1. **Title of Project:** Identifying and Predicting Classes of Sex Trafficking Survivors in the United States

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3. **Background**
   Estimates suggest that at any given time, upwards of 21 million people around the world are victims of human trafficking (International Labor Organization, 2017; U.S. Department of State Trafficking in Persons [TIP] Report, 2013). While there are no universally accepted approximations of human trafficking within the United States, some sources propose that the number reaches into the tens of thousands (Clawson et al., 2009). The Trafficking Victims Protection Act of 2000 (TPVA) defines human trafficking as an act of “recruiting, harboring, transporting, providing, or obtaining a person for labor or services, through the use of force, fraud, or coercion” (22 U.S.C. § 7102). The rates of trafficking victimization supersede the combined global mortality rates of heart disease (8.7 million) and strokes (6.2 million), the leading causes of death in 2015 (WHO, 2017). Of known trafficking cases, over 70% involve sexual exploitation (TIP Report, 2015). It is well known that sex trafficking victimization is linked with major health concerns including sexually transmitted infections such as HIV/AIDS, post-traumatic stress disorder, substance abuse/addiction, depression, anxiety, personality disorders, psychotic behavior, physical health problems, and suicidality (e.g., Lederer & Wetzel, 2014; Oram et al., 2016). Further, human trafficking in the U.S. and globally is a costly epidemic with billions of dollars directed toward state and federal law enforcement, health and human services programs for survivors, and most importantly, the intangible cost of human lives.

Despite the influx in global advocacy and intervention initiatives, post-trafficking resources for survivors are sparse. Sex trafficking survivors have significant physical and mental health needs, but there are currently no empirically validated treatment approaches for this population. Despite increasing research on the sex trafficking phenomenon, existing studies rely on small sample sizes and qualitative analysis to examine victimization in terms of simple frequencies. These findings offer a foundation for understanding the sex trafficking crisis, but they neglect nuanced details of trafficking victimization. There is little understanding of the trafficking inception process, how survivors escape, what increases their likelihood of treatment engagement, or unique risk and resilience factors associated with this population. Due to a lack of empirical research on the experiences, characteristics, and unique needs of sex trafficking survivors, there are currently no professionally agreed upon models of best practice for physical and mental health treatment. Thus, there is urgent need to address this gap in knowledge and inform service provision by developing interventions that optimize outcomes for survivors.

4. **Summary of Activity**
   Human sex trafficking is a complex and unique phenomenon involving the commercial sexual exploitation (CSE) of persons by means of force, fraud, or coercion. To date, research on the sex trafficking phenomenon has generally relied on small sample sizes and qualitative analyses to examine victimization in terms of simple frequencies. Although these findings offer an important foundation for understanding the trafficking crisis, their generalizability and power to detect meaningful idiosyncrasies across survivors’ unique experiences and needs is limited. The objective of this study was to examine heterogeneity in trauma exposure and biopsychosocial health among sex trafficking survivors by identifying distinct sub-groups (i.e., profiles or classes) within a sample of survivors from the United States. Further, utilizing a Community-Based Participatory Research (CBPR; Minkler & Wallerstein, 2008) approach, this study investigated differences in help-seeking attitudes and intentions between these different profiles Uncovering thematic variance in trauma...
history and biopsychosocial health, as well as differential help-seeking factors will ultimately contribute to a broader and more inclusive framework for understanding and responding to survivors’ recovery needs.

We examined two specific aims to test our hypotheses and thereby fulfill our overall objective:

1. **Identify the unique profiles of sex trafficking survivors within the United States.**
2. **Determine the individualized needs and treatment-seeking patterns of these unique sex trafficking survivor profiles.**

**Methods and Procedures.** Adult sex trafficking survivors (18 years of age or older) identified by one of the partner organizations (See CBPR section) were invited to participate in a one-time online quantitative survey. For the purpose of this study, sex trafficking was operationalized by the U.S. State Department’s definition of sex trafficking (“Sex trafficking occurs when a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age”). Partner organization employees informed individuals who met these criteria of the study. Survivors who expressed interest in the study were referred to an online survey via Qualtrics. Due to the length and detail of the survey, participants were paid $30.00 for taking part in the study. IRB Approval from Kansas State University (IRB#8943) was received for the present study.

**Measures.** A wide range of gold standard biopsychosocial assessments were modified and used to gather comprehensive data on trafficking survivors’ unique health profiles. Fifteen scales and a demographic questionnaire were used to measure a total of 52 variables in the present study. The survey took approximately 60 to 90 minutes to complete; for this reason, providing incentives for participants was necessary.

