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## Final Summary Overview

### Evaluation of a Service Provision Program for Victims of Sex Trafficking

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## Introduction

The commercial sexual exploitation (CSE) of children is a substantial public health and criminal justice problem. It is challenging to assess the number of people who have been sexually exploited due to the hidden nature of the crime, victim reluctance to report to authorities, and because the specific act that are defined as CSE varies by state. In the U.S. any inducement of a person under the age of 18 into a commercial sex qualifies as child trafficking ("TVPA," 2000).

Youth survivors of commercial sexual exploitation (CSE) often need to navigate multiple systems while coping with potentially severe and long-lasting physical and mental health sequelae. Many young CSE survivors are involved with legal and welfare systems. For example, many CSE victims are involved with the child welfare system related to their exploitation or to past abuse and neglect (O'Brien, White, & Rizo, 2017; Joan A. Reid, Michael T. Baglivio, Alex R. Piquero, Mark A. Greenwald, & Nathan Epps, 2017). Many CSE victims also have histories with the juvenile justice or criminal justice system (Gibbs, Hardison Walters, Lutnick, Miller, & Kluckman, 2015; Gibbs, Henninger, Tueller, & Kluckman, 2018; Greenbaum & Committee on Child Abuse and Neglect, 2017; J. A. Reid, M. T. Baglivio, A. R. Piquero, M. A. Greenwald, & N. Epps, 2017). Sequeale of CSE include depression, anxiety, and post-traumatic stress disorder (PTSD) (Hossain, Zimmerman, Abas, Light, & Watts, 2010), suicidal ideation and suicidal behavior (Edinburgh, Pape-Blabolil, Harpin, & Saewyc, 2015). CSE victims may also experience physical health issues related to trafficking including sexually transmitted infections (Goldberg, Moore, Houck, Kaplan, & Barron, 2017), pregnancies (Greenbaum, Dodd, & McCracken, 2018), and substance use (Varma, Gillespie, McCracken, & Greenbaum, 2015). In addition, many CSE

victims suffer from housing and food insecurity, as well as instability in accessing and receiving needed services (Dank, Yu, & Yahner, 2016).

Preventing youth from ever becoming CSE victims and preventing youth who have already been exploited from becoming exploited again, are two methods of preventing CSE. These two types of prevention are called secondary and tertiary prevention in public health, respectively. However, there has been limited research on both secondary and tertiary CSE prevention. Regarding secondary CSE prevention, to our knowledge, there have been only two published descriptions of CSE prevention programs, and neither of these programs were evaluated (Kruger et al., 2016; Taylor, 2018). In addition, there was one pilot evaluation of a CSE prevention program, although the intervention was a web-based documentary-style video shown to teens in a family planning clinic, with a small study sample ( $n=48$ ), and results showed minor changes in knowledge and attitudes (CliniMurphy, Bennett, & Kottke, 2012). There have also been few evaluations of tertiary prevention programs (preventing CSE youth from becoming CSE victims again). Moynihan and colleagues conducted a review of peer-reviewed studies of interventions for sexually exploited children and other adolescents. They found 21 studies from 1991-2005 that promoted the healing of these adolescents, however, the quality of study design and outcome results varied. For example, some studies only published descriptions of the interventions and limited outcome results, and many of the articles did not provide details on how participants were recruited or how the interventions were delivered (Moynihan, Pitcher, & Saewyc, 2018). In addition, the group Citrus Helping Adolescents Negatively Impacted by Commercial Exploitation (CHANCE) in Florida recently conducted a pilot study of their wraparound services for youth who have experienced CSE (Armstrong, Johnson, Landers, Dollard, & Anderson, 2016).

## **My Life My Choice**

My Life My Choice (MLMC) is a survivor-led program that was founded in 2002 in Boston, Massachusetts to prevent CSE. As a program of the Justice Resource Institute, MLMC offers many programs and services to train service providers about CSE, assist survivors of CSE, and prevent youth from becoming exploited. MLMC offers CSE prevention groups (secondary prevention) as well as one-on-one survivor mentoring (tertiary prevention).

