



Evaluation of a Teen Dating Violence Prevention Intervention among Urban Middle-School Youth Using Youth Participatory Action Research: Lessons Learned from *Start Strong Boston*

Elizabeth D. Beatriz^{1,2}  · Alisa K. Lincoln¹ · Jess Alder³ · Nicole Daley^{3,4} · Felicia Simmons¹ · Karibe Ibeh¹ · Crystal Figueroa¹ · Beth E. Molnar¹

Published online: 20 July 2018

© Springer Science+Business Media, LLC, part of Springer Nature 2018

Abstract

Almost half of adolescents aged 11 to 14 have dated and between 10 and 30% report experiencing Teen Dating Violence (TDV). However, there are no evidence-based TDV prevention interventions designed for afterschool, community-based settings with middle-school youth, in high-risk neighborhoods. Start Strong Boston (SSB) is a model that fills all three gaps, founded on partnerships between the Boston Public Health Commission, community afterschool sites, academic experts and evaluators, and youth. Here, we describe the SSB program and discuss how this collaboration built upon successes of this peer-engaged intervention, by developing and implementing a youth participatory action research (YPAR) evaluation study of SSB. Use of the YPAR framework tested the feasibility of employing Peer Researchers in an interdisciplinary evaluation team. We describe how through participation in evaluation research, Peer Researchers improve professional and leadership skills while informing measurement and conceptualization of a program affecting their own neighborhoods. Lessons learned are presented.

Keywords Adolescent · Dating violence · Prevention · Youth participatory action research · Evaluation · Community-based

Background

Teen dating violence (TDV) is any behavior among adolescents in a relationship that leads to manipulating, gaining power, or control over one's partner. It manifests in various forms of physical, emotional and sexual harm that are associated with serious and lasting consequences, such as subsequent suicidal ideation, mental illness, substance use disorders, injuries, and death (Ackard et al. 2007; Ali et al. 2015; Exner-Cortens et al. 2013; Vagi et al. 2015). The 2015 Youth Risk Behavior Surveillance System (YRBSS), a nationally representative survey of U.S. high school students, indicates that

9.6% of students experienced physical TDV and 10.6% experienced sexual TDV in the 1 year prior to the study (Centers for Disease Control and Prevention 2016; Vagi et al. 2015). Across 12 years of the YRBSS, 1999–2011, rates of reported TDV victimization have been stable at 9.4% for males and 9.2% for females (Rothman and Xuan 2013). Increasingly, studies indicate that younger adolescents and pre-adolescents are experiencing violence in their relationships. For example, a study across four urban communities in the U.S. found very high rates of TDV behaviors in a sample of middle school youth. Among those who were dating, 77% reported perpetrating emotional/psychological abuse, 32% reported perpetration of physical abuse and 15% reported perpetrating sexual abuse (Niolon et al. 2015).

While the etiology of TDV victimization and perpetration is complex, interacting individual and community-level risk factors are leading determinants of TDV prevalence. Risk factors associated with TDV include previous exposures to multiple types of violence (e.g. physical violence, sexual assault, or threats) in multiple contexts (e.g. in the community or home). Other risk factors include early engagement in sexual activity, depression, other mental disorders, substance use and a normative belief that violence in relationships is acceptable

✉ Elizabeth D. Beatriz
e.beatriz@northeastern.edu

¹ Institute for Health Equity and Social Justice Research, Northeastern University, Boston, MA, USA

² IUHR, Bouvé College of Health Sciences, Northeastern University, 360 Huntington Ave, M/S 314 INV, Boston, MA 02115, USA

³ Boston Public Health Commission, Boston, MA, USA

⁴ One Love Foundation, Bronxville, NY, USA

(Centers for Disease Control and Prevention 2017; Rothman et al. 2012; Vagi et al. 2013).

