Inspire Treatment Adherence for Life): Brief facility based video intervention to improve retention and adherence to ART among pregnant and breastfeeding women

NIH (Christine Markham, PI)

Christine Markham, PI

7.5%

04/01/2018-01/31/2023

Major Goals: The goal of this project is to implement and evaluated VITAL Start (Video-intervention to Inspire Treatment Adherence for Life), a brief facility based video intervention to improve retention and adherence to ART among pregnant and breastfeeding women.

Overlap with proposed project: None

Toward Planning A Cross-Sector Strategy Addressing Pregnancy Prevention and Parenting Supports Among Foster Youth (Implementation)

Healthy Futures of Texas / Houston Endowment

(Melissa Peskin, PI)

Christine Markham, Co-I

5%

11/01/2020-04/30/2023

Major Goals: The goal of this project is to conduct a needs assessment to inform the development of curricula for youth, trainings for adults, and other possible individual- and systems-level strategies to reduce pregnancies among youth in care

Overlap with proposed project: None

Contracting Grants Officer:

Molly Clayton, Executive Director

molly@txcampaign.org

Me & You-Tech: A Socio-Ecological Solution To Teen Dating Violence For Digital Age

Radiant / NIH R42HD100233 (Melissa Peskin, PI)

Christine Markham, Co-I

2%

09/13/2019-12/31/2022

Major Goals: The goal of this 3 year Fast-Track STTR is to develop and evaluate a multi-level (youth, parent, school) Internet-based teen dating violence (DV) prevention program, 'Me & You-Tech' (MYT), for predominantly racial/ethnic-minority 6th--grade middle school students.

Overlap with proposed project: None

Contracting Grants Officer:

Melinda Bixby, Contact

Mindy.bixby@nih.gov

NIH/NICHD
(PIs)

McLaughlin, Peskin, Shegog

Me & You-Tech: A socio-ecological solution to teen dating violence for the digital age.

This Fast Track STTR application proposes to develop an internet-based dating violence prevention program called "Me and You-Tech," targeted to 6th-grade middle school students, their parents, and school staff to reduce dating violence victimization and improve factors related to healthy relationships.

Role: Co-I

NIH R21

Markham, Shegog, Peskin (PIs)

Native iCHAMPS: An innovative online decision support system for increasing implementation of effective sexual health education in tribal communities.

The goal of this R21 study is to adapt and assess the feasibility of an innovative online decision support system, Native iCHAMPS, to facilitate the adoption and implementation of culturally-relevant effective sexual health education interventions in AIAN communities.

Role: Co-I

#248-96-0011

Markham/Shegog (PIs)

09/30/2018-09/29/2022

Office of Minority Health & Indian Health Service/NWPAIHB

Disseminating Effective Adolescent Health Interventions in American Indian & Alaska Native Communities. Subcontract provides training & technical assistance to increase the capacity of community-based organization to implement promising prevention strategies for AIAN youth. Role: Joint PI.

HRSA. 6 U3SHS45319-01-03.6.

Fernandez (PI)

11/01/2021-10/31/2022

Community-based workforce to increase COVID-19 vaccinations in underserved communities.

This project will mobilize and train community outreach workers, patient navigators, and other workers to increase access to COVID-19 vaccinations. Role: Co-I.

Targeting HIV Retention and Improved Viral load through Engagement ('THRIVE')

1R34MH122294-01A1 Baylor College of Medicine / NIHM

(Thomas Giordano, PI)

Christine Markham, Subcontract PI

4%

08/01/2020-07/31/2023

Major Goals: This application proposes to develop a brief intervention targeting hospitalized, out-of-care persons living with HIV.

Harmonizing comprehensive adolescent health promotion data to innovate and advance teen pregnancy prevention

PHEPA000002 UTMB / DHHS (Jeffery Temple, PI)

Christine Markham, Subcontract PI 2%

9/30/2020-09/29/2023

Major Goals: We will study the intersection of unintended pregnancy, physical and sexual teen dating violence as a mediator of poor sexual health outcomes using data collected from our previous adolescent sexual health intervention studies.

RADx: Understanding and Addressing COVID-19 Testing Disparities in Vulnerable Populations: A Multilevel and Multi-method Approach (CCTS Competitive Revision)

3UL1TR003167-02S1 NIH (David McPherson, PI)

Christine Markham, Subcontract PI

2%

9/01/2020-08/31/2023

Major Goals: The goal of the study is to partner with our community and stakeholder colleagues to identify dynamic disease hotspots to inform the rapid adaptation and deployment of multilevel level just-in-time adaptive intervention strategies to reach vulnerable populations.

Specific Aims

Aim 1: Describe disparities and dynamics of SARS-CoV-2 testing and infections in three Texas

regions currently experiencing high rates COVID-19 related morbidity and mortality. Aim 1a. Estimate real-time testing availability and uptake patterns utilizing data from regional health departments and hospital records; disparities in testing availability and uptake by location, age group, race/ethnicity, health status, immigration status, and among homeless groups. Aim 1b. Estimate real-time disparities in incidence rate and test positive rate of SARS-CoV-2 infections and COVID-19, including severe cases, and evaluate the growth dynamics of the pandemic to provide estimates of case growth, growth rate and acceleration, overall and in key underserved subgroups and geographic locations. Aim 1c. Develop a multi-level Bayesian spatial-temporal modeling approach to simultaneously identify, characterize and predict dynamic disease hotspots and testing deserts in vulnerable communities, to best inform adaptive interventions to increase testing. Aim 2: Use multilevel network modeling methods to examine the structural properties of interorganizational networks; and apply network optimization methods to identify influential organizations that can maximize system-level organizational performance to better coordinate local testing and service delivery needs. Aim 2a. Estimate auto-logistic actor attribute model (ALAAM) to identify structural properties that characterize multilevel interorganizational networks. Aim 2b. Develop a new network optimization method based on the estimated ALAAM in Aim2a to generate rankings of influential organizations that could maximize system-level organizational performance. Aim 3: Engage CCTS community networks to develop, implement and evaluate a targeted, adaptive multilevel intervention to increase reach, uptake, implementation, and sustainment of SARS-CoV-2 diagnostics among individuals with comorbid conditions and populations experiencing homelessness. Aim 3a. Identify the cultural, ethical, economic, social and behavioral factors influencing testing, implications of positive results, and contact tracing to inform multilevel intervention strategies. Aim 3b. Use community engaged processes to co-create multilevel, culturally relevant intervention strategies to increase access to, and utilization of, SARS-CoV-2 testing among vulnerable groups. Aim 3c. Conduct a multicenter group randomized pragmatic trial to evaluate the reach, effectiveness and implementation of a Community-level Just-In-Time Adaptive Intervention (JITAI) on increasing SARS-CoV-2 testing in identified high risk priority neighborhoods.

Our approach will fill a desperate need to increase health equity and will advance understanding the factors associated with testing, follow up, and disease disparities and create novel approaches to rapid adaptation and deployment of resources in targeted areas to reduce disparities for those disproportionately affected by the COVID-19.