In 2003, MLMC designed the prevention group curriculum with survivors and has since trained 624 facilitators from 33 U.S. states and Canada to provide these prevention groups. Group facilitators, who often include clinicians, counselors, child welfare workers, or adult CSE survivors who have been free from CSE for at least five years, are trained in the ten-session curriculum by MLMC in a two-day training. In the 10-session prevention groups, youth who have been determined by the facilitators to be “at-risk” for exploitation learn about sexual exploitation, healthy relationships, sexual health, and how to find help and local resources. Prevention groups are held in residential and detention facilities, public and private middle and high schools, child welfare offices, community organizations, and other similar settings.

Starting in 2004, MLMC has also offered one-on-one survivor mentoring to Eastern Massachusetts youth who are exploited or who MLMC believes are at high-risk for exploitation. Survivor mentors, who are trained and have been free from CSE for at least five years, provide long-term and consistent emotional support to youth and connect youth with other MLMC and Massachusetts-area services.

## **Research Project**

We evaluated both the My Life My Choice prevention group program and the survivor mentorship program using a longitudinal, mixed-methods design (Figure 1). The purpose of this

study was to (1) determine whether participation in the MLMC prevention groups or survivor mentoring lead to a reduction in CSE, dating abuse, non-voluntary police contact, and risk behaviors (e.g., substance use), (2) qualitatively explore participants' experiences with MLMC, and (3) conduct a cost analysis of the MLMC prevention groups and survivor mentoring.

This brief report highlights the description of MLMC prevention group and survivor mentorship programs, and the design, methods, analyses, findings, and challenges of our evaluation of these two MLMC programs. Greater detail can be found in the peer-reviewed articles, "Evaluation of a Multi-Session Group Designed to Prevent Commercial Sexual Exploitation of Minors: The My Life My Choice Curriculum," (under review), "A Longitudinal Evaluation of a Survivor-Mentor Program for Child Survivors of Sex Trafficking in the United States," (under review) and "Ethical and Practical Considerations for Collecting Research-Related Data from Commercially Sexually Exploited Children" (published)<sup>1</sup>.

## **Secondary Prevention: Evaluation of prevention groups**

### **Research Design and Methods**

The MLMC prevention group program was evaluated using a longitudinal design. Participant survey data were collected three times: (1) at baseline, which was on the first or second day of the group, (2) on the last day of the group (approximately three months later), and (3) six months after baseline. Data collection protocols were approved by the Boston University Institutional Review Board (IRB), as well as the IRBs at the Massachusetts Department of

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<sup>1</sup> Rothman, EF., Farrell, A. Bright, K & Paruk, J (2018). Ethical and practical considerations for collecting research-related data from commercially sexually exploited children. *Journal of Behavioral Medicine*. 44(3):250-258.

Children and Families (DCF), the Justice Research Institute (JRI), the Connecticut DCF, New Jersey DCF, and Florida DCF.

## **Participants**

Youth were eligible for study participation if they were participating in an MLMC prevention group, were 11 years of age or older, and could read and speak English. Participants (n=354) were recruited from four U.S. sites that were all trained to use the My Life My Choice prevention program model, including: My Life My Choice (Boston, MA), Prevent Child Abuse New Jersey (New Brunswick, NJ), Selah Freedom (Sarasota, FL), and The Village for Families and Children (Hartford, CT). Baseline and follow-up data were collected from 2015 – 2017.

## **Consent and Baseline Data Collection**

Before the prevention groups began, if youth were younger than 18, group facilitators gave them consent forms to take home to their parents/guardians. Youth were allowed to return the consent forms up until the last day of group. Parent/guardian consent forms were available in English and Spanish. There were two situations that merited a waiver of parent/guardian informed consent. First, Massachusetts youth who were involved with the Department of Children and Families (DCF), but for whom parental rights had not yet been terminated, received a waiver of parental consent. “Involved” means housed in a residential setting away from their parents, with little parent contact. In addition, non-DCF involved youth in Massachusetts who were participating in the prevention group at a congregate care facility that had collected parental consent previously for any and all institution-related services received a waiver of informed consent.