**Participants.** The present study included cross-sectional data from 135 adult survivors of CSE living in the United States. Participants had a mean age of 34.78 (SD = 9.86, Range: 18 – 64) and the majority were female (95.6%; male = 3.3%; transgender = 1.1%). A majority of the sample identified their primary racial identity as White (55.1%), followed by Black (28.1%), Other (7.9%), Hispanic (3.4%), American Indian/Alaska Native (2.2%), Native Hawaiian/Pacific Islander (2.2%), and Asian (1.1%). Regarding education, just over one fourth of the sample reported earning a high school diploma or GED (27%), followed by those who earned some college credit but no degree (23.6%), some schooling, but no high school diploma (12.3%), a bachelor’s degree (10.1%), technical or vocational training degree (7.9%), an associate’s degree (7.9%), no schooling (6.7%), and a master’s or professional degree or higher (4.5%). The two largest employment categories were almost evenly split between unemployed-looking for work (23.6%) and employed full time (22.5%). Among the other half of the sample, 13.5% were employed part time, 13.5% were unable to work, 9% were students, 5.6% were unemployed and not looking for work, 5.6% endorsed other, 3.4% were homemakers, and 3.4% were self-employed. The three most frequently endorsed income brackets were: below $9,999 (51.2%), $10,000 - $19,999 (16.3%), and $20,000 - $29,999 (16.3%). Regarding geographic locations, almost one third (31.1%) of participants lived in the southern region of the United States when they took part in this study; among remaining participants, 23% lived in the West, 5.2% in the Midwest, and 3% in the northeast. Study participants reported exposure to an average of 10.79 (SD = 6.50) traumatic life events, 7.31 (SD = 1.77) adverse childhood experiences, and 11.54 years (SD = 8.83) of CSE.

**Analysis.** Data were analyzed with a Latent Profile Analysis (LPA; Muthén & Muthén, 1998-2012). The LPA is an advanced statistical analysis that allows researchers to examine their populations of interest as heterogeneous rather than homogenous groups with distinct differences. The benefit of using this person-centered analysis to address the proposed aims were that we would be able to identify unique typologies or classes of sex trafficking survivors. The LPA generates these profiles based on common factors shared by participants that make them distinctly different from other groups within the sample. As a result, we were able to develop a more nuanced picture of sex trafficking survivors within the United States.

**Results.** Results from a latent profile analysis with 135 adults trafficked in the United States yielded three distinct survivor sub-groups: mildly distressed, moderately distressed, and severely distressed. The mildly distressed class (18.5%) was characterized by the lowest reports of trauma exposure and an absence of clinically significant psycho-social stress symptoms. The moderately distressed class (48.89%) endorsed comparatively medial levels of trauma exposure, as well as clinically significant disturbance in six domains of
psychosocial health. The severely distressed class (32.59%) reported the highest degree of trauma exposure and exhibited clinically significant symptoms of pervasive psychosocial stress across all domains assessed. To better understand variation in CSE survivors’ engagement with formal support services, this study also examined differences in help-seeking attitudes and intentions between latent classes. Results indicated that compared to those in the mildly and moderately distressed classes, severely distressed survivors endorsed significantly more unfavorable attitudes toward seeking professional help, along with no intention to seek help from any source when facing a personal or emotional crisis. Findings from this study provide a snapshot of significant heterogeneity in trauma exposure and biopsychosocial health among CSE survivors, as well as associated differences in help-seeking attitudes and intentions. The identification of distinct survivor subgroups in these and future analyses mark an important intermediate step toward developing empirically-testable support services that are specifically designed to meet the unique needs of CSE survivors. (See attached Research Summary report for additional study information).

5. **Project Impact for All Collaborative Partners**

The foundation of the proposed study’s research design is the Community-Based Participatory Research (CBPR; Minkler & Wallerstein, 2008) framework. CBPR departs from traditional research methodology by building trust with marginalized communities to establish and mobilize collaborative community partnerships for research and intervention. CBPR is defined by the equitable integration of community members, service organizations, and researchers in all aspects of the research process. In CBPR, research agendas originate from, are conducted within, and are subsequently owned by the community of interest. When research emanates from community need, it is more likely that results will meaningfully inform action and policy. By engaging community stakeholders and responding to their self-identified empirical priorities, researchers contribute to the “democratization” of research, thereby bridging the gap between science and practice. This, in turn, facilitates an integration of knowledge generation and action *in context* to promote social change and improve health outcomes.