Overlap with proposed project: None

Contracting Grants Officer:

Matthew Zeback, Grants Specialist

Matthew.zeback@nih.gov

The following studies have become active for Dr. Christine Markham:

Texas Implementation Science Hub to end HIV

BCM / NIH (Albert Hergenroeder, PI)

Christine Markham, Subcontract-PI 8%

07/01/2022-03/31/2024

Major Goals: The overarching goal of this project is to establish the Texas Implementation Science Hub to

End HIV (aka the Texas IS Hub) as part of the Texas Developmental Center for Aids Research – a collaboration of three premiere institutions in Texas including: Baylor College of Medicine, University of Texas Health Science Center (UTHealth) and Texas Biomedical Research Institute

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

Leadership Education in Adolescent Health (LEAH)

T71MC45698 BCM / HRSA (Albert Hergenroeder, PI)

Christine Markham, Subcontract-PI 5%

07/01/2022-06/30/2027

Major Goals: The purpose of the program is to prepare diverse leaders in adolescent and young adult health through didactic, experiential, and research-based interdisciplinary education and training in core health disciplines of medicine, nursing, nutrition, psychology, social work, and public health

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

A Cluster Randomized Controlled Trial of X-CoRe: A Multi-Level Sexual Assault Prevention Intervention for Active Duty Airmen

HT94252310763 DOD (Belinda Hernandez, PI)

Christine Markham, Co-I 10%

09/01/2023 – 08/31/2027

Major Goals: The goal of this four-year cluster randomized controlled trial is to determine the efficacy of an innovative, multi-level sexual assault and sexual harassment prevention intervention for Active duty Airmen, named Code of Respect (X-CoRe).

Specific aims:

Our **specific aims** are to:

1. Examine the efficacy of X-CoRe in improving psychosocial determinants related to respectful/disrespectful relationships at the 6- and 12-month follow-up among Junior Enlisted Airmen at JBMDL.
2. **(Primary)** Examine the efficacy of X-CoRe in reducing SA and SH victimization among Junior Enlisted Airmen at the 12-month follow-up.
3. Examine the efficacy of X-CoRe in improving unit cohesion and mission readiness by increasing bystander behavior and overall health functioning and decreasing secondary risk and harmful behaviors (e.g., alcohol misuse, intimate partner violence, suicide ideation) at the 6- and 12-month follow-up.

Hypotheses: Compared with Junior Airmen in the comparison group (X-CoRe's Installation + Leadership Components), Junior Airmen who receive all three X-CoRe components will demonstrate significantly:

1. Improved psychosocial determinants related to respectful/disrespectful relationships (e.g., knowledge, skills, self-efficacy, attitudes) at the 6- and 12-month follow-ups
2. Reduced victimization of SA and SH at the 12-month follow-up (**primary outcomes**)
3. Increased bystander behavior, health functioning, unit cohesion, and reduced secondary risk and harmful behaviors at the 6 and 12-month follow-ups

Contracting Grants Officer:

Teresa Parker-Reeser, Grants Officer
Teresa.M.ParkerReeser.civ@health.mil

Overlap with proposed project: None

Feasibility and acceptability of a father-based intervention to support adolescents' reproductive health 1R21HD109744-01A1 Wellesley College / NIH (Jennifer Grossman, PI) Christine Markham, Co-I 2% 08/10/2023-07/31/2026

Major Goals: Provide expert guidance on intervention development, feasibility & acceptability assessment, and preliminary effectiveness, particularly for the Intervention Mapping process.

Specific Aims:

Specific Aim 1: To develop a 3-module online program prototype to support father-teen health-promoting talk about sex, addressing topics of sexual risk & protection, healthy & unhealthy relationships, and consent. Each module will include 1) an online lesson, 2) a father-teen activity, and 3) an online father support group. Using Intervention Mapping, we will select theory-based behavior change methods to create matrices of proximal program objectives for fathers and teens, and develop prototype modules based on feedback from our Family Advisory Board (FAB) throughout the development process (10 fathers and □6 teens).

Specific Aim 2: To evaluate the program's acceptability, feasibility, and preliminary efficacy. Fifty father-teen pairs from diverse racial/ethnic backgrounds, stratified by teen gender, will be enrolled in the program. 2a) To assess program feasibility and acceptability, brief acceptability and feasibility survey questionnaires, data on participants' enrollment and number of modules completed, module feedback, debrief interviews with a purposive sample (5 fathers, 5 teens), and FAB input on feasibility (e.g., approach and timing for pilot recruitment, intervention ease of use) and acceptability (e.g., intervention usefulness and favorability) will be collected. 2b) Preliminary efficacy will be explored through pre- and post-intervention surveys to assess directionality of change in correlates of teens' sexual behavior: knowledge, self-efficacy, and outcome expectations related to sex and communication, using matched pair t-tests, and t-tests to assess effects of teen gender on outcomes.

Replicating Evidence-Based Teen Pregnancy Prevention (TPP) Programs to Scale in Multiple Settings to Advance Equity through the Adolescent Lifespan

1TP1AH000324-01-00 OPA (Melissa Peskin, PI)

Christine Markham, Co-I

15%

07/01/2023 – 06/30/2028

Major Goals: This project seeks to replicate evidence-based teen pregnancy prevention programs in high need and overlooked settings throughout the Harris County area.

Specific aims

The goal of this 5-year project is to improve sexual and reproductive health outcomes, promote positive youth development, and advance health equity for adolescents, their families, and communities through the replication of medically accurate and age-appropriate evidencebased teen pregnancy prevention programs (EBPs).

Contracting Grants Officer:

Dixie Perez, Grants Management Specialist
Dixie.Perez@hhs.gov

Overlap with proposed project: None

Melissa Peskin, PhD

The following studies have closed for Dr. Peskin:

NIH/NICHD
(PIs)

McLaughlin, Peskin, Shegog

Me & You-Tech: A socio-ecological solution to teen dating violence for the digital age.

This Fast Track STTR application proposes to develop an internet-based dating violence prevention program called "Me and You-Tech," targeted to 6th-grade middle school students, their parents, and school staff to reduce dating violence victimization and improve factors related to healthy relationships.

Role: Co-I

Houston Endowment/TX Campaign to Prevent Teen Preg. Peskin (PI) 08/01/2018-10/31/2022
Toward ***Planning a Cross-Sector Strategy Addressing Pregnancy Prevention and Parenting Supports Among Foster Youth.***

The goal of this project is to conduct a needs assessment to inform the development of curricula for youth, trainings for adults, and other possible individual- and systems-level strategies to reduce pregnancies among youth in care. We will also develop a digital toolkit for pregnant and parenting youth and update iCHAMPSS for use among Texas school districts. Role: PI

NIH/NIMHD 1R21MD013960-01A1 Markham, Shegog, Peskin (PIs) 12/01/2019-11/31/2022
Native iCHAMPS: An innovative online decision support system for increasing implementation of effective sexual health education in tribal communities.

The goal of this project is to adapt and assess the feasibility and impact an innovative online decision support system, Native iCHAMPS, to facilitate the adoption and implementation of culturally-relevant effective sexual health education interventions in AIAN communities. Role: Multi PI.

