

1. Title: Child sexual abuse prevention: A RCT of a parent-focused module; PI: Jennie G. Noll

2. Keywords: child sexual abuse, prevention, randomized controlled trial, intervention

3. Abstract: Child sexual abuse (CSA) affects nearly 60,000 children annually (DHHS, 2018), and the lifetime economic burden is estimated to exceed \$9.3B (Letourneau, Brown, Fang, Hassan, & Mercy, 2018). Unlike other forms of child maltreatment, CSA typically occurs for a longer duration, may take years to be reported, and is seldom perpetrated by biological parents. Through parent-education (PE) programs, parents are already important and effective agents in the prevention of a number of public health topics including substance abuse and delinquency. Parents can play a similar role in the prevention of CSA, but the focus of CSA prevention requires a different form from extant PE programs. Parents need to know how to (a) create safe environments where CSA is less likely to occur, (b) identify normative and nonnormative sexual development, and (c) communicate with children about sexual topics that will increase their perception of danger cues as well as behavioral and physical signs of CSA. These CSA-specific prevention skills and protective behaviors are clear extensions of concepts taught in extant PE programs, which focus on safety, education, and communication. Rather than produce a standalone CSA prevention program for parents, we propose to add a brief CSA-specific module to an existing PE program as an avenue to reduce risk, while also promoting a sustainable strategy that leverages the implementation infrastructure of existing efforts. Utilizing Level 1 funds, we developed a brief parent-focused CSA module. This module underwent rapid prototyping and a small feasibility/acceptability pilot. The module is ready to be tested within the context of an existing PE program. The proposed Level 2 study extends the work of the Level 1 and seeks to assess the effectiveness of this CSA prevention module as an additional session added to the end of Incredible Years (IY), a PE program supported widely in PA. We will conduct a cluster RCT wherein providers are randomized to either IY+CSA or IY as usual (IY-AU). We hypothesize parents in the IY+CSA condition will demonstrate higher scores on CSA-related knowledge, attitudes, and protective behaviors as compared to parents receiving IY-AU.

4. Specific Aims: Parents are important agents in CSA prevention, but have been underutilized in CSA prevention efforts. Unless parents participate in voluntary community-wide education efforts that focus on reducing environmental risk, increasing public awareness, and training in how to identify and report CSA, they typically do not receive targeted, CSA-specific prevention programming. This is unfortunate, as parents are in a unique position to prevent CSA given their “social proximity” to potential CSA exposure and their influence on child behavior (Mendelson & Letourneau, 2015). There are evidence-based child maltreatment prevention efforts designed for delivery to parents that have successfully reduced prevalence rates of physical abuse and neglect. However, these efforts have not affected rates of CSA (Self-Brown et al., 2012; Letourneau et al., 2014). This is not surprising, given that CSA-specific prevention strategies are not expressly included in extant parent-focused maltreatment prevention. It is possible that programs that have effectively reduced rates of physical abuse and neglect will also be effective in reducing CSA, provided their delivery include additional CSA-specific prevention content (Mendelson & Letourneau, 2015).

PE programs increase parents’ knowledge of child development, improve parenting skills, and enhance parent-child communication. These broader PE programs do not cover strategies for ensuring protective environments, knowledge about sexual development, and strategies for

communicating about sexual content. Incorporating CSA-specific prevention content into existing PE programs will provide much-needed skills and behaviors to the large array of parents who consume PE each year in the U.S. Moreover, generalized PE programs are often prescribed to at-risk parents via referral as a result of child welfare involvement. These parents may have an unsubstantiated or subthreshold child maltreatment allegation or other risk factors, such as substance abuse or domestic violence. These parents are also likely to have parenting skills deficits, high levels of stress, little social support, and their own maltreatment history (Whitaker et al., 2008)—all of which have been shown to contribute to environments wherein CSA is perpetrated (Noll, 2008). By leveraging the implementation infrastructure of, and augmenting the fundamental parenting skills taught by, widely disseminated evidence-based PE programs, the addition of CSA-specific content to this model is an efficient, economical, sustainable, and innovative CSA prevention strategy for high-risk environments.

Supported by a Level 1 (PI: Noll), we developed a parent-focused CSA prevention module (*Smart Parents – Safe and Healthy Kids*; SPSHK), designed as a single session to be added into existing PE programs (module materials available upon request). The module teaches parents three essential aspects of CSA prevention: (1) healthy sexual development, (2) communication strategies about sex and sexual content to children and other adults, and (3) safety issues pertaining to CSA. Concurrently, we developed and conducted a psychometric evaluation of a measure (*Assessment of SmartParents’ Knowledge*; ASK) that can be used to assess changes in CSA knowledge and attitudes and adoption of prevention behaviors over time. A small pilot demonstrated the SPSHK module can be delivered feasibly within one session of an existing PE program, the content and presentation are acceptable to parents and providers, and the ASK has adequate internal validity.

The next step is to add SPSHK to an existing PE program to evaluate its effectiveness in improving parents’ CSA knowledge, attitudes, and protective behaviors through a cluster randomized controlled trial (RCT), wherein providers are randomized to either PE plus the CSA prevention module or PE as usual. For the purpose of this proposal, we will examine the effectiveness of SPSHK in the context of IY, a group-delivered evidence-based PE program for parents of children 2–12 supported and implemented in PA. The specific aims are:

Aim 1: To examine the effectiveness of our CSA prevention module when added to IY (i.e., IY+ CSA vs. IY-AU) in improving CSA-related knowledge, attitudes, and protective behaviors.

Aim 2: To examine the effectiveness of our CSA prevention module 1 month post-intervention.

Aim 3: To examine whether the CSA prevention module can be added to IY without affecting the efficacy of the parenting behaviors taught in IY.

Exploratory Aim: To explore baseline covariates (i.e., parent readiness for change, substance use, perceived social support, and mental health) that may predict effectiveness

(Aim1), retention over 1-month (Aim2), and efficacy of parenting skills taught in IY (Aim3). An objective of the proposed study is to provide an accurate effect size estimate for a larger trial focusing on the implementation of this innovative prevention approach in the broader child welfare system across additional PE programs (to be submitted to NICHD in the future).

5. Background, rationale, & methods: General PE programs, such as IY, change parents' attitudes and behaviors (e.g., developmental expectations and activities), increase protective factors (e.g., parent-child interactions), and improve outcomes for both parents (e.g., reduced depressive symptoms) and children (e.g., reduced problem behavior; Lundahl & Harris, 2006). Several PE programs have demonstrated a reduction in risk of maltreatment and are touted as child maltreatment prevention programs. However, while these PE programs have effectively demonstrated reduction in risk for physical abuse and neglect, they have not affected rates of CSA (Letourneau et al., 2014). Unlike physical abuse or neglect, a biological parent is less likely than others to perpetrate CSA on their own child. CSA prevention programs should therefore educate parents about how CSA occurs, teach normative and non-normative sexual development, enhance communication around content of a sexual nature, and encourage the creation of safe environments where CSA is less likely to occur. Currently no PE program encompasses these important aspects of CSA prevention. While parenting skills learned in general PE provide a sufficient foundation, knowledge and skills specific to CSA prevention must be added to these PE programs if these programs can truly be touted as impacting CSA.