Due to a history of structural biases, adolescents from economically disadvantaged, urban neighborhoods, in particular youth of color, are more likely to be exposed to TDV risk factors at multiple levels. Consequently, youth of color report higher rates of TDV victimization and perpetration (Benson and Fox 2004; Johnson et al. 2015; Spriggs et al. 2009; Wincentak et al. 2017). For example, over half of urban youth of color among a sample of inner-city Chicago public high school female students in 10th and 11th grade reported experiencing psychological TDV and one-third physical TDV (Alleyne-Green et al. 2012). In data collected across four high-risk urban communities (94% were middle school-aged youth of color), 77% reported perpetrating psychological TDV and 32% physical TDV (Niolon et al. 2015). Experiencing community violence and racial discrimination were associated with experiencing TDV even after controlling for demographic and socioeconomic characteristics in a sample of African American and Latina young women followed from middle school until 7 years later (Stueve and O'Donnell 2008). TDV perpetration and victimization have consistently shown to be co-occurring (Alleyne-Green et al. 2012; Fedina et al. 2016).

Teen dating violence prevention programs have been established to mitigate the influence of risk factors, prevent TDV, and alleviate its adverse outcomes nationwide, particularly in communities where youth are exposed to high rates of violence. Most programs focus on adolescents ages 13 through 18; however, increasingly programs are focusing on adolescents during their middle school years. Notably the Centers for Disease Control and Prevention (CDC)'s *Dating Matters* program is being evaluated in middle schools in 4 U.S. cities. *Dating Matters* is a primary prevention effort focused on 6th to 8th graders in urban, high crime neighborhoods (Tharp 2012). Prevention programs are most frequently implemented in school-based settings, as either part of a health class curriculum or in afterschool settings (Cascardi and Avery-Leaf 2014; Hickman et al. 2004; Malhotra et al. 2015; Miller et al. 2015). Evaluation studies have shown some promising results of these interventions; for example, a recent meta-analysis of 23 school-based interventions (10 in middle schools, 13 in high schools) showed significant changes in knowledge and attitudes across studies, though not in perpetration or victimization (De La Rue et al. 2017). Less is known about TDV programs for middle-school youth in community-based afterschool programs.

While increasingly attention is paid to evaluating TDV prevention programs, few evaluated teen dating violence prevention programs are guided by youth participatory action research (YPAR) or community-based participatory research (CBPR) principles. YPAR, similar to CBPR, trains youth to conduct systematic research, allowing for youth involvement

in social change (C. B. Powers and Allaman 2012). Participation in research and evaluation is beneficial to young participants, with research showing increases in professional skills training, sense of engagement, leadership skills, and ability to voice concerns more effectively (Lau et al. 2003; London et al. 2003; Sabo 2003). YPAR allows youth to actively examine issues affecting their lives to decide whether or not to create meaningful change with respect to those issues (London et al. 2003). Engaging youth in community-based research also imparts feeling valued by adults, energizes collective change in communities and programs, and promotes critical thinking and exploration of social circumstances related to investigators' research questions (J. L. Powers and Tiffany 2006).

The use of YPAR in teen dating violence research offers a unique opportunity to engage youth in research that is deeply personal and impacted by contextual norms (Noonan and Charles 2009). For example, in describing a theoretical framework for TDV, the National Institute of Justice stresses that teen dating violence is best understood through a multi-systemic lens; when adolescents start dating they bring their own perceptions of relationships, which are influenced by the contexts in which they live (Oudekerk et al. 2014). Because of their shared experiences, youth researchers are able to inform research on the intersection of youth perceptions and youth contexts. While there are few published studies that have used YPAR in interpersonal violence research, there are some notable examples that have demonstrated the win-win nature of YPAR, including: (1) strengthened, more culturally appropriate research, and (2) benefits for the youth involved in conducting the research. For example, the program *Visual Voices*, which used art as qualitative data to engage adolescents throughout a research project, demonstrated an increase in creativity and critical thinking as adolescents developed ways to disseminate TDV information to their peers and evaluate it (Yonas et al. 2013). Another program using a CBPR approach, *Teach One Reach One*, provided workshops to African American adolescents ages 10 to 14 around healthy relationships that the adolescents then shared with their peers. Among the adolescents sharing the information, acceptance of violence in relationships was significantly lowered and successful use of CBPR around TDV was demonstrated (Ritchwood et al. 2015).