On the first or second day of the prevention group, research staff assented youth younger than the age of 18, and consented youth ages 18 and older. After the assent/consent process,

youth completed the 20-30-minute paper baseline survey. Youth also filled out a contact sheet, which provided researchers with physical addresses, email addresses, social media contacts, and contacts of trusted adults and various agency (such as child welfare, school or residential staff). If youth turned in a properly signed parent/guardian consent form by the final group session, they were enrolled into the study. Youth received a \$10 gift card for filling out the baseline survey. A total of 354 youth were enrolled.

### **Follow-Up Data Collection**

At the last prevention group session (typically 3 months after baseline), participants took the first follow-up survey. If participants were absent from the last session, research staff contacted them through their contact sheet information and offered them the chance to take the survey online through REDCap, over the phone with the research assistant, or in-person (if feasible). Youth received \$10 for completing the first follow-up survey. A total of 296 participants completed the first follow-up survey (84% follow-up rate). On the last day of group, researchers also collected group attendance sheets to measure how many of the sessions participants attended.

After the group ended, research staff contacted participants about once per month to confirm and update contact information. If participants could not be contacted directly, research staff contacted others that the youth had listed on their contact sheet (e.g., parent, residential staff) to confirm contact information.

Six months after baseline, research staff re-contacted participants to invite them to complete the second follow-up survey. Participants received a \$20 gift card for completing the second follow-up survey. A total of 241 youth completed the 6-month survey (68% follow-up rate).

## Survey Measures (Appendix A)

CSE and Sexually Explicit Behavior (SEB): CSE during the past three months was assessed using a single yes/no item “exchanged sex for money, food, a place to stay, drugs, gifts, or favors,” which was adapted from the Add Health survey (Resnick et al., 1997). Participants also answered four yes/no original items that could indicate CSE but were categorized as sexually explicit behavior (e.g., “stripped or engaged in x-rated (naked) dancing”).

Dating Abuse: Participants were asked if they were in a romantic or dating type relationship with someone. If they were in a relationship, youth responded to five items measuring physical, sexual, and psychological dating abuse victimization. The first two items, “Pushed, grabbed, hit, beat or hurt them physically, and “Forced them to have sex,” were adapted from the Dating Abuse Perpetration Acts Scale (Goncy & Rothman, 2016). The final three items, “Made them describe where they were every minute of the day,” “Would not let them do things with other people, and “Made them feel like they couldn’t say no to sex or made them have sex when they really didn’t want to” were original items.

Knowledge and Attitudes about CSE: Prevention group participants were asked to indicate how true twenty statements were using a Likert-type scale (1=totally not true, 6=totally true). These twenty statements assessed participants’ knowledge and attitudes. Example statements included: “Girls get rich through prostitution,” “Only girls who are addicted to drugs get pimped out,” and “If a girl gets fooled by a pimp, it’s her own fault.”

CSE Help: Participants were also asked four original questions if they had given help or information about CSE in the last three months, or since the last survey. Participants could indicate yes or no if they had: told a friend about MLMC because they were trying to help the friend get out of a bad situation, educated a friend about the myths and facts of selling sex,

warned somebody not to sell sex, and helped a person their age get professional help (e.g., from a doctor or counselor) for a serious problem.

Marijuana and Alcohol Use: Researchers also measured participants' marijuana and alcohol use within the past thirty days. Participants were asked how many days they had at least one drink of alcohol, had four or more drinks in a row, drank until they passed out, and drank until they vomited. The first two of these items were based on the AUDIT. Study participants were also asked on how many they had used marijuana. Participants could indicate that each of these items happened 0 days, 1 day, 2-3 days, 4-7 days, 8-14 days, 15-29 days, or all 30 days.

Trust in Police: Finally, prevention group participants could indicate yes or no to the following two original items about trust in police: "I felt like the police are not safe to trust," and "I felt like I would ask police for help if I felt in danger."

## **Data Analysis**

Descriptive statistics of survey items were calculated for all participants who completed the baseline survey (n=354), as well as for those that completed follow-up 1 (n=296), and follow-up 2 (n=241). Within-participant change from baseline to follow-up was calculated using McNemar's test. A modified Poisson model with robust error variances was then used to calculate unadjusted and adjusted relative risks and confidence intervals for the association between baseline and follow-up.