Module Development and Pilot Work. Supported by a Level 1, our team developed a parent-focused CSA prevention module designed to be added into existing PE programs (Guastaferrro, Reader, Zadzora, Shanley, & Noll, in preparation). A copy of the module (i.e., parent handbook and provider guidebook) is available upon request. The module, *Smart Parents – Safe and Healthy Kids* (SPSHK), was informed by input from a panel of national experts, findings and limitations of prior research, and feedback from end-users (i.e., parents enrolled in and providers of PE programs). The one-session module is designed to be added onto an existing PE program and to teach parents three specific and essential elements of CSA prevention: healthy sexual development, strategies to aid in communication about sex and sexual content to children and other adults, and safety issues specifically pertaining to CSA. A small pilot demonstrated that this module is delivered feasibly within a single session of an existing PE program and that content and presentation is acceptable to parents and providers. All parents ($N = 24$) found the session to be helpful and were confident that they could use the parent handbook. Providers ($N = 9$) were initially apprehensive about the content of the CSA module, but after observing the module, providers changed their opinion: “The content was beneficial to parents of kids of all ages... taught in a very practical, non-threatening way. All parents need to know this information and I understand more fully how it is very appropriate for a parenting class.”

During the pilot phase, an assessment tool (ASK) aligned with the CSA module was created and psychometrically evaluated. Designed to measure knowledge, attitudes, and behavioral gains specific to SPSHK, the development was informed by existing measures used to assess CSA prevention knowledge, attitudes, and behaviors. Knowledge and attitude-oriented questions included items regarding the degree to which parents agreed with general facts about CSA, the role of a parent in CSA prevention, and what is appropriate to discuss with children. We added four hypothetical vignettes in order to assess parents' behavioral response to situations where CSA either has or is likely to occur. A confirmatory factor analysis of the ASK suggested a two-factor solution: “Knowledge and Attitudes” ($\alpha = .69$) and “Behaviors” ($\alpha = .74$); there was a moderate correlation between the two factors ($r = .31, p < .05$). The ASK assessment can be reliably used to measure the effectiveness of the CSA module.

Current Proposal. The next step is to add the module to existing PE programs and to evaluate its effectiveness in improving parents' CSA knowledge, attitudes, and protective behaviors through a RCT where providers are randomized to either PE plus CSA prevention module or PE as usual. This proposal focuses on IY, a group-delivered evidence-based PE program widely disseminated across PA. It is relevant to note that the Commonwealth of PA is willing to add this CSA component to a larger statewide prevention effort, provided its effectiveness is demonstrated within the next 2 years. As such, we have opted to utilize the Level 2 mechanism as opposed to attempting R21 funding.

Research Design: This study will consist of a two-arm RCT evaluating the effectiveness of IY+CSA on improving CSA-related knowledge, attitudes, and behaviors compared to IY-AU (**Aim 1**) and examining the retention and maintenance of these skills one month post-intervention (**Aim 2**). IY has a well-established evidence base; our study is not focused on establishing the effectiveness of IY, but rather whether the CSA prevention module (SPSHK) can be added to IY without affecting the efficacy of parenting behaviors taught in IY (**Aim 3**).

Incredible Years. IY is delivered via weekly group sessions to parents of children 2–12 and seeks to increase positive parenting skills; prevent behavior problems; and promote social, emotional, and academic competencies (Reid & Webster-Stratton, 2001). These taught skills provide a foundation for the CSA-specific prevention skills in the added module. A well-established evidence-based model, IY is implemented widely across PA with the support of the PA Commission on Crime and Delinquency (PCCD) and the Evidence-based Prevention and Intervention Support (EPIS) Center at The Pennsylvania State University.

Sample Population. We will recruit sites utilizing relationships with community partners and Children and Youth agencies. Recruitment will be focused in the network of IY sites funded by PCCD and supported by EPIS across PA and will be extended to sites funded by alternative mechanisms or sites out of state to obtain the necessary sample size. Providers from these sites will recruit parents enrolled in IY prior to the first intervention session (i.e., pre-IY). Parents become involved with IY for a variety of reasons, including involvement in the child welfare system. A typical IY site has 10–12 parents in each IY group and implements the model 3 times per year (30 to 36 parents served annually by each IY site).

Sample Size Calculations. Because the additive approach of our research is novel, we are relying on prior CSA prevention and general PE program research to estimate the effect size. A meta-analysis of general PE programs, from which CSA programs were excluded, found the estimated average effect size for trials including a control group to be $d = .3$. A meta-analysis of CSA-specific prevention programs (Davis & Gidycz, 2000) reported the average effect size for a single session program to be $d = .59$. Averaging these findings, we estimate the effect size of our module to be $d = .45$. The group-based delivery of IY requires the experimental design to be a cluster RCT and, as such, clustering must be considered in sample size calculation (i.e., participants are nested within groups). In order to calculate the required sample size for the cluster randomized trials, we used the sample size calculation equation (Equation 1) for repeated measures from Heo and colleagues (2009; Equation 19, p. 385). Cluster sampling introduces a less precise estimate of parameters than simple random sampling (e.g., commonalities among participants); this increase of variance is estimated in the design effect ($2f$). Our

Equation 1.

$$N_3 = \frac{2fC_f(\phi^{-1}\left(1 - \frac{\alpha}{2}\right) + \phi^{-1}(1 - \beta))^2}{N_2N_1\Delta_2^2}$$

design has repeated measures, which introduces autocorrelation (C_f); for our purposes we estimate this to be .7. Together, the design effect and the autocorrelation of the outcome of interest over time creates the corrected design effect ($2fC_f$), estimated to be 8.0025 for our calculation. Assuming $\alpha = .05$, $\beta = .80$, 10 participants per group (N_2), 3 measurement occasions (N_1), and an effect size (Δ) of 0.45, the number of groups needed per condition (N_3) is 11; this is in agreement with simulated sample sizes presented by Heo et al. (2009; Table 1). To account for participant attrition and lack of participation in research, **we will recruit 14 groups per condition such that our sample is comprised of ~ 280 participants (140 per condition).**

Experimental Procedure. Randomization will occur at the site level to reduce potential contamination from supervision. Parents in the experimental group (IY+CSA) will complete four assessments: pre-IY (T1), post-IY (T2), post-CSA (T3) and 1-month post-IY+CSA (T4). Parents in the control groups (IY-AU) will complete four assessments: pre-IY (T1), post-IY (T2), one-week post IY module (T3) and 1-month post-IY (T4). The control group will complete the T3 survey (1 week after IY) so that we may examine if any observed degradation in parenting skills is not a product of the added module, but rather a function of time after intervention.

Figure 1.

	T1		T2		T3		T4
	Pre-IY	IY (Sessions 1 – 13)	Post-IY (Session 14)	CSA Module	Post-CSA Module	One-month follow-up	
IY + CSA Sites	X	X	X	X	X	X	
IY-AU Sites	X	X	X		X	X	
<i>Measures</i>	Demog	BL cov.	ASK		ASK	ASK	
	ASK	APQ	APQ		APQ	APQ	

NOTE: Demog = Demographics; BL Cov = Baseline covariates; ASK = Assessment of SmartParents Knowledge; APQ = Alabama Parenting Questionnaire; T1 = Time 1; T2 = Time 2; T3 = Time 3; T4 = Time 4; = Exploratory Aim; = Aim 1; = Aim 2; = Aim 3

The primary outcome of interest is parents’ CSA-related knowledge, attitudes, and protective behaviors measured through the ASK (**Aim 1**) and the maintenance of these skills at one-month follow-up (**Aim 2**). We expect parents that receive the added CSA module will have a significant improvement from pre- to post-intervention compared to parents who do not receive the added module and will retain more of these skills over time. To ensure that the additive approach does not affect IY outcomes, we will assess parenting skills and stress via the Alabama Parenting Questionnaire (APQ; **Aim 3**). We expect that adding the CSA module will not affect parenting outcomes. So as to explore potential moderators of the effectiveness, retention, and efficacy of the module and to characterize risk of our sample, we will assess demographics, substance use, depression, social support, and readiness for change at T1 (**Exploratory Aim**).

Analytic Plan. Aims 1 and 2, examining the effect of SPSHK over time, will be analyzed using a repeated measures ANOVA between factors. The dependent variable for these aims is the ASK. Statistical models will control for time and the nested nature of individuals within groups. Aim 3, which seeks to examine what impact SPSHK may have on the efficacy of the basic parenting skills taught in typical IY, will be analyzed using simple t-tests. Baseline covariates (Exploratory Aim) will be included as possible moderators in secondary analyses.