Toward Planning A Cross-Sector Strategy Addressing Pregnancy Prevention and Parenting Supports Among Foster Youth (Implementation)

Healthy Futures of Texas / Houston Endowment

(Melissa Peskin, PI)

Melissa Peskin, PI

5%

11/01/2020-04/30/2023

Major Goals: The goal of this project is to conduct a needs assessment to inform the development of curricula for youth, trainings for adults, and other possible individual- and systems-level strategies to reduce pregnancies among youth in care

Me & You-Tech: A Socio-Ecological Solution To Teen Dating Violence For Digital Age

Radiant / NIH R42HD100233 (Melissa Peskin, PI)

Melissa Peskin PI

6.76%

09/13/2019-12/31/2022

Major Goals: The goal of this 3 year Fast-Track STTR is to develop and evaluate a multi-level (youth, parent, school) Internet-based teen dating violence (DV) prevention program, 'Me & You-Tech' (MYT), for predominantly racial/ethnic-minority 6th--grade middle school students.

Harmonizing comprehensive adolescent health promotion data to innovate and advance teen pregnancy prevention

PHEPA000002 UTMB / DHHS (Jeffery Temple, PI)

Melissa Peskin, Co-I 2%

9/30/2020-09/29/2023

Major Goals: We will study the intersection of unintended pregnancy, physical and sexual teen dating violence as a mediator of poor sexual health outcomes using data collected from our previous adolescent sexual health intervention studies.

Specific Aims

Overlap with proposed project: None

The following studies have become active for Dr. Peskin:

Long-term effectiveness of a middle school dating violence prevention evaluation with and without an SMS booster

R01 HD083445-06A1 UTMB / NIMHD (Jeffery Temple, PI)

Melissa Peskin, Subcontract PI

3.5%

07/01/2022 – 06/30/2027

Major Goals: Competing renewal to continue following RCT sample to measure the long-term efficacy of a dating violence prevention program and test the added benefit of a text-based booster

Specific aims

Overlap with proposed project: None

Contracting Grants Officer:

Harris Health PCORI HSII Capacity Building

HHS / PCORI (Shreela Sharma, PI)

Melissa Peskin, Co-I

2%

07/01/2023 – 12/31/2024

Major Goals: Participate in governance development, bringing expertise in the development of governance structures and protocols that will determine the finalization of Harris Health HSII projects

Specific aims

Overlap with proposed project: None

Contracting Grants Officer:

A Cluster Randomized Controlled Trial of X-CoRe: A Multi-Level Sexual Assault Prevention Intervention for Active Duty Airmen

HT94252310763 DOD (Belinda Hernandez, PI)

Melissa Peskin, Co-I

8%

09/01/2023 – 08/31/2027

Major Goals: The goal of this four-year cluster randomized controlled trial is to determine the efficacy of an innovative, multi-level sexual assault and sexual harassment prevention intervention for Active duty Airmen, named Code of Respect (X-CoRe).

Specific aims:

Our **specific aims** are to:

1. Examine the efficacy of X-CoRe in improving psychosocial determinants related to respectful/disrespectful relationships at the 6- and 12-month follow-up among Junior Enlisted Airmen at JBMDL.
2. **(Primary)** Examine the efficacy of X-CoRe in reducing SA and SH victimization among Junior Enlisted Airmen at the 12-month follow-up.
3. Examine the efficacy of X-CoRe in improving unit cohesion and mission readiness by increasing bystander behavior and overall health functioning and decreasing secondary risk and harmful behaviors (e.g., alcohol misuse, intimate partner violence, suicide ideation) at the 6- and 12-month follow-up.

Hypotheses: Compared with Junior Airmen in the comparison group (X-CoRe's Installation + Leadership Components), Junior Airmen who receive all three X-CoRe components will demonstrate significantly:

1. Improved psychosocial determinants related to respectful/disrespectful relationships (e.g., knowledge, skills, self-efficacy, attitudes) at the 6- and 12-month follow-ups
2. Reduced victimization of SA and SH at the 12-month follow-up (**primary outcomes**)
3. Increased bystander behavior, health functioning, unit cohesion, and reduced secondary risk and harmful behaviors at the 6 and 12-month follow-ups

Contracting Grants Officer:

Teresa Parker-Reeser, Grants Officer

Teresa.M.ParkerReeser.civ@health.mil

Overlap with proposed project: None

Replicating Evidence-Based Teen Pregnancy Prevention (TPP) Programs to Scale in Multiple Settings to Advance Equity through the Adolescent Lifespan

1TP1AH000324-01-00 OPA (Melissa Peskin, PI)

Melissa Peskin, PI

23%

07/01/2023 – 06/30/2028

Major Goals: This project seeks to replicate evidence-based teen pregnancy prevention programs in high need and overlooked settings throughout the Harris County area.

Specific aims

The goal of this 5-year project is to improve sexual and reproductive health outcomes, promote positive youth development, and advance health equity for adolescents, their families, and communities through the replication of medically accurate and age-appropriate evidence-based teen pregnancy prevention programs (EBPs).

Contracting Grants Officer:

Dixie Perez, Grants Management Specialist

Dixie.Perez@hhs.gov

Overlap with proposed project: None

Ross Shegog, PhD

The following studies have closed for Dr. Shegog:

NIH/NICHD
(PIs)

McLaughlin, Peskin, Shegog

Me & You-Tech: A socio-ecological solution to teen dating violence for the digital age.

This Fast Track STTR application proposes to develop an internet-based dating violence prevention program called "Me and You-Tech," targeted to 6th-grade middle school students, their parents, and school staff to reduce dating violence victimization and improve factors related to healthy relationships.

Role: Co-I

NIH R21

Markham, Shegog, Peskin (PIs)

Native iCHAMPS: An innovative online decision support system for increasing implementation of effective sexual health education in tribal communities.

The goal of this R21 study is to adapt and assess the feasibility of an innovative online decision support system, Native iCHAMPS, to facilitate the adoption and implementation of culturally-relevant effective sexual health education interventions in AIAN communities.

Role: Co-I

#248-96-0011

Markham/Shegog (PIs)

09/30/2018-09/29/2022

Office of Minority Health & Indian Health Service/NWPAIHB

Disseminating Effective Adolescent Health Interventions in American Indian & Alaska Native Communities. Subcontract provides training & technical assistance to increase the capacity of community-based organization to implement promising prevention strategies for AIAN youth. Role: Joint PI.

HRSA. 6 U3SHS45319-01-03.6.

Fernandez (PI)

11/01/2021-10/31/2022

Community-based workforce to increase COVID-19 vaccinations in underserved communities. This project will mobilize and train community outreach workers, patient navigators, and other workers to increase access to COVID-19 vaccinations. Role: Co-I.

Toward Planning A Cross-Sector Strategy Addressing Pregnancy Prevention and Parenting Supports Among Foster Youth (Implementation)

Healthy Futures of Texas / Houston Endowment

(Melissa Peskin, PI)

Ross Shegog, Co-I

2%

11/01/2020-04/30/2023

Major Goals: The goal of this project is to conduct a needs assessment to inform the development of curricula for youth, trainings for adults, and other possible individual- and systems-level strategies to reduce pregnancies among youth in care

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

Molly Clayton, Executive Director

molly@txcampaign.org

Me & You-Tech: A Socio-Ecological Solution To Teen Dating Violence For Digital Age

Radiant / NIH R42HD100233 (Melissa Peskin, PI)

Ross Shegog, Co-I

6.76%

09/13/2019-12/31/2022

Major Goals: The goal of this 3 year Fast-Track STTR is to develop and evaluate a multi-level (youth, parent, school) Internet-based teen dating violence (DV) prevention program, 'Me & You-Tech' (MYT), for predominantly racial/ethnic-minority 6th--grade middle school students.