In practice, CBPR is an iterative process that relies on strong, ongoing community partnerships characterized by mutual learning, trust, and empowerment. These relationships enable researchers to connect with vulnerable and traditionally hard to reach populations. Further, they also facilitate bidirectional exchanges between community members, service organizations, and researchers that enhance the cultural and contextual appropriateness of research protocol, thereby strengthening research outcomes.

Consistent with the CBPR method, we developed an advisory board named **RESTORE**, “Research and Education with Sex Trafficking Survivors on Resilience and Empowerment.” This board includes former sex trafficking survivors and representatives from several community organizations who facilitate survivor rescue and recovery programs. Members of the RESTORE advisory board represent diverse geographic regions and professional disciplines (e.g., clergy, social workers, law enforcement officers, etc.). Through conversations with board members, we have collectively identified thematic challenges facing trafficking survivors and barriers to service provision. The aims of this study were unanimously identified by this group as empirical priorities. To address gaps in the field, the RESTORE advisory board, representing 6 independent agencies/groups (i.e., The Homestead, Exodus Cry, Women’s Crisis Center, Kansas Attorney General’s Anti-Human Trafficking Unit, The University of Nebraska Medical School, and The Women’s Fund of Omaha) served as liaisons between researchers and the target population – sex trafficking survivors within the United States. We will collect data for the proposed study from these organizations and their partner sites. At this time, **RESTORE** has community partnerships with 29 organizations in 19 different states. Because the study’s target recruitment goal was 250 participants, ongoing data collection will continue through 2019.

Upon successful completion of the proposed research, we have contributed a detailed understanding of the varied and unique typologies (i.e., profiles) of sex trafficking survivors in the United States. This contribution is significant because it will inform the development of targeted intervention and treatment approaches for this marginalized and underserved population. Results are expected to move the field vertically forward by outlining the unique topography of sex trafficking survivors beyond basic frequencies and general trends. This information will provide a stronger and more deeply integrated foundation for future research, theory, and intervention practices specific to sex trafficking survivors, a growing and underserved
population across the country and globally. With dynamic data on survivor physical, psychological, and interpersonal profiles and their associated treatment-seeking patterns, we will be able to develop and test the efficacy of tailored intervention services in the future, thereby mitigating the damaging effects of trafficking victimization. In addition, we anticipate the development of comprehensive materials for professionals in a variety of areas who are directly involved with this population, including law enforcement, health and human services providers, as well as local, state, and national government entities combatting the sex trafficking industry and providing recovery support for survivors.

6. **Fit of Project with CECD Funding Priorities**
   - Community-based participatory research
   - Applied interdisciplinary research aimed at addressing important public issues
   - Programs aimed at bettering the lives of underserved populations
   - Community asset identification and mapping, strategic planning, and resource development

7. **Project Self-Assessment**

   **Successes:**
   - Successful completion of CBPR research study with data collection from a nationally-recruited sample of 135 sex trafficking survivors.
   - Established RESTORE advisory board and developed community partnerships with 29 organizations in 19 different states.
   - Data will inform policy in a variety of areas who are directly involved with this population, including law enforcement, health and human services providers, as well as local, state, and national government entities combatting the sex trafficking industry and providing recovery support for survivors.

   **Challenges:**
   - Recruitment limitations and lack of trust due to vulnerability and history of exploitation and mistreatment of target population
   - Direct challenges from some community organizations with other motives attempting to create obstructions in conducting the research

   **Future Goals:**
   - Continue data collection to achieve goal of 250 total participants
   - Reporting study results back to partner organizations to fully engage in CBPR benefits for all partners
   - Develop trainings and publications for dissemination of results

8. **Final Project Budget**

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>CECD Funding</th>
<th>Matched Funding</th>
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<tr>
<td>GRA Salary</td>
<td>Funding in the amount of $7,500 was used to support GRA Salary for implementation of the project during AY2018.</td>
<td>$7,500</td>
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<tr>
<td>Statistical Software</td>
<td>Funding in the amount of $1,095 was used to purchase the statistical software required for the study analyses, including SPSS and Mplus with the mixture modeling add-on. This statistical software was necessary to run the advanced statistical analysis in the proposed project.</td>
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<td>Researcher Site Travel</td>
<td>Funding in the amount of $1,405 supported researcher travel to data collection sites to distribute recruitment flyers, manage participant</td>
<td>$1,405</td>
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