6. Relevance to SSRI: The relevance of our research lies in the long-term health benefits that accompany the prevention of CSA, as aligned with the mission of SSRI through CMSN.

7. Anticipated Outcomes: We expect to use the effect size determined by this study to power a larger RCT (R01) that will expand the use of our module in the child welfare system and include additional PE programs.

ADDITIONAL INFORMATION

1. External Funding Sources

Following the research proposed herein, we plan to apply for external funding (R01) from the National Institutes of Health, specifically the National Institute of Child Health and Human Development (NICHD). The purpose of the R01 will be to expand the CSA module to other PE programs and integrate it systematically within the child welfare system. Investigators will include Drs. Noll (PI), Guastafarro (Co-I), and Jackson (Co-I). The targeted date for submission of that proposal (tentatively titled: CSA Prevention for Parents) is the first cycle of 2020.

2. Timeline

The proposed study will take approximately 24 months to complete. This is dependent upon the recruitment of the required number of subjects and the turnover in caseload from participating sites.

	Year 1												Year 2											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Recruitment and Randomization	X																							
Participant Recruitment & Enrollment		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Implementation & Data Collection		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Manuscript Preparation																							X	X
Prepare R01 for submission to NICHD																								X

3. Personnel

Dr. Jennie G. Noll (Lead Investigator), Professor of Human Development and Family Studies, is an expert in the biopsychosocial consequences of CSA. She is also the PI of several longitudinal cohort studies examining the effects of CSA and as such has unique experience with participant retention in this population. Dr. Noll will oversee the entire project with an eye toward participant retention.

Dr. Kate Guastafarro (Co-Investigator), Assistant Research Professor at the Methodology Center, is an expert in intervention science and large-scale implementation research. Dr. Guastafarro will be responsible for training providers in the CSA module and ensuring the module is implemented with fidelity. Additionally, she will design data collection materials, train providers in the CSA module, and be responsible for data analysis.

Dr. Yolanda Jackson (Co-Investigator), Professor of Psychology, is an expert in the impact of trauma on youth mental health. Dr. Jackson will review training materials to ensure the way in which practitioners deliver the intervention is in line with current trauma research. She will also be involved with manuscript preparation.

Kathleen Zadzora (Project Coordinator) will be responsible for managing recruitment of sites and participants, training data collectors, and managing data collection. Jonathan Reader (Graduate Research Assistant) will have an active role in data collection efforts.

4. Budget and Justification

Please note, this Level 2 proposal is requesting the maximum support available (\$20,000) which will be matched in full (\$20,000) by the Child Maltreatment Solutions Network. See letter of support from the Director of the Child Maltreatment Solutions Network, Dr. Jennie G. Noll, to this effect. The budget and justification are prepared for the combined total of \$40,000.



PennState

Child Maltreatment Solutions Network
Social Science Research Institute
The Pennsylvania State University
202 Henderson Building
University Park, PA 16802

814-865-2193
solutionsnetwork.psu.edu

Dear Dr. Noll,

I am writing in support of your Level 2 application to the Social Science Research Institute entitled *Child sexual abuse prevention: A RCT of a parent-focused module*. The proposal is an extension of prior work conducted utilizing Level 1 funds and shows a clear direction in the program of research for your team, including Drs. Guastaferrero and Jackson.

To show our commitment to this program of research and to facilitate the scale of research proposed in the Level 2, the Child Maltreatment Solutions Network agrees to match the \$20,000 award from the Social Science Research Institute in full (\$20,000).

Sincerely,

Jennie G. Noll, Ph.D.
Professor, Department of Human Development and Family Studies
Director, Child Maltreatment Solutions Network
PI, P50 Translational Center for Child Maltreatment Studies
The Pennsylvania State University
HHD 209
University Park, PA 16802
jgn3@psu.edu
(814) 867-4751

Budget

	Cost
Participant Incentives	\$14,000
Site Incentives	\$5,600
IY Implementation Support	\$15,000
SPSHK Implementation Costs	\$3,976
Travel for training and data collection	\$1,424
TOTAL	\$ 40,000

Participant Incentives

Participants are incentivized for their completion of each aspect of the research (e.g., T1, T2, T3, T4), as this is in addition to the normal IY program commitment.

		Amount
T1	Pre-IY	\$10
T2	Post-PE	\$10
T3	Post-CSA	\$10
T4	Follow-up	\$20
Total		\$50

We will recruit a total of 28 groups (14 groups for the IY+CSA condition and 14 sites for the IY-AU condition). This equates to 280 subjects. Each subject will be compensated at \$50 (280 X \$50 = 14,000).

TOTAL PARTICIPANT INCENTIVES = \$14,000

Site incentives

To facilitate buy-in and support at the site level, each participating site will be incentivized for the participation of providers. As it is not a requirement that all educators participate, the site will receive \$100 for each participating provider. There is no maximum or minimum number of providers per site. We estimate needing roughly 56 providers, as IY implementation requires 2 providers per group (\$100 X 56 = \$5,600).

TOTAL SITE INCENTIVES = \$5,600

IY Implementation Support

Because our project requires a high number of IY groups be run, it is likely that the number of groups will need to be increased at participating sites. The implementation cost of IY is largely covered by the County Needs-based Budget, but extraneous costs may exist (e.g., dinner costs or child care), or the site may have only budgeted to run fewer groups in a given year. To maximize the potential of our sites being able to conduct as many IY groups as we need, we will allocate \$15,000 in support of IY implementation. As we recruit sites, we will plan for the equitable distribution of these funds to facilitate the implementation of IY in both the IY+CSA and IY-AU groups.

TOTAL IY IMPLEMENTATION SUPPORT = \$15,000

SPSHK Implementation Costs (for only intervention sessions)

Because sites delivering the SPSHK session are doing so outside their usual operating budget, we will provide support for the implementation of the extra session in which the SPSHK is delivered. Standard IY implementation includes child care (\$12/hour), parent dinner (\$80), child dinner (\$80), and provider time (\$25/hour). The total implementation cost for one session is \$284. We estimate needing to deliver 14 SPSHK sessions (\$284 X 14 = \$3,976)

TOTAL SPSHK IMPLEMENTATION = \$3,976

Travel for Training and Data Collection

Training will be done at each site by a member of the PSU research team (we will offer training to the control sites at the conclusion of experimentation). Additionally, the PSU research team will need to travel to the sites for data collection. We are requesting \$1,424 to support this necessary travel (e.g., fleet vehicle rentals).

TOTAL TRAINING AND DATA COLLECTION TRAVEL = \$1,424

5. SSRI services will not be utilized in the proposed project.

6. Investigator Information

Principal Investigator: Jennie G. Noll, Ph.D.

Title: Professor

Department/Organization: Department of Human Development and Family Studies

College/Campus: College of Health and Human Development, UP

Phone: 814-867-4751

Email: jgn3@psu.edu

Tenure Track: Yes; Department of Human Development and Family Studies

Collaborating Investigators:

Name: Kate Guastaferrero, Ph.D.

Title: Assistant Research Professor

Department/Organization: Methodology Center

College/Campus: College of Health and Human Development, UP

Phone: 814-863-9795

Email: kmg55@psu.edu

Tenure Track: No

Name: Yolanda Jackson, Ph.D.

Title: Professor

Department/Organization: Psychology

College/Campus: College of Liberal Arts, UP

Email: yjackson@psu.edu

Tenure Track: Yes; Department of Psychology

7. Pre-submission checklist

- i. Which agency or foundation officials (e.g., project officer) have you spoken with to determine their interest in this project or project area? What feedback did you receive on your concept and approach?