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

Melinda Bixby, Contact

Mindy.bixby@nih.gov

Scale up of the Adolescent Vaccination Program Implementation Tool (AVP-IT)

MDACC (Ross Shegog, PI)

Ross Shegog, PI

9%

05/02/2022-02/28/2023

Major Goals: The goal of this quality improvement project is to disseminate the web-based Adolescent Vaccination Program Implementation Tool (AVP-IT) within Texas pediatric, FQHC, and family practice clinics.

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

Harmonizing comprehensive adolescent health promotion data to innovate and advance teen pregnancy prevention

PHEPA000002 UTMB / DHHS (Jeffery Temple, PI)

Ross Shegog, Co-I

2%

9/30/2020-09/29/2023

Major Goals: We will study the intersection of unintended pregnancy, physical and sexual teen dating violence as a mediator of poor sexual health outcomes using data collected from our previous adolescent sexual health intervention studies.

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

The following studies have become active for Dr. Shegog:

Scale up of the Adolescent Vaccination Program Implementation Tool (AVP-IT)

3001963166 MDACC (Ross Shegog, PI)

Ross Shegog, PI

2%

05/02/2022-02/29/2024

Major Goals: The goal of this quality improvement project is to disseminate the web-based Adolescent Vaccination Program Implementation Tool (AVP-IT) within Texas pediatric, FQHC, and family practice clinics

Specific Aims

Overlap with proposed project: None

Agile development of innovative, interactive hazard recognition and mitigation tools/learning e-platforms for workers involved in the rescue and recovery operations in diverse flooding environments

R44ES030580 Radiant / NIH (William Perkison, PI)

Ross Shegog, Co-I

5%

08/01/2022-07/31/2024

Major Goals: The proposed research is relevant to public health because the safety of individuals participating in post-flood reconstruction is becoming increasingly more important in terms of the number of workers involved in this activity and the number of hazards they are exposed to in the aftermath of storms of increasing intensity.

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

Epilepsy Foundation National MINDSET Pilot Study

Epilepsy Foundation National / CDC (Ross Shegog, PI)

Ross Shegog, PI

2.5%

09/30/2022 – 01/31/2024

Major Goals: To increase the number of people with epilepsy completing evidence-based epilepsy-self management programs and providers who are trained in epilepsy self-management programs

Specific aims

Contracting Grants Officer:

Overlap with proposed project: None

A Cluster Randomized Controlled Trial of X-CoRe: A Multi-Level Sexual Assault Prevention Intervention for Active Duty Airmen

HT94252310763 DOD (Belinda Hernandez, PI)

Christine Markham, Co-I

10%

09/01/2023 – 08/31/2027

Major Goals: The goal of this four-year cluster randomized controlled trial is to determine the efficacy of an innovative, multi-level sexual assault and sexual harassment prevention intervention for Active duty Airmen, named Code of Respect (X-CoRe).

Specific aims:

Our **specific aims** are to:

1. Examine the efficacy of X-CoRe in improving psychosocial determinants related to respectful/disrespectful relationships at the 6- and 12-month follow-up among Junior Enlisted Airmen at JBMDL.
2. **(Primary)** Examine the efficacy of X-CoRe in reducing SA and SH victimization among Junior Enlisted Airmen at the 12-month follow-up.
3. Examine the efficacy of X-CoRe in improving unit cohesion and mission readiness by increasing bystander behavior and overall health functioning and decreasing secondary risk and harmful behaviors (e.g., alcohol misuse, intimate partner violence, suicide ideation) at the 6- and 12-month follow-up.

Hypotheses: Compared with Junior Airmen in the comparison group (X-CoRe's Installation + Leadership Components), Junior Airmen who receive all three X-CoRe components will demonstrate significantly:

1. Improved psychosocial determinants related to respectful/disrespectful relationships (e.g., knowledge, skills, self-efficacy, attitudes) at the 6- and 12-month follow-ups
2. Reduced victimization of SA and SH at the 12-month follow-up (**primary outcomes**)
3. Increased bystander behavior, health functioning, unit cohesion, and reduced secondary risk and harmful behaviors at the 6 and 12-month follow-ups

Contracting Grants Officer:

Teresa Parker-Reeser, Grants Officer
Teresa.M.ParkerReeser.civ@health.mil

Overlap with proposed project: None

Replicating Evidence-Based Teen Pregnancy Prevention (TPP) Programs to Scale in Multiple Settings to Advance Equity through the Adolescent Lifespan

1TP1AH000324-01-00 OPA (Melissa Peskin, PI)

Ross Shegog, Co-I

5%

07/01/2023 – 06/30/2028

Major Goals: This project seeks to replicate evidence-based teen pregnancy prevention programs in high need and overlooked settings throughout the Harris County area.

Specific aims

The goal of this 5-year project is to improve sexual and reproductive health outcomes, promote positive youth development, and advance health equity for adolescents, their families, and communities through the replication of medically accurate and age-appropriate evidencebased teen pregnancy prevention programs (EBPs).

Contracting Grants Officer:

Dixie Perez, Grants Management Specialist
Dixie.Perez@hhs.gov

Overlap with proposed project: None

Susan Emery, PhD

The following studies have become active for Dr. Susan Emery:

The PHIT Workforce Development Program: Creating a diverse and inclusive health information technology (IT) workforce in Texas

90PH0003/01-04 Office of National Coordinator Health Info (Eric Boerwinkle, PI) Susan Emery Co-I
10% 09/21/2021-09/20/2025

Major Goals:

Specific Aims

Overlap with proposed project: None

Contracting Grants Officer:

A Cluster Randomized Controlled Trial of X-CoRe: A Multi-Level Sexual Assault Prevention Intervention for Active Duty Airmen

HT94252310763 DOD (Belinda Hernandez, PI)

Susan Emery Co-I

2%

09/01/2023 – 08/31/2027

Major Goals: The goal of this four-year cluster randomized controlled trial is to determine the efficacy of an innovative, multi-level sexual assault and sexual harassment prevention intervention for Active duty Airmen, named Code of Respect (X-CoRe).

Specific aims:

Our **specific aims** are to:

1. Examine the efficacy of X-CoRe in improving psychosocial determinants related to respectful/disrespectful relationships at the 6- and 12-month follow-up among Junior Enlisted Airmen at JBMDL.
2. **(Primary)** Examine the efficacy of X-CoRe in reducing SA and SH victimization among Junior Enlisted Airmen at the 12-month follow-up.
3. Examine the efficacy of X-CoRe in improving unit cohesion and mission readiness by increasing bystander behavior and overall health functioning and decreasing secondary risk and harmful behaviors (e.g., alcohol misuse, intimate partner violence, suicide ideation) at the 6- and 12-month follow-up.