## **Results**

Almost all of the MLMC group participants identified as female (96%), and the mean age of the participants was 16 years old. About one quarter of the participants identified as Black/African-American (28%), one quarter as Hispanic/Latina (25%), one quarter as White/non-Hispanic (25%), and one quarter as another race/ethnicity (22%). Almost forty

percent of youth identified as bisexual, lesbian, pansexual, or other. The sample included males and three people identifying as other gender. Sixty percent of the sample came from the Massachusetts groups, an addition 25% came from New Jersey. About ten percent of participants were enrolled in Florida and less than 5% were enrolled in Connecticut. The groups were conducted in middle schools (9%), High schools (29%) residential facilities (40%) and in other settings (21%). On average, participants attended 81% of the group sessions that were part of their MLMC class.

This report contains preliminary results because an in-depth analysis of data is in progress. Results have been submitted to a peer-reviewed journal and will be disseminated widely after publication. In the interim, preliminary results suggest:

Knowledge about CSEC improved for all participants, and particularly those who were 11-15 years old and for those in a residential facility. At baseline 47% had poor knowledge of this topic, but at follow-up 1 only 35% had poor knowledge (25% decrease in poor knowledge).

Experiences of sexual exploitation: at baseline 20% reported some prior exploitation in the past 3 months, but after the group only 9% had experienced that (which is a 55% decrease) and at the six month point still only 12% had (which is a 40% decrease). The effects were even more striking for those who got the group in a residential facility, who were Latina, and who were not alcohol or drug users at baseline.

Dating abuse: Participants were 2 times less likely to report dating abuse victimization in the past 3 months at follow-up as they were at the start of the class. Any victimization went from 44% at baseline to 25% at follow-up 1 (almost half as likely), and 21% six months after the group; also, the effects were even more striking for those 11-15 years old than for those 16-20 years old. This reduction in dating abuse was true for youth of all racial groups.

Providing CSE-related help to other people: At baseline 54% reported that in the past 3 months they had given a form of CSE related help to a friend, but by follow-up 100% had done that in the past 3 months and at the furthest follow-up point, 79% had done so.

### **Tertiary Prevention: Evaluation of survivor mentoring**

#### **Research Design and Methods**

The MLMC survivor mentorship program was evaluated using a longitudinal, mixed-methods design. Participant surveys and interviews were conducted three times: (1) baseline, (2) six months after baseline, and (3) twelve months after baseline. Self-reported data were supplemented with additional information about the youths' history of exploitation from MLMC administrative files and staff. Data collection protocols were approved by the Boston University Institutional Review Board (IRB), as well as the IRBs at the Massachusetts Department of Children and Families (DCF), and the Justice Research Institute (JRI).

#### **Study Sample**

Youth were eligible for study participation if they were receiving MLMC survivor mentorship services, were 11 years of age or older, and could read and speak English. Participants (n=41) were all recruited from My Life My Choice in Boston. Baseline and follow-up data were collected from 2015-2018.

#### **Consent and baseline data collection**

MLMC staff gave youths' parents/guardians the consent form to sign at the start of a youth's engagement with MLMC services if they were interested in their child participating in the study. Parent/guardian consent forms were available in English and Spanish. Youth who were involved with the Department of Children and Families (DCF), but for whom parental rights had not yet been terminated, received a waiver of parental consent. Research staff assented

or consented youth in-person before a youth's third meeting with their MLMC mentor.<sup>2</sup> After the assent/consent process, youth completed a 30-minute paper survey. Participants also completed a contact sheet to provide contact information for follow-up data collection. Youth received a \$15 gift card for completing the survey. Forty-three survivor mentoring youth were enrolled and completed a baseline survey, although two participants were removed from the study soon after baseline.<sup>3</sup>

After enrollment, research staff asked participants if they were interested in participating in an interview about the MLMC program on another day in the near-future. Semi-structured interviews with interested youth were conducted in confidential settings and typically lasted from 25-45 minutes. If the youth and parent/guardian had assented or consented to audio recordings, the interview was audio-recorded and transcribed. If youth and/or the parent/guardian had not consented to audio recording, the research interviewer took notes. Youth received a \$20 gift card for participating in the interview. Thirty-one survivor mentoring youth completed a baseline qualitative interview.