Dr. Noll has shared the specific aims with Valerie Maholmes at NICHD. She expressed interest in the aims included in this proposal and is supportive of the progress toward an R01 submission. An email from Dr. Maholmes is forthcoming.

- ii. Are you responding to a specific request for proposal (RFP/RFA), program announcement, or other special funding initiative? If yes, which one and how is your Level 2 a good match for it?

We are not responding to a specific program announcement. It is our intention to leverage this Level 2 effort in our pursuit of an R01 at NICHD.

- iii. How does your study compare with projects in similar domains that have been funded by your targeted agency? In particular, how does the scope of your methodology appear similar to other funded projects (in terms of the size and representativeness of the sample, measurement strategies, design and planned analytic approach, etc.)?

NIH, specifically NICHD, routinely funds child maltreatment research, as evidenced by the P50 recently awarded to Dr. Noll.

- iv. What criteria will be used to evaluate your proposal and what do you know about the likely reviewers?

Our future proposal will likely be reviewed on its innovative contribution to child maltreatment prevention by a panel of experts with a specific eye toward curriculum development, trials, prevention, and implementation science. Potential reviewers might include Drs. Christian Connell, Chad Shenk, Erika Lunkenheimer, Hannah Schreier, and Stephanie Lanza.

- v. What input/advice/support have you received from your department head and/or college research dean?

We have the support of the Child Maltreatment Solutions Network and have discussed our plans with Dr. Susan McHale.

8. Translational Research Potential

Our research is an effectiveness trial in that it is both conducted in an applied setting but also within real-world constraints. In particular, in response to feedback from providers we developed a one-session module that can be added to programs already scaled (i.e., with an implementation infrastructure) making our approach highly sustainable.

9. Letters of Support from all Collaborators

May 1, 2018

Dear Dr. Noll,

I am writing in support of the SSRI Level 2 application, *Child sexual abuse prevention: A RCT of a parent-focused module* on which I am named as a co-investigator. I am pleased to see our work from the previous Level 1 in which we developed the *Smart Parents – Safe and Healthy Kids* module continue. As a co-investigator on this project, I understand my responsibilities will include training, fidelity monitoring, data collection, and data analysis. I understand I will also

oversee the work of project staff, specifically Kathleen Zadzora and Jonathan Reader. I have .6FTE of my effort devoted to our work together (effective June 1, 2018, which is sufficient for the aforementioned responsibilities.

Sincerely,

Kate Guastafarro, Ph.D., MPH
Assistant Research Professor, The Methodology Center
The Pennsylvania State University
Kmg55@psu.edu

May 7, 2018

Dear Dr. Noll,

I am writing in support of your SSRI Level 2 application, *Child sexual abuse prevention: A RCT of a parent-focused module*. As requested, I am pleased to serve as a co-investigator and I understand my responsibilities will include reviewing training materials and contributing to manuscript preparation. I am pleased to offer my expertise in the impact of trauma on youth to inform the way in which practitioners are trained to deliver the intervention to parents.

Sincerely,



Yo Jackson, PhD, ABPP
Professor, Department of Psychology
The Pennsylvania State University
yjackson@psu.edu

10. NIH Biosketches

BIOGRAPHICAL SKETCH

NAME: NOLL, JENNIE

eRA COMMONS USER NAME (agency login): jgnoll

POSITION TITLE: Professor, Human Development and Family Studies, The Pennsylvania State University

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Southern California, Los Angeles, CA	BA	05/1995	Psychology (Honors)

University of Southern California, Los Angeles, CA	PHD	05/1990	Dev. Psychology/Stat Methods
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A. PERSONAL STATEMENT

As Professor of Human Development and Family Studies at Penn State, I run several vibrant and productive NIH-funded research labs spanning several programmatic areas, including (1) the long-term developmental and physical health consequences of childhood sexual abuse, (2) intergenerational transmission of the impact of childhood maltreatment, (3) pathways to teen pregnancy and motherhood for abused and non-abused females, (4) the cyber-hygiene and social media behaviors of at-risk youth, (5) reversibility of neurocognitive deficits in stress-exposed populations, and (6) the prevention of childhood sexual abuse. I have been both Co-PI and PI of the Female Growth and Development Study (FGDS)—a longitudinal study of the effects of childhood sexual abuse across development for females spanning 30 years and achieving 96% retention. The study was also awarded continuation R01 funds from NICHD aimed at the long-term health consequences and intergenerational impact of sexual abuse as well as an R01 grant from NIA to study daily stress-coping and premature cognitive aging in this highly unique cohort. Through data gleaned from this cohort we have been the lead author on numerous high-impact publications on topics including high-risk sexual behaviors, accelerated pubertal timing, the development of obesity, long-term health consequences, revictimization, teen motherhood, premature delivery, intergenerational transmission, and trajectories of cognitive maldevelopment. Prospective, longitudinal, long-term, multi-level investigations spanning distinct periods of development and traversing generations characterize my fierce commitment to the highest methodological standards and innovations. Published results from several of my longitudinal studies have been used to inform public policy recommendations for child abuse prevention by Pennsylvania's Joint State Government Commission, the World Health Summit, the NSPCC Scotland and research priority recommendations by the Institute of Medicine (IOM) (<http://www.iom.edu/Reports/2013/NewDirections-in-Child-Abuse-and-Neglect-Research.aspx>). I currently direct Penn State's Child Maltreatment Solutions Network, an unprecedented academic effort comprised of 12 faculty across 5 Colleges conducting impactful interdisciplinary research. I am also the PI of the NICHD P50 Capstone Center for Child Maltreatment Research and Training thus establishing Penn State's Translational Center for Child Maltreatment Studies (TCCMS). The TCCMS conducts cutting edge research regarding the role of biologic embedding in health disparities for abused and neglected youth, models of resilience, early detection of abusive head trauma, predictive analytics of the public costs of maltreatment, and a controlled trial of a universal childhood sexual abuse prevention program implemented across the Commonwealth of Pennsylvania. The TCCMS will serve as a national resource for supporting and growing new science, translating research into policy that implores public investment in the prevention and treatment, and training the next generation of advocates and scientists who will devote their careers to protecting and improving the lives of children. As PI of the P50 Center, I can offer Dr. Guastaferro full access to the resources afforded by the TCCMS (including pilot funds, support of the distinguished advisory board, and other resources designed to nurture early stage investigators).

1. Noll JG, Trickett PK, Putnam FW. A prospective investigation of the impact of childhood sexual abuse on the development of sexuality. *J Consult Clin Psychol.* 2003 Jun;71(3):575-86. PubMed PMID: [12795580](#); PubMed Central PMCID: [PMC3012425](#).
2. Noll JG. Sexual abuse of children--unique in its effects on development? *Child Abuse Negl.* 2008 Jun;32(6):603-5. PubMed PMID: [18562000](#).

3. Noll JG, Shenk CE. Introduction to the special issue: the physical health consequences of childhood maltreatment--implications for public health. *J Pediatr Psychol*. 2010 Jun;35(5):447-9. PubMed PMID: [20231257](#).
4. Trickett PK, Noll JG, Putnam FW. The impact of sexual abuse on female development: lessons from a multigenerational, longitudinal research study. *Dev Psychopathol*. 2011 May;23(2):453-76. PubMed PMID: [23786689](#); PubMed Central PMCID: [PMC3693773](#).