Hypotheses: Compared with Junior Airmen in the comparison group (X-CoRe's Installation + Leadership Components), Junior Airmen who receive all three X-CoRe components will demonstrate significantly:

1. Improved psychosocial determinants related to respectful/disrespectful relationships (e.g., knowledge, skills, self-efficacy, attitudes) at the 6- and 12-month follow-ups
2. Reduced victimization of SA and SH at the 12-month follow-up (**primary outcomes**)
3. Increased bystander behavior, health functioning, unit cohesion, and reduced secondary risk and harmful behaviors at the 6 and 12-month follow-ups

Replicating Evidence-Based Teen Pregnancy Prevention (TPP) Programs to Scale in Multiple Settings to Advance Equity through the Adolescent Lifespan

1TP1AH000324-01-00 OPA (Melissa Peskin, PI)

Susan Emery Co-I

2%

07/01/2023 – 06/30/2028

Major Goals: This project seeks to replicate evidence-based teen pregnancy prevention programs in high need and overlooked settings throughout the Harris County area.

Specific aims

The goal of this 5-year project is to improve sexual and reproductive health outcomes, promote positive youth development, and advance health equity for adolescents, their families, and communities through the replication of medically accurate and age-appropriate evidencebased teen pregnancy prevention programs (EBPs).

Contracting Grants Officer:

Dixie Perez, Grants Management Specialist

Dixie.Perez@hhs.gov

Overlap with proposed project: None

Establishing a Center for Reproductive Health Equity at The University of Texas Health Science Center at Houston(UTHealth) School of Public Health

R-202201-05267 Episcopal Health Foundation (Kimberly Baker, PI)

Susan Emery Co-I

3%

06/23/2022-05/31/2024

Major Goals:

Specific Aims

Overlap with proposed project: None

What other organizations were involved as partners?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe partner organizations – academic institutions, other nonprofits, industrial or commercial firms, state or local governments, schools or school systems, or other organizations (foreign or domestic) – that were involved with the project. Partner organizations may have provided financial or in-kind support, supplied facilities or equipment, collaborated in the research, exchanged personnel, or otherwise contributed.

Provide the following information for each partnership:

Organization Name:

Location of Organization: (if foreign location list country)

Partner’s contribution to the project (identify one or more)

- *Financial support;*
- *In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff);*
- *Facilities (e.g., project staff use the partner’s facilities for project activities);*
- *Collaboration (e.g., partner’s staff work with project staff on the project);*
- *Personnel exchanges (e.g., project staff and/or partner’s staff use each other’s facilities, work at each other’s site); and*
- *Other*

Organization Name: Radiant, LLC

Location of Organization: Virginia

Partner's contribution to the project: Online program application software development

Organization Name: K.A. White Productions

Location of Organization: New Jersey

Partner's contribution to the project: Video production and testimonial editing

8. SPECIAL REPORTING REQUIREMENTS

COLLABORATIVE AWARDS: *For collaborative awards, independent reports are required from BOTH the Initiating Principal Investigator (PI) and the Collaborating/Partnering PI. A duplicative report is acceptable; however, tasks shall be clearly marked with the responsible PI and research site. A report shall be submitted to <https://ers.amedd.army.mil> for each unique award.*

QUAD CHARTS: *If applicable, the Quad Chart (available on <https://www.usamraa.army.mil>) should be updated and submitted with attachments.*

9. **APPENDICES:** *Attach all appendices that contain information that supplements, clarifies or supports the text. Examples include original copies of journal articles, reprints of manuscripts and abstracts, a curriculum vitae, patent applications, study questionnaires, and surveys, etc.*

LIST OF APPENDICES

- 1. Appendix A: APHA 2022 Abstract #1 Poster Presentation**
- 2. Appendix B: APHA 2022 Abstract #2 (Oral Presentation)**
- 3. Appendix C: APHA 2023 Abstract #1 (Poster Presentation)**
- 4. Appendix D: Usability Full Program Pre- and Post-Survey**



Presenter: Belinda Hernandez, PhD, MPH

"It depends": Attitudes and perceptions of sexual harassment and assault and intentions to report incidents among Active-duty Airmen

BACKGROUND

- Rates of sexual harassment (SH) and sexual assault (SA) in the military continue to increase, making them serious public health problems.
- SH and SA can have serious physical and psychological effects on service members, including depression, substance use, post-traumatic stress disorder, and suicide ideation.
- Most cases of SH and SA in the military go unreported.
- Having permissive attitudes towards SH and accepting rape myths can create an organizational climate conducive to SH and SA and prohibit reporting of such events.
- Few studies have assessed service members' perceptions of SH and SA and the factors that would influence their intentions to report or not report an incident of SH and SA.

PURPOSE

To qualitatively examine active duty Airmen's perceptions of SH, SA, and intentions to report incidents. The findings will help inform the development of prevention interventions.

METHODS

- 28 active duty Airmen participated in a virtual in-depth interview.
- To assess attitudes about SH and SA and intentions to report, Airmen were presented with three vignettes representing sexual violence along the continuum of harm (Figure 1).
- Airmen were asked to identify the vignette as SH, SA, or none of the above. They were then asked if they would report the incident.

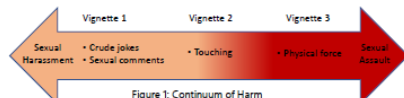
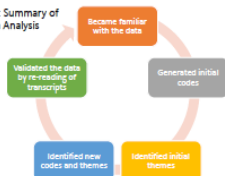


Figure 1: Continuum of Harm

Figure 2: Summary of the Data Analysis



Airmen's perceptions of sexual harassment and sexual assault and whether or not they will report an incident are largely dependent on three factors:



Perceived Severity

When airmen perceived an incident as being less harmful (e.g., telling jokes) they were less likely to state they would report the incident. Many stated that they would handle the incident at their level and "try not to go beyond the ranks."

There were mixed beliefs on if touching a co-worker on the shoulders (Vignette 2) was SH or SA. Even so, most Airmen would not report the incident.

When airmen perceived an incident as severe (e.g., sexual assault) they were more likely to state they would report the incident.

"There's clearly some of my coworkers that I'll be perfectly fine with them massaging my shoulders, with them going, 'Hey, you're going to be fine, it's all good,' including my male coworkers. It's kind of like the Wingman concept. But if I were to deem that type of touch unacceptable, I would make sure to basically just brush it off. I wouldn't really make anything of it, of that one, because they're massaging my shoulders. It's not like, to me, for that situation, I don't take that as being an overt sexual act." (Female, Junior Enlisted)



Relationship with the Offender

If Airmen knew the offender well, then they would be more comfortable confronting the offender, ignoring them, or joking around along with them. If Airmen did not know the offender well, then they would be more confrontational.

If the offender was lower-ranking, Airmen tended to be more lenient in their response to the offender and expressed willingness to instruct the offender on what is or is not appropriate in the workplace.

If the offender was higher-ranking, most Airmen tended to be more stern and confrontational in their response. They believed higher-ranking Airmen "should know better".

"If I have a friendly relationship with that coworker in which we already are secure in our friend basis, then if he were to say that in a joking manner, I would be joking right on back. But if it was someone that I did not have a close relationship with, then my reaction would be, 'Why did you just say that?' I would be confronting. I shouldn't really say 'confronting,' but I would definitely make sure to imply that that was not okay." (Female, Junior Enlisted)



Frequency

For many Airmen, the frequency of an incident determined if the situation was SH or SA. If an incident happened only one time, then Airmen were less likely to consider this SH or SA. However, if it repeated or the offender did not stop when told, then they were more likely to consider an incident SH or SA depending on the severity of harm.