### **Follow-up contact and data collection**

Participants were contacted about once a month to update and confirm contact information. If participants could not be reached directly, research staff confirmed contact information with friends and family the participant had listed on their contact sheet. At six and 12 months after baseline, participants were invited to complete a follow-up survey. Participating

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<sup>2</sup> The first several meetings MLMC youth have with a survivor mentor are introductory meetings. Research team members waited until the survivor mentor had established rapport with the youth through the introductory meetings before asking youth if they were interested in participating in the study. However, research staff always assented or consented youth in-person before a youth's third meeting with their MLMC mentor, before youth had done substantive work with the mentor.

<sup>3</sup> Two participants were removed from the study. One participant's parent asked that their child be withdrawn from the study, and MLMC stopped services for another participant soon after enrollment.

youth received a \$20 gift card for completing the six-month follow-up survey and a \$25 gift card for completing the 12-month survey. Twenty-nine youth completed the six-month survey (71%) and 28 youth (68%) completed the 12-month survey.

Youth were also invited to participate in another qualitative research interview about their experiences with MLMC at follow-up. Participants received a \$20 gift card for completing each follow-up interview. Twenty-one youth completed 6-month qualitative interviews and 16 completed 12-month interviews.

Research staff collected MLMC administrative data of the number of in-person contacts and the number of total contacts mentors had with their mentees within one year. To find out more about the study participants' history of CSE, research staff also collected data from MLMC administrative files and mentors.

### **Survey Measures (Appendix A)**

CSE: CSE within the past six months was measured in two different ways: (1) self-report and (2) self-report plus additional MLMC administrative and staff information. For the self-report measurement, participants were asked eight questions about commercial sex. Several of the questions were based on the Add Health Survey question regarding exchanging sex for drugs or money. Some of these eight questions were based on the question of exchanging sex for drugs or money from the Add Health Survey (Resnick et al., 1997). For example, two items were “In the last six months, have you ever exchanged sex for money, food, a place to stay, drugs, gifts, or favors?” and “In the last six months, I accepted an offer to exchange sex for money, food, a place to stay, drugs, gifts, or favors.” For the second measurement of CSE, research staff also used MLMC administrative referral files (such as police or medical referrals explaining to MLMC

why they thought the youth would be a good fit for MLMC services) and mentor knowledge to determine if participants had been exploited.

Participants were also asked three questions if they had turned down any CSE offers within the last six months. For example, participants were asked if they had, “Turned down an offer to exchange sex for money, food, a place to stay, drugs, gifts, or favors.”

Sexually Explicit Behavior (SEB): Any sexually explicit behavior within the past six months was determined using four survey items that all had yes/no response options. For example, participants indicated if they had “stripped or engaged in x-rated (naked) dancing” or “agreed to let your boyfriend (or someone else) take a video of you stripping or having sex.”

Delinquent Behavior: Participants were asked about delinquent behavior on the survey, including illicit drug use and being arrested by the police. To measure any illicit drug use, researchers used the question, “How many days in the past 30 days have you used marijuana?” from the Youth Risk Behavior Survey. Additionally, the survey asked youth how many times they had used nine types of illicit drugs (*e.g.*, heroin or non-prescribed pain medications such as OxyContin) within the past six months.

To assess other types of delinquency within the past twelve months, researchers used ten yes/no items based on the Rochester Youth Development Survey (Thornberry, Lizotte, Krohn, & Garnworth, 1994). For example, participants were asked if they “Damaged, destroyed, or marked up somebody else’s property on purpose” within the past six months. Participants were also asked if they had been arrested or detained by the police within the past six months and could respond, “Yes,” “No,” or “sort of/I don’t know.”