B. POSITIONS AND HONORS

- 1995–1998 Research Fellow, Behavioral Endocrinology Branch, National Institutes of Health, Bethesda, MD
- 1998–2003 Research Assistant Professor of Social Work, School of Social Work, University of Southern California, Washington, DC offices, Washington, DC
- 2001–2003 Research Associate Professor of Psychology, The Catholic University of America, Washington, DC
- 2006–2011 Associate Professor (with tenure) of Pediatrics, Division of Behavioral Medicine and Clinical Psychology, Division of Epidemiology and Biostatistics (Joint Appointment), Cincinnati Children’s Hospital Medical Center Department of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, OH
- 2009–2013 Director of Research, Division of Behavioral Medicine and Clinical Psychology, Cincinnati Children’s Hospital Medical Center Department of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, OH
- 2011–2013 Professor of Pediatrics (with tenure), Division of Behavioral Medicine and Clinical Psychology, and Division of Epidemiology and Biostatistics (Joint Appointment), Cincinnati Children’s Hospital Medical Center Department of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, OH
- 2013–present Adjunct Professor, Division of Behavioral Medicine and Clinical Psychology, Cincinnati Children's Hospital Medical Center Department of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, OH
- 2013–present Professor (with Tenure), Department of Human Development and Family Studies, The Pennsylvania State University, University Park, PA
- 2013–present Director, Child Maltreatment Solutions Network, The Pennsylvania State University, University Park, PA
- 2017-present President, Section on Child Maltreatment, Division 37, American Psychological Association
- 2017-present Endowed Professorship, Ken Young Family Professor for Healthy Children

C. Contribution to Science

1. My work has been instrumental in bringing to light—and, through prospective methods, providing strong inferences about—how childhood maltreatment confers insidious risk for deleterious outcomes across a multitude of developmental and physiologic systems. Our group published the first ever developmental curves of circulating cortisol from childhood through young adulthood, demonstrating a distinctive pattern for sexually abused females consisting of initial hyper hypothalamic-pituitary-adrenal (HPA) activation in childhood followed by a marked down-regulation of HPA beginning in late adolescence. These findings provided some of the first solid developmental evidence for allostatic load in humans. We published compelling evidence for concerning growth patterns in the development of obesity, where abused females exceed the CDC 75th percentile for body mass index by adolescence with 48% categorized as obese by young adulthood. We published the definitive paper prospectively documenting earlier pubertal timing for abused females for both breast and pubic hair development. Additional growth trajectories of cognitive abilities demonstrated that abused females acquire receptive

language knowledge at a slower rate from age 6 to 32 and peak earlier in terms of overall performance. Extrapolation of these curves via dual exponential modeling shows a marked downward trend in the late 30s and early 40s for abused females, prognosticating premature cognitive aging. Findings led to an NIA R01 aimed at assessing early signs of dementia and articulating potential avenues for reversibility. This work has been continuously cited in the empirical literature supporting the biologic embedding of stress and the health consequences of early-life adversity and has been referenced in the IOM's recommendations for research priorities that will advance scientific inquiry with respect to mitigating the long-term health consequences for victims of childhood maltreatment.

- a. Noll JG, Trickett PK, Long JD, Negri S, Susman EJ, Shalev I, Li JC, Putnam FW. Childhood Sexual Abuse and Early Timing of Puberty. *J Adolesc Health*. 2017;60(1):65-71. PubMed PMID 27836531.
- b. Noll JG, Zeller MH, Trickett PK, Putnam FW. Obesity risk for female victims of childhood sexual abuse: a prospective study. *Pediatrics*. 2007 Jul;120(1):e61-7. PubMed PMID: [17606550](#).
- c. Trickett PK, Noll JG, Susman EJ, Shenk CE, Putnam FW. Attenuation of cortisol across development for victims of sexual abuse. *Dev Psychopathol*. 2010 Winter;22(1):165-75. PubMed PMID: [20102654](#); PubMed Central PMCID: [PMC3100742](#).
- d. Noll JG, Shenk CE, Yeh MT, Ji J, Putnam FW, et al. Receptive language and educational attainment for sexually abused females. *Pediatrics*. 2010 Sep;126(3):e615-22. PubMed PMID: [20696731](#); PubMed Central PMCID: [PMC3690582](#).

2. Studying the offspring born to our long-term longitudinal cohort provides an exceedingly rare opportunity to advance scientific inquiry into the far-reaching consequences of childhood abuse; specifically its impact across generations. For example, through examination of birth records, our longitudinal cohort data revealed high rates of prematurity for offspring born to abused mothers, with maternal pre-pregnancy HPA axis dysregulation implicated as a chief culprit. These findings were some of the first to extend animal models of prenatal stress to humans. Via dyadic observations, offspring born to an abused mother displayed higher rates of insecure attachment and lower cognitive abilities than offspring born to comparison mothers. Moreover, our data were some of the first to demonstrate that abused mothers do not necessarily go on to abuse their offspring, but in a multitude of other ways, recreate impoverished and at-risk environments in which abuse is allowed to persist. Indeed 17% of offspring born to abused mothers have been involved in protective services compared to 1% of comparison offspring.

- a. Noll JG, Schulkin J, Trickett PK, Susman EJ, Breech L, et al. Differential pathways to preterm delivery for sexually abused and comparison women. *J Pediatr Psychol*. 2007 Nov-Dec;32(10):1238-48. PubMed PMID: [17569710](#).
- b. Noll JG, Trickett PK, Harris WW, Putnam FW. The cumulative burden borne by offspring whose mothers were sexually abused as children: descriptive results from a multigenerational study. *J Interpers Violence*. 2009 Mar;24(3):424-49. PubMed PMID: [18451100](#); PubMed Central PMCID: [PMC3096869](#).
- c. Kwako LE, Noll JG, Putnam FW, Trickett PK. Childhood sexual abuse and attachment: An intergenerational perspective. *Clin Child Psychol Psychiatry*. 2010 Jul;15(3):407-22. PubMed PMID: [20603427](#); PubMed Central PMCID: [PMC3161402](#).

3. Inconsistencies in the literature questioned a solid connection between childhood abuse and teenage pregnancy/motherhood. To finally put this conjecture to rest, we conducted a meta-analysis of 21 studies confirming this association with an odds ratio of 2.12. This paper sparked further debate about plausible explanations and why prevention efforts are evading teenage abuse victims. I received a grant from NICHD to conduct a prospective study of pre-pregnancy

mechanisms involved in abused and comparison females followed longitudinally through adolescence. Final results published in *Pediatrics* showed that maltreated females became teen mothers at five times the national average. Another paper upholds both sexual preoccupation and global psychological dysregulation as key pre-pregnancy mechanisms involved in the development of risky sexual behaviors for maltreated females. Findings from this first-ever prospective study of teen pregnancy mechanisms have been cited by the IOM as an underappreciated public health consequence of child maltreatment, and were used in the PA Joint State Government resolution 163 putting forth specific recommendations for prevention.

- a. Noll JG, Trickett PK, Putnam FW. A prospective investigation of the impact of childhood sexual abuse on the development of sexuality. *J Consult Clin Psychol*. 2003 Jun;71(3):575-86. PubMed PMID: [12795580](#); PubMed Central PMCID: [PMC3012425](#).
- b. Noll JG, Shenk CE, Putnam KT. Childhood sexual abuse and adolescent pregnancy: A meta-analytic update. *J Pediatr Psychol*. 2009 May;34(4):366-78. PubMed PMID: [18794188](#); PubMed Central PMCID: [PMC2722133](#).
- c. Noll JG, Haralson KJ, Butler EM, Shenk CE. Childhood maltreatment, psychological dysregulation, and risky sexual behaviors in female adolescents. *J Pediatr Psychol*. 2011 Aug;36(7):743-52. PubMed PMID: [21335615](#); PubMed Central PMCID: [PMC3146756](#).
- d. Noll JG, Shenk CE. Teen birth rates in sexually abused and neglected females. *Pediatrics*. 2013 Apr;131(4):e1181-7. PubMed PMID: [23530173](#); PubMed Central PMCID: [PMC3608488](#).