Many Airmen stated that they would report an incident of SH only if the incident repeats itself or if the event escalated.

"If it just happened once, I wouldn't even categorize it as harassment so to say. It definitely falls under that category but me personally, it's a joke. Take it as it is and leave it. Just don't do it again. If it were a persistent issue, then it would be sexual harassment." (Male, Junior Enlisted)

"I mean, if at first it's just a one-time thing, no, I wouldn't [report it]. But if it comes to be an issue and you've given her a couple of warnings, then I would go up to our leadership and start saying something. It'd have to take a couple times to do that." (Male, Junior Enlisted)

Acknowledgments: This study was funded by the Department of Defense PH/TBIRP Research Program. Contract #W81XWH-20-2-0031.

Table 1: Study Sample Demographic Characteristics

Demographic	N (%)
Age (n = 27)	
19-24 years	11 (40.7)
25-30 years	10 (37.0)
31 years or older	6 (22.2)
Gender (n = 27)	
Male	14 (51.9)
Female	13 (48.15)
Race (n = 26)	
White	12 (46.2)
Black	8 (30.8)
Hispanic	4 (15.4)
Multiple races/ethnicities	2 (7.7)
Rank (n = 27)	
E4 or below	12 (44.4)
E5 to E9	12 (44.4)
O1 to O3	3 (11.1)

IMPLICATIONS

- The findings indicate the need for improved training in the following:
- Awareness:** Many Airmen perceived SH as being less harmful than SA and thus, would not report such incidents. Prevention interventions should help Airmen recognize harmful behaviors along the full range of the continuum of harm, giving equal attention to SH and SA.
 - Communication & refusal skills:** Building effective communication and refusal skills of Airmen within peer and work relationships may help increase comfort to stop an incident from repeating or escalating, creating more respectful work climates.
 - Reporting:** Emphasizing bringing incidents of SH to authorities, before they repeat or escalate, may help Airmen intervene early along the continuum of harm and prevent offenders from causing more harm.

Co-Authors:

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UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON
SCHOOL OF PUBLIC HEALTH

ATTITUDES AND PERCEPTIONS OF CURRENT SEXUAL HARASSMENT AND ASSAULT PREVENTION TRAINING AMONG AIRMEN: A MIXED METHODS STUDY

Brayden Bowic, BS, Amanda Li, MPH, MBA, Melissa Peakin, PhD, Ross Shegog, PhD, Christine Markham, PhD, Susan Emery, PhD, Laura Thormahlen, MPH, Rejane Teixeira, MPH, Irina Witherspoon, Janis Doss, Victor Jones, Belinda Hernandez, PhD

UTHealth
The University of Texas
Health Science Center at Houston



Presenter Disclosures

Attitudes and perceptions of current sexual harassment and assault prevention training among airmen: a mixed methods study

1. The following personal financial relationships with commercial interests relevant to this presentation existed during the past 24 months:

No Relationships to Disclose

Background

- Sexual Harassment (SH) and Sexual Assault (SA) are significant issues facing the US Military
- In 2021, at least 35,875 U.S. service members experienced some form of unwanted sexual contact
- SH and SA can have negative effects on service members mental, physical, and emotional health
- Few prevention programs using theory or empirical evidence have been developed specifically for the military

STUDY PURPOSE

TO EXAMINE AIRMEN'S ATTITUDES AND PERCEPTIONS OF CURRENT SH AND SA PREVENTION PROGRAMMING AND THEIR DESIRES FOR FUTURE PREVENTION PROGRAMS.

Methods

SAMPLE	INTERVIEWS	SURVEYS	ANALYSIS
27 Active duty airmen from an Air Force base in the northeast U.S.	Semi-structured individual interviews	Demographic information	Qualitative Analysis Thematic coding ATLAS.ti
Average Age: 27 years	1 hour long	Information on previous SH/SA prevention training	Quantitative Analysis Descriptive analysis (frequencies, means, and proportions) SPSS
Male: 52%	Conducted through zoom	Recommendations for future SH/SA prevention training topics	
White: 46%	One interviewer and one note taker present for each interview		
African American: 31%			
Hispanic: 15%			
Junior Enlisted: 44%			
Mid-Level Leaders: 44%			
Officers: 11%			

Results

Slightly over half of the sample attended prevention training about once a year and in-person.

The most common training activities were PowerPoint lectures, small group discussions, videos, and case studies.

Table 1: Current Training Characteristics

	n	%
Participation in Military SH/SA Training		
About once a year	14	54%
Between two to four times a year	11	42%
More than two times a month	1	4%
Type of Training for Last SH/SA		
In-person training with a lecturer/presenter/facilitator	14	54%
Webinar (on the internet with a mod.)	9	35%
Self-study course	2	8%
Other (Webinar; I was facilitator)	1	4%
Activities in Last SH/SA Training		
PowerPoint Lecture	23	29%
Small group discussions	14	18%
Video(s)	12	15%
Case studies	11	14%
Demonstrations	4	5%
Practical Exercises	4	5%
Role plays	4	5%
Computer activities	4	5%
Panel discussion	3	4%

Results

A majority of Airmen reported that there were no topics discussed too much in current trainings.

Airmen responded that healthy relationships, avoiding risky situations, getting out of risky situations, clear no's, and consent were not discussed enough in their last SH/SA prevention training.

Table 2: SH and SA Topics

Topics	Discussed not Enough		Discussed Too Much	
	n	%	n	%
Healthy peer and romantic relationships	16	14%	0	0%
How to avoid situations that may increase your risk of being sexually harassed or assaulted	14	12%	2	7%
How to get out of a situation that may increase your risk of being sexually harassed or assaulted	14	12%	0	0%
How to say "no" to something you do not want to do	12	10%	1	3%
How to give active consent to participate in sexual acts	11	9%	1	3%
What actions are considered sexual assault	6	5%	2	7%
How to report an incident of sexual harassment or assault	2	2%	2	7%
Resources available for someone who has experienced a sexual harassment or assault	3	3%	2	7%

Table 3: Theme Table

Category	Theme
Current Training	Beneficial
	Did not teach practical skills
	Repetitive and predictable
	Discussions were hostile towards survivors
Recommendations for future programming	In-person components
	3rd party facilitator
	Mixed group discussions
	Gray Area Scenarios
	Team-building
	Leadership
	Personal Responsibility
	Diversity
	Transparency

Results

Many Airmen believed their current SH/SA training is repetitive and predictable

"...it's like it's the same exact thing year after year and everyone just... No one likes the same thing over and over and over" – Junior Enlisted Male Airman

"I would say just in general, most people will find sexual assault, the prevention training, they find it repetitive" – Mid-Level Leader Male Airman

Many Airmen believed that current SH/SA trainings are too clear-cut or not taken seriously.