Dating Abuse: Participants who indicated that they were in a romantic or dating-type relationship were also asked 28 questions about dating abuse victimization. These 28 items were

adapted from the Dating Abuse Perpetration Acts Scale (DAPAS) (Goncy & Rothman, 2016). Youth were asked how many times (Never, 1-3 times, 4-9 times, or 10+ times) each of the items their dating partner did to them during the past six months. Items included dating abuse behaviors such as, “Scratched me,” and “Hit me with something hard besides a fist.”

Health: To assess health, participants answered questions about sexually transmitted infections, feeling sad, and feeling hopeless. Youth were asked if they had been diagnosed with a sexually transmitted infection or STD within the past six months, and could respond yes or no. Sadness was also assessed with one item, which was taken from the Youth Risk Behavior Survey; youth were asked how many days they felt sad, blue, or depressed within the past 30 days. Hopelessness was assessed using six items from the Hopelessness Scale for Children (Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983). Participants indicated how much they agreed or disagreed with each item using a Likert-type scale. Examples of the six items include, “I will have more good times than bad times,” and “When I grow up, I think I will be happier than I am now.”

Social Factors: Participants also answered survey questions about social factors, including support from others, coping skills, and risky behaviors. For ten items about support from others, participants used a Likert-type scale to indicate if they thought the items were “definitely false, probably false, probably true, or definitely true.” A majority of the ten items were from the Interpersonal Support Evaluation List (ISEL) (Sheldon Cohen, Mermelstein, Kamarck, & Hoberman, 1985), and sample items included, “If I was stranded ten miles from home, there is someone I could call to get me,” and “I don’t often get invited to do things with others.” To assess coping skills, participants indicated using a Likert-type scale how much they agreed or disagreed with ten items from the Perceived Stress Scale (S. Cohen, Kamarck, &

Mermelstein, 1983). Sample items included “My belief in myself gets me through hard times,” and “I am unable to control the important things in my life.” Finally, participant risky behavior was assessed using four items from the self-control scale risk-seeking and impulsivity subcomponents (Grasmick, Tittle, Bursik Jr, & Arneklev, 1993).

## **Data Analysis**

Descriptive statistics were calculated for all participants who completed the baseline survey (n=41), the six-month survey (n=29), and the twelve-month survey (n=28). Within-participant change was calculated from baseline to follow-up 1, as well as baseline to follow-up 2, using McNemar’s tests. Poisson models were then used to calculate the unadjusted and adjusted relative risks and confidence intervals of outcome variables.

## **Results**

The average age of the participants was 16 years old, and almost all of the youth identified as female. About one third of the participants identified as Hispanic, one third as White/non-Hispanic, 20% as Multiracial, ten percent as Black/African-American, and approximately 10% identified as other another race or ethnicity. Just over half of the participants identified as straight or heterosexual.

This report contains preliminary results because an in-depth analysis of data is in progress. Results have been submitted to a peer-reviewed journal and will be disseminated widely after publication. In the interim, preliminary results suggest that, after adjusting for potential confounders, participants changed in positive directions for many of the outcome measures. Youth were three times less likely to report having been commercially sexually exploited in the past six months after having been involved with My Life My Choice for six months and five times less likely after being with My Life My Choice for a year. CSE was

measured in two ways: (1) via self-report, and (2) via self-report plus any additional information that mentors had about the participant's exploitation. Using the first definition of CSE, at baseline 28% of the sample reported CSE in the past six months, at 6-month follow-up only 10% reported CSE, and at 12-month follow-up 7% had. Using the second definition of CSE, at baseline 72% of participants had been exploited and at 6-month follow-up 24% had, and at 12-month follow-up 14% had.

Additionally, coping skills increased from baseline to six months and at the one year mark. At baseline, 29% of participants had low coping skills. At 6-month follow-up, 11% had low coping skills and at 12-month follow-up 7% had low coping skills. Similarly, low social support decreased over time. At baseline, 31% had low social support, and 7% had low social support at 6-month follow-up, while 4% had low social support at 12-month follow-up. Self-reported drug use decreased from baseline to six months, and decreased at the 12-month follow-up. At baseline, 52% reported drug use in the past six months, while at 6-month follow-up 31% reported drug use, and at 12-month follow-up 43% reported it. Depression, defined as  $\geq 21$  days in the past month feeling sad, blue or depressed, decreased from baseline to 6 months from 31% to 12%, though at 12-month follow-up it was back up to 19%.