3. Conducting longitudinal studies affords ample challenges in terms of locating participants for retention. While utilizing emerging social networking websites (e.g., Myspace) to locate participants for my teen pregnancy R01, we noticed that publically available profiles were exceedingly provocative for many of these participants. Anecdotally, I observed that the majority of these provocative presentations were posted by females in the maltreated group. I conducted a sub-study in which females create an avatar while present in my lab, quantifying bodily choices in terms of provocative features (e.g., bust-to-hip ratios, skin-to-clothing ratios, piercings). Avatars created by maltreated females (vs. comparison females) scored significantly higher on this objective scale. Further, the propensity to create a provocative avatar was significantly related to receiving online sexual advances and offline meetings with individuals whose identity had not been fully confirmed. This led to a more in-depth investigation of high-risk social media behaviors whereby we objectively coded Myspace profiles for provocative content. Results confirmed that maltreated females displayed a propensity for provocative self-presentations; these presentations, in turn, were predictive of online sexual advances and subsequent offline meetings one year later. This work led to an NICHD R01 (currently underway) aimed at objectively tracking high-risk internet activity and social media behaviors among 450 sexually abused and comparison females aged 12-15 followed annually through adolescence.

- a. Noll JG, Shenk CE, Barnes JE, Putnam FW. Childhood abuse, avatar choices, and other risk factors associated with internet-initiated victimization of adolescent girls. *Pediatrics*. 2009 Jun;123(6):e1078-83. PubMed PMID: [19482741](#); PubMed Central PMCID: [PMC2966308](#).
- b. Noll JG, Shenk CE, Barnes JE, Haralson KJ. Association of maltreatment with high-risk internet behaviors and offline encounters. *Pediatrics*. 2013 Feb;131(2):e510-7. PubMed PMID: [23319522](#); PubMed Central PMCID: [PMC3557406](#).

Complete List of Published Work:

<http://www.ncbi.nlm.nih.gov/myncbi/jennie.noll.1/bibliography/43728531/public/?sort=date&direction=ascending>

D. RESEARCH SUPPORT (PI Role only)

Active

P50HD089922 (Noll, PI) 04/20/2017-04/19/2022
NIH/NICHD \$7,715,440

Penn State's Transitional Center for Child Maltreatment Studies-TCCMS.

This P50 Capstone Center will conduct high quality, high impact science, translate and package this science into messages that resonate with community providers and policy makers, and traverse the Research-to-Policy Bridge by communicating these packages to legislative leaders. The Center will be a key national resource for conducting and rapidly disseminating impactful new science that can change health and development trajectories for survivors, mobilize public investment in child maltreatment prevention and treatment, accelerate science to practice, spark dynamic system-wide solutions, and support and inspire future generations to do the same.

R01HD072468 (Noll, PI) 08/10/13–08/11/18
NIH/NICHD \$4,972,416

Health & Well-being of Sexually Abused Females & Offspring: 25 and 27 Yr. Follow up

The goals of this study are to accomplish the 7th and 8th waves of a longitudinal study of the biopsych-social consequences of childhood sexual abuse.

R01HD073130 (Noll, PI) 07/01/12–06/30/18
NIH/NICHD \$3,672,658

Abused and Non-Abused Females' High-Risk Online Behaviors: Impact on Development

The overall objective is to fully inform teen internet safety campaigns by providing objective HRIBs prevalence rates and articulating their impact on adolescent development.

Completed Research Support (PI Role Only)

R01AG04879 (Noll, PI) 09/30/14–04/30/16
NIH/NIA

Daily Stress Coping and Premature Cognitive Aging in Child Abuse Victims at Midlife

Role: PI

R03HD060604 (Noll, PI) 07/19/10–06/30/12
NIH/NICHD

20-year Intergenerational Longitudinal Followup of Females Abused as Children

Role: PI

R01HD052533 (Noll, PI) 03/10/07–02/28/12
NIH/NICHD

Preventing Teen Pregnancy: Prepregnancy Psychosocial Mechanisms for At-risk Females

Role: PI

R03HD045346 (Noll, PI) 12/05/04–11/30/06
NIH/NICHD

Cortisol Activity and Sexual Abuse

Role: PI

K01HD041402-01 (Noll, PI) 03/01/02–02/28/07

NIH/NICHD

Offspring of Maltreated Mothers: Prenatal & Infant Health

Role: PI

BIOGRAPHICAL SKETCH

NAME: **Kate Guastafarro**

eRA COMMONS USER NAME (credential, e.g., agency login): **KGUASTAFERRO**

POSITION TITLE: **Assistant Research Professor**

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Boston University (Boston, MA)	B.A.	05/2008	Anthropology
Georgia State University (Atlanta, GA)	M.P.H	08/2011	Health Promotion
Georgia State University (Atlanta, GA)	Ph.D.	08/2016	Health Promotion
The Pennsylvania State University (University Park, PA)	Postdoctoral Fellow	06/2017	Prevention and Methodology

A. Personal Statement

My program of research is three-fold, centering on the implementation of behavioral interventions with high public health impact. I am interested broadly in the development and adaptation of behavioral interventions with an emphasis on child maltreatment prevention. My graduate training focused on the design and evaluation of parent-education (PE) interventions that integrated curricula content or modified the implementation infrastructure to better meet the needs of children and families. In one study, I combined two complementary evidence-based programs to intervene on a broader scope of risk factors for maltreatment. As part of my dissertation, I examined risk for maltreatment and the need for intervention (e.g., PE, trauma therapy) among parents in an adult drug court. The complex nature of risk and how it is used to predict important public health outcomes led to an interest in the application of advanced analytic methods (e.g., mixture modeling) to better understand risk and to inform intervention development. To advance my expertise in the context of person-centered analysis and the optimization of interventions, I pursued and completed a NIH-funded postdoctoral fellowship in the Prevention and Methodology Training program (T32). As a fellow, under the mentorship of Drs. Linda Collins and Jennie Noll, I received advanced training in prevention science (e.g. applied intervention science), advanced analytic methodologies (e.g., person-centered analysis) focused on child maltreatment prevention. As an independent scientist working at the cutting edge of prevention and intervention science, I aim to integrate these lines of research with an eye toward the application of innovative methodology for the optimization, evaluation, and dissemination of interventions (e.g., the multiphase optimization strategy [MOST]) to the prevention of child maltreatment.

B. Positions and Honors

Employment

2009 – 2011 Graduate Research Assistant, The Mark Chaffin Center for Healthy Development, School of Public Health, Georgia State University, Atlanta, GA

2010 Assistant Epidemiologist [Term Appointment], Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA

2011 – 2013	Project Coordinator, Georgia State University, Atlanta, GA
2012 – 2017	Instructor, College of Public Health, Kent State University, Kent, OH
2013 – 2016	Doctoral Research Assistant, The Mark Chaffin Center for Healthy Development, School of Public Health, Georgia State University, Atlanta, GA
2016 – 2017	Postdoctoral Fellow, Prevention and Methodology Training Program (T32), The Methodology Center, The Pennsylvania State University, University Park, PA
2017 – present	Assistant Research Professor, The Methodology Center, The Pennsylvania State University, University Park, PA

Honors

2008	Scarlet Key Honor Society, Boston University
2016	Public Health Achievement Award, Georgia State University
2017	Summer Research Institute Participant, National Data Archive on Child Abuse and Neglect, Cornell University, Ithaca, NY
2018	International Behavioral Trials Network, Summer School Participant, Montreal, Ontario
2018	Cornell Translational Research Summer Institute Participant, Bronfenbrenner Center for Translational Research, Cornell University, Ithaca NY

C. Contribution to Science

1. Development, Adaptation, and Evaluation of Child and Family Interventions

The majority of my research has centered on the development, adaptation, and evaluation of behavioral interventions focusing on the prevention of child maltreatment. In one project, I created a version of an existing intervention specific to toddlers, a developmental age not explicitly targeted in the original intervention. I implemented this intervention with three teen mothers and authored a paper examining the efficacy of the intervention with regard to teaching them to identify developmental milestones using a single-case research design (Guastaferro, Lutzker, Jabaley, Shanley, & Crimmins, 2013). This led to my role in developing a novel intervention that systematically braided two evidence-based PE programs (Guastaferro, Miller, Shanley Chatham, et al., 2017; Guastaferro, Miller, Lutzker, et al., 2017). The resulting curriculum was compared to typical implementation of one of the original parent-training programs via a cluster randomized trial implemented across three states (Guastaferro, Lai, Miller, et al., 2018). Though the findings were not consistently in support of either intervention approach (the braided curriculum or the original program), the providers and recipients of the braided program were vocal about the acceptability and applicability of the novel curriculum. Further refinement and adaptation of the systematic braiding approach is an open line of research I plan to develop in my independent program of research.