"Because I notice a lot of times when we do get these trainings, that it's a very black-and-white situation. And it's like, "Yeah, that's clearly not acceptable." But life isn't black and white, life has those greys..." – Junior Enlisted Female Airman

"The Air Force said, "Hey, you're going to go to this training." So, we're going to sit here for this hour or hour and a half, participate and then they're going to go on about their lives. It's in one ear and out the other" – Mid-Level Leader Male Airman

Recommendations for Future Trainings

Junior Ranked Airmen

- Mixed group in-person programs
- Civilian or third-party facilitator
- Small group discussion
- Scenario Based Learning
- "Grey Area" Scenarios

"Definitely in person. I feel like it's very beneficial to have that face-to-face contact with people..." – Junior Enlisted Female Airman

Mid- and Senior Ranked Airmen

- Small group settings
- Hybrid programs
- Emphasis on personal responsibility
- Clear definition of current laws

"The other side of that, the other side, this is really the key piece, and until the Air Force is willing to do this and people take a personal responsibility in it, nothing's going to change." – Mid-Level Leader Male Airman

Strengths & Limitations

Strengths

- Among the first to get Airmen's perceptions of current trainings and recommendations for future trainings
- Collection of detailed and in-depth qualitative data
- Diverse sample

Limitations

- Recruited from one installation
 - Cannot be generalized to other installations
- Limited number of officers
- Selection Bias

Summary

Airmen reported that SH/SA trainings were worthwhile, but there were several areas where trainings could be improved. Many Airmen believed that their current SH/SA training did not sufficiently cover several topics that are critical for SH/SA prevention.

Conclusions

1. Attention is needed on healthy relationships, consent, and how to get out of risky situations in training
2. Clarify current laws and Department of Defense (DoD) instructions for leaders and those involved in responding to sexual assaults
3. Host prevention trainings in-person or make online training more dynamic and interactive
4. Create training sessions with realistic scenarios that are less black and white

Code of Respect (X-CORE)



Acknowledgments

Thank you to the Airmen that participated, the SARC, VPI, and EO at the installation, Dr. Hernandez, and the entire UTHealth Team for making this presentation possible! This study was funded by the Department of Defense PH/TBIRP Research Program. Contract #W81XWH-20-2-0031



Appendix C: APHA 2023 Abstract #1 (Poster Presentation)

Title. Code of Respect (X-CoRe): Can phone-based sexual harassment and sexual assault prevention offer an appealing solution for the U.S. Air Force?

Authors: Andina Teixeira, R., Thormaehlen, L., Shegog, R., Peskin, M., Markham, C., Emery, S., Bowie, M., Li, A., Witherspoon, I., Doss, J., Jones, V., Hernandez, B.

Learning Objectives

1. By the end of this presentation, participants will be able to:
2. Describe the prevalence of sexual assault and sexual harassment among Active-Duty Airmen.
3. Describe Active-Duty Airmen's perceptions of the prototype of an online sexual harassment and sexual assault prevention program.
4. Explain how the prototype testing results may inform the development of a prevention program.

Background: Within the U.S. military, over 35,000 active duty Service members experience some form of unwanted sexual contact, with prevalence estimates over five times higher among women than men. Evidence-based interventions can prevent sexual harassment (SH) and sexual assault (SA), yet few have been tailored for military personnel. Code of Respect (X-CoRe) is a theory- and empirically-based multi-level, phone-based SH and SA prevention intervention tailored for Air Force personnel of all ranks.

Purpose: To conduct usability testing of the X-CoRe prototype with Active-Duty Airmen.

Methods: Usability testing was conducted at an Air Force Base located in the Northeast U.S. with 24 Airmen (64% female; average age: 32.5 years; 63% mid-level leaders) who completed modules 1-4 of the planned 10-module program. Airmen completed rating inventories to assess ease of use, credibility, trustworthiness, and motivational appeal and pre- and post-surveys to assess change in psychosocial variables associated with SH and SA (e.g., knowledge and self-efficacy).

Results: Most Airmen (> 75%) rated the X-CoRe prototype and its characters, storylines, and graphics as likable, with a lower agreement (59.3%) regarding embedded videos. Most (>83%) rated X-CoRe as helpful in having respectful social, work, and intimate relationships and in selecting and protecting boundaries to maintain respectful relationships. Exposure to X-CoRe significantly increased negative attitudes toward SH ($p < 0.02$).

Conclusion: Initial acceptability and attitudinal impact of the X-CoRe prototype suggests promise as a contributor to preventing SH and SA for military personnel. Completion of the full 10-module intervention and further feasibility testing is indicated.

APPENDIX D. Usability Full Program Pre and Post-Survey

Knowledge of Sexual Harassment and Assault (Knowledge of Sexual Harassment and Assault Scale)

Please indicate if the following statements are true or false.

1. Sexual assault is defined by the UCMJ as “Intentional and unwanted sexual touching (or attempts to touch) of another person when that person does not give or is not capable of giving consent”.
☐ True
☐ False
2. Sexual harassment can only happen in-person.
☐ True
☐ False
3. It is legal to share a nude photo of a person without their consent.
☐ True
☐ False
4. Verbal harassment can progress to more severe forms of violence, like physical assault.
☐ True
☐ False
5. A hostile work environment is a form of sexual harassment in the workplace that involves a “this for that” situation.
☐ True
☐ False
6. Making jokes or derogatory comments about a person’s appearance, accent or gender identity is a form of harassment.
☐ True
☐ False

Attitudes Towards Sexual Harassment (Sexual Harassment Attitude Scale)

Please indicate how much you agree or disagree with the following statements. Remember, there are no right or wrong answers so please answer how you really think or feel.

	Strongly agree (5)	Agree (4)	Neither Agree or Disagree (3)	Disagree (2)	Strongly disagree (1)
1. An attractive Airman has to expect sexual advances and should learn how to handle them.					
2. It is normal for Airmen to be sexually teased by others with whom they interact on the job.					
3. Most Airmen who are sexually insulted by another person provoke their behavior by the way they talk, act, or dress.					
4. Airmen must learn to understand that a person’s “no” to their sexual advances really means “no”.					
5. It is only natural for Airmen to use their					

sexuality as a way of getting ahead at work.					
6. I believe that sexual intimidation is a serious social problem.					
7. It is only natural for Airmen to make sexual advances to a someone they finds attractive.					
8. Innocent flirtations make the workday interesting.					
9. Encouraging a supervisor's sexual interest is frequently used by Airmen to improve their work situations.					
10. One of the problems with sexual harassment is that some Airmen can't take a joke.					
11. Many charges of sexual harassment are frivolous and vindictive.					
12. A lot of what people call sexual harassment is just normal flirtation between Airmen.					
13. Sexual assault and sexual harassment are two completely different things.					
14. Sexual harassment refers to those incidents of unwanted sexual attention that aren't too serious.					
15. Sexual harassment has little to do with power.					
16. Sexism and sexual harassment are two completely different things.					
17. All this concern about sexual harassment makes it harder for Airmen to have normal relationships.					

Attitudes Towards Relationship Violence (Acceptance of Couple Violence Scale)

Please indicate how much you agree or disagree with the following statements.