Qualitative interviews with MLMC participating youth indicate that youth believe the program has met their expectations, particularly their desire for emotional support. Importantly, youth report that having a survivor mentor was positively *different* from other forms of system support they had experienced. Qualitative interviews reflected youth's deep respect for their mentors who they saw as role models with a unique ability to understand the youth's experiences. Qualitative interviews further suggest that youth desire even greater engagement

with their survivor mentors and recognize that it takes a long time for them to fully stabilize following victimization experiences.

### **Cost Analysis**

In order to evaluate the cost-benefit of providing MLMC secondary prevention groups or survivor mentorship, research team members gathered data on the costs of providing these services and on the costs that accrue to society when services are not provided to children who have been sexually exploited. For example, costs of not providing services might include the child needing medical treatment for an unplanned pregnancy, law enforcement response, or lost productivity due to lack of school and/or employment attendance. We are now in the process of calculating whether the costs of providing the services outweigh the costs of not providing the services. Data were obtained from MLMC program staff and from published sources.

### **Responses to Research Challenges**

The research team came across many challenges while collecting project data that we believe inform research on CSE youth and vulnerable youth populations more broadly. Some challenges are highlighted below, however, additional challenges and the team's responses to these challenges can be found in the article "Ethical and Practical Considerations for Collecting Research-Related Data from Commercially Sexually Exploited Children" in the *Journal of Behavioral Medicine*.

Two of the challenges that researchers faced were the over-interrogation of CSE youth and ensuring that research participants were not further exploited by participation in the research study. Before meeting the researchers, many of the participants had already experienced coercion or force (e.g., commercial sexual exploitation). In addition, many of these youth had substantial interactions with law enforcement, DCF, the courts, and other systems questioning them about

their past exploitation and abuse. Researchers wanted to make sure that they were not another source of pressure or stress in these youths' lives, and that these participants had agency in what they chose to share with the researchers about their experiences with MLMC and other systems. Researchers responded to these challenges in the qualitative interviews by offering youth many different participation options and by training interviewers in trauma-informed research methods. For example, if a participant indicated that they didn't want to do an interview at baseline but that they might want to do an interview later in the study, researchers offered participants the opportunity to do an interview at one of the follow-up times, and met the participant in a location that was convenient for the participant. Additionally, researchers explained to youth at the beginning of each interview that they wanted to understand their relationship with MLMC and other organizations or systems in their lives (e.g., DCF, law enforcement) and were not going to ask youth direct questions about their story or their history (i.e., past exploitation).