- a. **Guastaferro, K.**, Lutzker, J.R., Jabaley, J.J., Shanley, J.R., & Crimmins, D.B. (2013). Teaching young mothers to identify developmental milestones. *International Journal of Child Health and Human Development*, 6(2), 223-233.
- b. **Guastaferro, K.**, Miller, K., Shanley Chatham, J.R., Whitaker, D.W., McGilly, K., & Lutzker, J.R. (2017). Systematic braiding of 2 evidence-based parent-training programs: Qualitative results from the pilot phase. *Family and Community Health*, 40(1), 88-97. PMID: PMC5310252
- c. **Guastaferro, K.**, Miller, K., Lutzker, J.R., Whitaker, D.J., Lai, B.S., Shanley Chatham, J., & Kemner, A. (2017). Implementing a braided home-based parent support curriculum: Lessons learned. *Psychosocial Intervention*, 26, 171-187.
- d. **Guastaferro, K.**, Lai, B.S., Miller, K., Shanley Chatham, J.R., Whitaker, D.J., Self-Brown, S., Kemner, A., and Lutzker J.R. (2018). Braiding of two evidence-

based programs for families at-risk: Results of a cluster randomized trial. *Journal of Child and Family Studies*, 27, 535-546. NIHMSID 946984

2. **Identifying Intervention Needs and Novel Opportunities for Intervention**

Another area of research has focused on examining the need for intervention and identifying novel opportunities for intervention with a focus on child maltreatment prevention. In a qualitative project, I examined the needs of grandparents raising grandchildren because of a parent's incarceration (Guastaferrero, Guastaferrero, & Stuart, 2015). This led to a related quasi-experimental study in which I assessed the level of need for parenting and mental health services among parents involved in an adult drug court program and their children (Guastaferrero, Guastaferrero, Brown, & Graves, 2014). Other research, to be presented in forthcoming manuscripts, has relied on secondary data analyses to identify predictors or and better understand underlying risk factors for diverse outcomes with the goal of informing the development of future child maltreatment prevention interventions. Notably, using a nationally representative survey of adults in the U.S., I identified patterns of maltreatment history most highly associated with mental health and substance use outcomes in later life using latent class analysis (Guastaferrero & Bray, 2017). The use of advanced data analysis to inform intervention development is a cornerstone of my budding independent line of research.

- a. Guastaferrero, W.P., **Guastaferrero, K.**, & Stuart, D. (2015). An exploratory study of grandparents raising grandchildren and the criminal justice system: A research note. *Journal of Crime and Justice*, 38(1), 137-161.
- b. **Guastaferrero, K.**, Guastaferrero, W.P., Brown, J., & Graves, S. (November 2014). *Reaching families in an adult felony-level drug court*. Poster presented at the 142nd annual American Public Health Association, New Orleans, LA.
- c. **Guastaferrero, K.** & Bray, B.C. (May 2017). *Examining patterns of child maltreatment history and adulthood mental health and substance use outcomes*. Poster presented at the 25th Society for Prevention Research, Washington, D.C.

3. **Application of Innovative Methodology to Prevention Science**

A nascent aspect of my research is the use of advanced methodologies and analytics to inform intervention development to increase public health impact. I am interested in the optimization, evaluation, and dissemination of interventions across a number of public health topics with an eye toward the prevention of child maltreatment. Part of my postdoctoral fellowship and mentorship as an assistant research professor is focused on the multiphase optimization strategy (MOST). MOST is an engineering-inspired framework for optimizing behavioral, biobehavioral, and biomedical interventions. Optimization is a process in which a multicomponent intervention is identified that provides the best expected outcome obtainable within identified constraints. Currently, my contribution to these projects centers upon experimental design and analysis of empirical data. In workshops I provide an applied demonstration of power and sample size calculations and review analytic techniques of a factorial experimental design. My funding from the Clinical and Translational Science Institute makes me responsible, in part, for the dissemination of MOST across a variety of disciplines and public health issues. To this end, over the past year, I have assisted with the lab portion of a graduate level course, co-facilitated an all-day preconference workshop, and presented an introductory talk at national conference. I also authored a forthcoming book chapter introducing MOST to the field of clinical psychology. Additionally, I have an investigator role on a currently funded R01 to utilize MOST to develop an online intervention for college students seeking to reduce the risk for sexually transmitted diseases (R01AA022931). The long-term goal is to use the MOST framework to develop,

optimize, and evaluate innovative child maltreatment prevention interventions informed by work in applied prevention and advanced data analysis research.

- a. Collins, L.M., & **Guastafarro, K.** (May 2017). *Introduction to the multiphase optimization strategy (MOST) for building more effective, efficient, economical, and scalable behavioral and biobehavioral interventions*. Preconference workshop at the 25th Society for Prevention Research, Washington, D.C.
- b. **Guastafarro, K.** (August 2017). *Innovative Methods: The Multiphase Optimization Strategy (MOST)*. Paper presented at a panel, "In Honor of Penelope K. Trickett, PhD" at the 125th American Psychological Association Convention, Washington, D.C.

Complete List of Published Work:

<https://scholar.google.com/citations?user=dKGfM7QAAAAJ&hl=en>

D. Research Support

Current Research Support

R01AA022931 (Collins, PI)

2015 - 2018

NIAAA

Engineering an Online STI Prevention Program

This project applies the innovative, engineering-inspired multiphase optimization strategy (MOST) to develop a highly effective, appealing, economical, and readily scalable internet-delivered behavioral intervention targeting the intersection of alcohol use and sexual risk behavior among college students.

Role: Investigator

NIH BIOGRAPHICAL SKETCH

NAME: Jackson, Yolanda K.

eRA COMMONS USER NAME (credential, e.g.,

agency login): yjackson POSITION TITLE: Professor

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training and residency training if applicable.)*

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
Valparaiso University	B.S.	05/1990	Psychology
The University of Alabama	M.A.	05/1993	Clinical Child Psychology
The University of Alabama	Ph.D.	05/1995	Clinical Child Psychology

A. Personal Statement

I have had extensive training and experience in the study of child trauma, developmental psychopathology, and the process of resilience in youth exposed to stress. My primary area of research is the mechanisms of resilience in youth exposed to trauma (and child maltreatment specifically) and I am also currently a co- investigator on a P50 grant on child maltreatment risk for pathology. As a board-certified clinical child psychologist and

professor, and as the PI on two NIH-funded RO1 grants, and the mentor for several Doris Duke, NSF, and F31 fellows, I have expertise to assist the projects and team members with mentoring junior faculty, helping to administer NIH funded grants and create transdisciplinary collaborations. All of my research projects have been highly collaborative and included experts from forensic science, social welfare and education. I am particularly devoted to raising awareness and the public discussion around child maltreatment and dissemination of science and practice for addressing the needs of youth exposed to child maltreatment.