	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)
1. A man angry enough to hit his female partner must love her very much.				
2. Violence between dating partners can improve the relationship.				
3. Women sometimes deserve to be hit by the men they date.				
4. A woman who makes her male partner jealous on purpose deserves to be hit.				
5. Men sometimes deserve to be hit by the women they date.				
6. A woman angry enough to hit her male partner must love him very much.				
7. There are times when violence between dating partners is okay.				
8. A man who makes his female partner jealous on purpose deserves to be hit.				
9. Sometimes violence is the only way to express your feelings.				

10. Some couples must use violence to solve their problems.				
11. Violence between dating partners is a personal matter and people should not interfere.				
12. A male angry enough to hit his male partner must love him very much.				
13. Men sometimes deserve to be hit by the men they date.				
14. A man who makes his male partner jealous on purpose deserves to be hit.				
15. Women sometimes deserve to be hit by the women they date.				
16. A woman angry enough to hit her female partner must love her very much.				
17. A woman who makes her female girlfriend jealous on purpose deserves to be hit.				

Attitudes Towards Cyberbullying (Harmful Cyberbullying Attitude Scale)

Please indicate how much you agree or disagree with the following statements. Remember, there are no right or wrong answers so please answer honestly.

	Strongly agree (5)	Agree (4)	Neither Agree or Disagree (3)	Disagree (2)	Strongly disagree (1)
1. Teasing or making fun of others with harmful comments online is fun to me.					
2. It is alright to send harmful online messages/posts to another.					
3. It makes me feel good to attack others online when they deserve it.					
4. I have no reservations about using technology to hurt others when they deserve it.					
5. Harming others via electronic media is acceptable to do.					

Attitudes/Knowledge of Effective Consent (ARC3/Sexual Consent Scale)

Please indicate how much you agree or disagree with the following statements. Remember, there are no right or wrong answers so please answer honestly.

	Strongly agree (4)	Agree (3)	Neither Agree or Disagree (2)	Disagree (1)	Strongly disagree (0)
1. Consent must be given at each step in a sexual encounter.					
2. If a person initiates sex, but during foreplay says they no longer want to, the person has not given consent to continue.					
3. If a person doesn't physically resist sex, they have given consent.*					
4. Consent for sex one time is consent for future sex.*					

5. If you and your sexual partner are both drunk, you don't have to worry about consent.*					
6. Mixed signals can sometimes mean consent.*					
7. If someone invites you to their place, they are giving consent for sex.*					
*Reverse coded					

Perceptions of Sexual Misconduct as Part of Military Life (ARC3/Bystander Awareness/Campus Safety)

Please indicate how much you agree or disagree with the following statements. Remember, there are no right or wrong answers so please answer honestly.

	Strongly agree (4)	Agree (3)	Neither Agree or Disagree (2)	Disagree (1)	Strongly disagree (0)
1. I don't think sexual <u>harassment</u> is a problem in the Air Force.					
2. I don't think sexual <u>assault</u> is a problem in the Air Force.					
3. I don't think there is much that can be done about sexual <u>harassment</u> in the Air Force.					
4. I don't think there is much that can be done about sexual <u>assault</u> in the Air Force.					
5. There isn't much need for me to think about sexual <u>harassment</u> while I'm in the Air Force					
6. There isn't much need for me think about sexual <u>assault</u> while I'm in the Air Force.					

Relationships Skills Self-Efficacy (Interpersonal Competence Questionnaire)

Imagine the following situations involved a romantic partner. Please indicate how comfortable you would be handling the situations.

	Romantic Partner				
	I'm poor at this; I'd feel so uncomfortable and unable to handle this situation, I'd avoid it if possible (1)	I'm only fair at this; I'd feel uncomfortable and would have lots of difficulty handling this situation (2)	I'm ok at this; I'd feel somewhat uncomfortable and have some difficulty handling this situation (3)	I'm good at this; I'd feel quite comfortable and able to handle this situation (4)	I'm extremely good at this; I'd feel very comfortable and could handle this situation very well (5)
1. Telling a partner you don't like a certain way he or she has been treating you.					
2. Saying "no" when a partner asks you to do something you don't want to do.					
3. Turning down a request by a partner that is unreasonable.					
4. Standing up for your rights when a partner is neglecting you or being inconsiderate.					
5. Telling a partner that he or she is doing something that embarrasses you.					
6. Confronting your close partner when he or she has broken a promise.					
7. Telling a partner that he or she had done something to hurt your feelings.					
8. Telling a partner that he or she has done something that made you angry.					

Imagine the following situations involved a friend. Please indicate how comfortable you would be handling the situations.

	Friend				
	I'm poor at this; I'd feel so uncomfortable and unable to handle this situation, I'd avoid it if possible (1)	I'm only fair at this; I'd feel uncomfortable and would have lots of difficulty handling this situation (2)	I'm ok at this; I'd feel somewhat uncomfortable and have some difficulty handling this situation (3)	I'm good at this; I'd feel quite comfortable and able to handle this situation (4)	I'm extremely good at this; I'd feel very comfortable and could handle this situation very well (5)
1. Telling a friend you don't like a certain way they have been treating you.					
2. Saying "no" when a friend asks you to do something you don't want to do.					
3. Turning down a request by a friend that is unreasonable.					
4. Standing up for your rights when a friend is neglecting you or being inconsiderate.					
5. Telling a friend that he or she is doing something that embarrasses you.					
6. Confronting your close friend when he or she has broken a promise.					
7. Telling a friend that he or she had done something to hurt your feelings.					
8. Telling a friend that he or she has done something that made you angry.					

Healthy Relationships Skills Self-Efficacy (Healthy Relationships Skills Self-Efficacy Scale - NEW)

How confident do you feel in your ability to...

	Not at all confident (1)	Not very confidence (2)	Somewhat Confident (3)	Very confident (4)
1. Select personal boundaries within your peer relationships?				
2. Select personal boundaries within your work relationships?				
3. Select personal boundaries within your intimate relationships?				
4. Detect signs and situations that may compromise your personal boundaries?				
5. Protect your personal boundaries?				
6. Protect your boundaries within electronic and online environments?				
7. Respect other people's personal boundaries?				
8. Communicate your feelings clearly and respectfully within your peer relationships?				
9. Communicate your feelings clearly and respectfully within your work relationships?				
10. Communicate your feelings clearly and respectfully within your intimate relationships?				

Bystander Self-Efficacy (Bystander Self-Efficacy Scale)

Please read each of the following behaviors. Indicate how confident you are that you could do them. Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

0 = can't do

10 = quite uncertain

50 = moderately certain

100 = very certain

How confident are that you could...	0 = Can't Do	10 = Quite Uncertain	50 = Moderately Certain	100 = Very Certain
1. Express my discomfort if someone makes a joke about another person's body.				
2. Get help and resources for a friend who tells me they have been raped.				
3. Ask a friend at a party if they need help getting out of a situation that may cause physical, emotional, or sexual harm.				
4. Ask a stranger at a party if they need help getting out of a situation that may cause physical, emotional, or sexual harm.				
5. Ask a coworker at work if they need help getting out of a situation that may cause physical, emotional, or sexual harm.				
6. Express my discomfort to a friend who tells me that they had sex with someone who was passed out or who didn't give consent.				

7. Report a friend who tells me that they had sex with someone who was passed out or who didn't give consent.				
8. Do something to help a very drunk person who is being brought to a bedroom by someone at a party.				