### **Implications for Criminal Justice Policy and Practice in the U.S.**

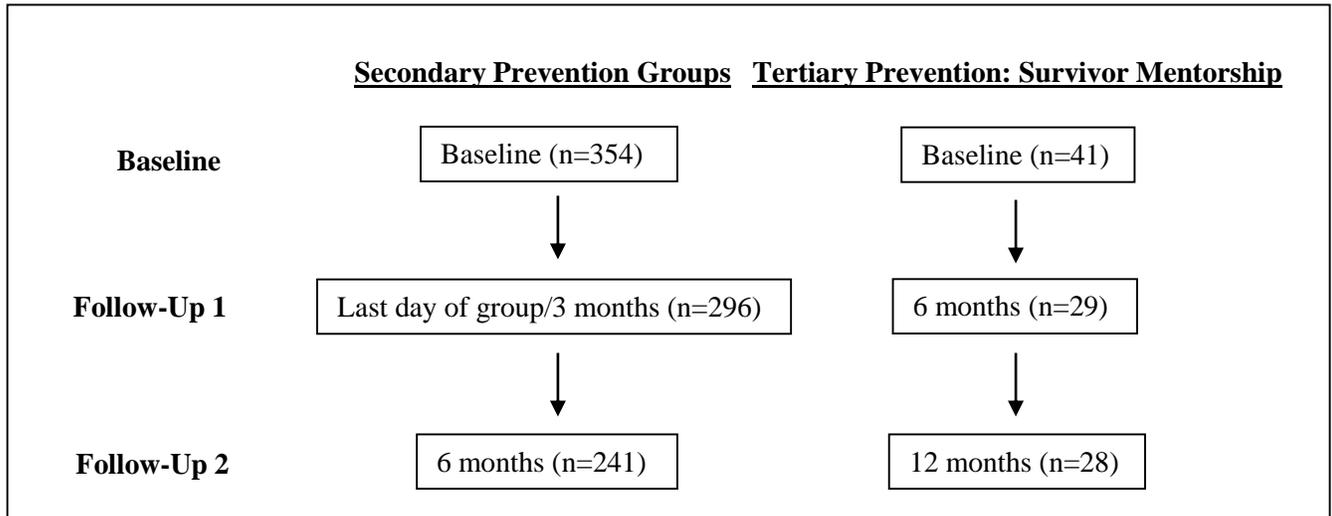
Our research shows the importance of prevention programming, even for those youth who are only at risk for sexual exploitation. For the prevention group youth who were determined to be "at-risk" for CSE, only a small percentage of the participants had been exploited. However, at follow-up 1 (when the group ended or about 3 months later), 100% of the participants indicated that they had given CSE-related help or information to someone that they knew since they started the MLMC group. Therefore, even though many of these participants indicated that they hadn't been exploited themselves, the participants spread the prevention message by warning somebody they knew not to sell sex or educating a friend about the myths and facts of selling sex. Since CSE survivors can be a hidden population, these prevention group participants might help educate CSE victims or help them to find MLMC or other helping

services. Finding ways to educate young men about the importance of supporting healthy and safety of girls, and not becoming buyers or “johns,” or exploiters (i.e., “pimps”) is equally important and is a critical next step for the field.

The survivor mentorship program results showed that even though participants experienced some significant changes (e.g., delinquent behavior and coping skills) some CSE survivors need more than twelve-months of mentorship and services. Although the participants were making progress in some areas by the time the study ended, longer follow-up research is needed to capture changes participants make after one year of services, as well as the difficulties participants face in making progress.

Our research study also highlights the value of working with survivors and survivor-led organizations. MLMC survivor mentors assisted with the creation of the surveys for this study and helped participants feel comfortable meeting with and talking to research staff. Survivors can help inform criminal justice researchers and policymakers about the challenges CSE participants face and how to best conduct research with this vulnerable population.

Figure 1: Study design of the evaluation of two MLMC programs



## Appendix A: Outcome Measures

<b>Construct</b>	<b>Number of items</b>	<b>Origin of measure or items used</b>
<i>Prevention Group (Secondary Prevention) Outcome Measures</i>		
Commercial sexual exploitation (CSE) victimization	1	Add Health survey
Sexually explicit behavior (SEB)	4	Original
Dating abuse victimization	5	Dating Abuse Perpetration Acts Scale (DAPAS)
Knowledge and attitudes about CSE	20	Original
CSE help for others	4	Original
Marijuana use	1	Youth Risk Behavior Survey (YRBS)
Alcohol use	4	Alcohol Use Disorders Identification Test (AUDIT)
Trust in police	2	Original
<i>Survivor Mentorship Group (Tertiary Prevention) Outcome Measures</i>		
CSE victimization (self-reported)	8	Add Health survey
CSE victimization (self-reported + MLMC data)	9	Add Health survey, MLMC administrative files and mentor knowledge
Turning down CSE propositions	3	Original
SEB	4	Original
Illicit drug use	10	Youth Risk Behavior Survey (YRBS), Original
Delinquent behavior	10	Rochester Youth Development Survey
Dating abuse victimization	28	Dating Abuse Perpetration Acts Scale (DAPAS)
Sexually transmitted infection	1	Original
Sadness	1	Youth Risk Behavior Survey (YRBS)
Hopelessness	6	Hopelessness Scale for Children
Social support	10	Interpersonal Support Evaluation List (ISEL)
Coping skills	10	Perceived Stress Scale
Risky behavior	4	Self-Control Scale, risk-seeking and impulsivity subcomponents

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