My research is by definition translational and working with community agencies and the populations they serve is the foundation of my academic career work. I currently collect data from several large-scale agencies in KC, MO that provide services to youth exposed to trauma. My lab maintains a database of over 500 youth and families involved in the foster care system and another database of over 600 children and families who are exposed to chronic stress (i.e., poverty, incarceration, violence exposure) making my lab and experience an important resource for the scientific community. I have extensive experience in recruiting "hard to recruit" youth and families and maintaining them in research studies. I am also very familiar with ethical issues that often arise when working with youth and families in research and solving any procedural or methods dilemmas as they arise.

B. Positions and Honors

Positions and Employment

1995 - 2002	Assistant Professor, University of Kansas
2002 - 2014	Associate Professor, University of Kansas
2015 - 2017	Professor, University of Kansas
2009 - 2015	Associate Director, KU Child and Family Services Clinic, University of Kansas
2015 - 2017	Director, KU Child and Family Services Clinic, University of Kansas
2018 – Present	Professor, Pennsylvania State University
2018 – Present	Associate Director, Child Maltreatment Solutions Network, Penn State University

Other Experience and Professional Memberships

Associate Editor, Journal of Consulting and Clinical Psychology
Editorial Board, Professional Psychology: Research and Practice
Editorial Board, Journal of Clinical Child and Adolescent Psychology
Reviewer, Child Abuse and Neglect
Reviewer,
Child Development Reviewer, Child
Maltreatment
Reviewer, Children's Services: Social policy. Research, and practice
Reviewer, Developmental Psychology
Reviewer, International Journal of Play Therapy
Reviewer, Journal of Abnormal Child Psychology
Reviewer, Journal of Black Psychology
Reviewer, Journal of Child and Family Studies
Reviewer, Journal of Consulting and Clinical Psychology
Reviewer, Journal of Pediatric Psychology

Reviewer, Journal of Research on Adolescence
Reviewer, Journal of Social and Clinical Psychology
Reviewer, Journal of Traumatic Stress
Reviewer, Training and Education in Professional Psychology

Member, American Psychological Association
Member, APA Division 37, Child, Youth and Family Services
Member, APA, Division 12, Clinical Psychology
Member, APA, Division 45, Society for the Psychological Study of Ethnic Minority Issues
Board Member, APA, Division 53, Clinical Child and Adolescent Psychology

2012 - Present Grant Reviewer, (Appointed, CPDD Study Section National Institutes of Health) 2017-2018 Special Interest Section – Grant Reviewer, (Appointed, NIH)

Honors

2008 - Present Diplomate in Clinical Child and Adolescent Psychology, American Board of Professional Psychology
2014 - Present Fellow, Society of Clinical Child and Adolescent Psychology, American Psychological Association

C. Contribution to Science

1. I am the PI of the PAIR project, a longitudinal study of preschool-age youth and their parents focused on identifying the intergenerational mechanisms of resilience for youth exposed to trauma. I am also the PI of the SPARK project, a longitudinal study of the mechanisms of resilience of youth in foster care. Although the field is clear that child abuse and foster care are related to poor adjustment for youth, not all youth so affected demonstrate pathology. The purpose of the project is to have empirical support not only for what may or may not be protective and relate to positive outcomes, but to document the interaction of important constructs like social support, IQ, locus of control, appraisal and coping. The SPARK project has over 500 youth ages 8+ followed over time at three time points. It is the most extensive collection of psychological data and behavioral and academic outcomes of youth in foster care. The results thus far have indicated support for the model that appraisal of events mediates the kind of coping response youth have to trauma (i.e., youth who interpret trauma as positive use more direct strategies) and the choice of coping style also mediates the kind of behavioral health demonstrated by the child. The PAIR project began in 2016 and we currently are in the process of recruitment and data collection.

- a. Jackson, Y., Gabrielli, J., Tunno, A., & Hambrick, E. (2012). Strategies for longitudinal research with youth in foster care: A demonstration of methods, barriers, and innovations. *Child Youth Services Review, 34*(7), 1208-1213. doi:10.1016/j.chilyouth.2012.02.007
- b. Gabrielli, J., Jackson, Y., & Brown, S. (2015). Measurement of behavioral and emotional outcomes of youth in foster care: Investigation of the roles of age and placement type. *Journal of Psychopathology and Behavioral Assessment, 37*(3). doi.org/www2.lib.ku.edu/10.1007/s10862-014-9464-8
- c. Hambrick, E., Gabrielli, J., Tunno, A., & Jackson, Y. (2014). Using multiple informants to assess child maltreatment: Concordance between case file and youth self-report. *Journal of Aggression, Maltreatment & Trauma, 23*(7), 751-771. doi:10.1080/10926771.2014.933463

- d. Jackson, Y., Gabrielli, J., Fleming, K., Tunno, A., & Mekanui, P. K. (2014). Untangling the relative contribution of maltreatment severity and frequency to type of behavioral outcome in foster youth. *Child Abuse and Neglect*, 38(7), 1147-1159. doi:10.1016/j.chiabu.2014.01.008
- e. Jackson, Y., Cushing, C. C., Gabrielli, J., Fleming, K., O'Connor, B. M., & Huffhines, L. (2016). Child maltreatment, trauma, and physical health outcomes: The role of abuse type and placement moves on health conditions and service use for youth in foster care. *Journal of Pediatric Psychology*, 41(1), 28-36 doi:10.1093/jpepsy/jsv066

2. I am PI of a funded project examining outcomes for early childhood-aged youth exposed to maltreatment who participate in day and outpatient treatment. The focus of the work is on what kinds of interventions are most effective for young children exposed to child abuse and how is risk for pathology and adjustment conferred through mental health services. The results of the work thus far have provided first time evidence of the impact of parent-child health and its role in mitigating the impact of child abuse and other environmental risk factors for maladjustment.

- a. 1. Jackson, Y. (in press). Child maltreatment. In T. H., Ollendick, S. W. White, & B. A. White (Eds.), *The Oxford Handbook of Clinical Child and Adolescent Psychology*. New York: Oxford University Press.
- b. Jackson, Y., & Huffhines, L. (2018). Physical health and foster youth. In E. Trejos & N. Trevino (Eds.), *Handbook of Foster Youth* (pp. 117-132). New York: Taylor & Francis.
- c. Kanine, R., Jackson, Y., Tunno, A., & O'Connor, B. (2015). Therapeutic day treatment for young maltreated children: A systematic literature review. *Journal of Child and Adolescent Trauma*. doi:10.1007/s40653-015-0053-0
- d. Drerup, L., & Jackson, Y. (2016). Measurement of the role of cognitive appraisals in youth exposure to community violence and psychological adjustment. *Journal of Child and Adolescent Trauma*, 2, 1-13. doi: 10.1007/s40653-016-0112-1

3. Another area of focus for my research lab is on the nature of trauma, how chronic and acute events impact the mental health of youth and families. Taking a dimensional approach to trauma assessment, the results of this work have indicated how different kinds of protective factors operate to predict adjustment in youth exposed to a wide range of different kinds of trauma events. Moreover, the work has documented which kinds of constructs have empirical support for their role in the trauma-outcome relation and how these variables work together to account for the multifinality of outcomes in youth.

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Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/volanda.jackson.2/bibliographv/41167104/public/>

D. Research Support

Ongoing Research Support

P50HD551411 (PI:Noll)
2021

2016-

NIH/NICHD

Penn State's Transitional Center for Child Maltreatment Studies-TCCMS.

Role: Co-Investigator

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2016- 2021

NIH/NIMH

***Trauma exposure, emotion regulation and cognitive skills in early childhood:
Prospective and longitudinal examination of the mechanisms of adjustment***

Role: Principal Investigator

F31 HD088020

06/04/17-06/03/19

NIH/NICHD

Biological Indicators of Trauma in Foster Youth: the Role of Social Support

Mentee: Huffhines

Role: Sponsor/Mentor

Greater Kansas City Healthcare Foundation - The Children's Palace

2014-2015

Role: PI

Effects of Early Childhood Maltreatment and Outcomes Outpatient and Day Treatment