Here we describe the development and implementation of a YPAR model to evaluate a unique teen dating violence prevention program aimed at preventing TDV among Boston middle-school aged youth. The prevention program is innovative because it was developed to be implemented in community centers during afterschool hours, focusing on middle-school students who live in neighborhoods with recurrent exposure to violence. First, we describe the conceptualization and implementation of the innovative, peer-led TDV prevention program, followed by a description of the use of YPAR in

our evaluation study. We end with the lessons learned throughout our evaluation process, so that others considering YPAR can prepare for the challenges we identified and build on our successes.

The Start Strong Program

In 2008, *The Start Strong Boston: Building Healthy Teen Relationships* program, a primary prevention approach to teen dating violence, began with initial funding from the Robert Wood Johnson Foundation. The Boston Public Health Commission (BPHC) developed the *Start Strong Boston* program as a community-based approach to primary prevention of TDV among middle-school youth. The program was predicated on the fact that many adolescents begin dating in middle school; thus effective primary prevention of TDV and education around healthy relationships cannot wait until adolescents reach high school. Program sites were located in neighborhoods where adolescents are exposed to high rates of violence and are consequently at higher risk for experiencing TDV. While the program does not explicitly target specific racial/ethnic or socioeconomic groups, it operates in disadvantaged neighborhoods where the majority of residents are non-Hispanic Black/African-American or Hispanic. The program involves a wide range of stakeholders including parents, teachers, coaches, older siblings, peers, school nurses and mentors, and focuses on teaching 11 to 14 year olds about healthy relationships through these partnerships.

To develop the *Start Strong Boston* curriculum, the Boston Public Health Commission partnered with Health Resources in Action (formally known as The Medical Foundation), Boston Centers for Youth and Families, and the Boston Police Department. The program was designed to be implemented in community centers and afterschool programs around the city of Boston, which provides the ability to reach adolescents in a setting outside of school. The program utilizes peer-led education and youth empowerment strategies to engage adolescents in all aspects of program development and implementation. These methods were chosen to deepen participants' acceptance and retention of healthy relationship messaging topics.

The program includes three core elements. First, adolescents, aged 14 to 18, are employed as "Peer Leaders" to deliver the program's content. These *Start Strong* Peer Leaders are selected through an open interview process and reflect the racial/ethnic, socioeconomic, and residential composition of the communities where *Start Strong* is implemented. The majority are Black and Latino adolescents and are students within the Boston Public School system. Peer Leaders participate in a six-week "Healthy Relationships Summer Institute" training and have continued training and support from BPHC staff to

throughout the academic year as they deliver healthy relationship workshops.

The primary tasks of the Peer Leaders are to conduct workshops on teen dating violence and healthy relationships at community centers and out-of-school programs around the city of Boston. Additionally, the Peer Leaders present regularly on the topic at area colleges and universities as well as at national conferences. Finally, the Peer Leaders create media campaigns aimed at preventing dating violence among adolescents in Boston and increasing their healthy relationship skills. These campaigns are designed by the Peer Leaders using cutting edge technology to reach out to young people, promote positive messages about healthy relationships and teach strategies to avoid teen dating violence.

The *Start Strong Real Love Real Talk* curriculum was developed in 2008 and 2009, followed by pilot testing. It is updated periodically with input from Peer Leaders and other stakeholders, including the current evaluation team. It addresses known risk factors for teen dating violence and domestic violence, including but not limited to: acceptance of traditional gender norms, acceptance of the use of violence to resolve issues, lack of experience in relationships, and awareness of the multiple dimensions of dating abuse. Recognizing that middle school youth may or may not have experienced dating prior to the program, the curriculum focuses on unpacking societal norms around relationships and gender. Staff members also work to stay relevant to the realities of the youth participating in the program. For example, to augment discussions of how to cope after a break-up, *Start Strong Boston* added skill building and dialogue with adolescents about how to thoughtfully prepare and engage in a break-up in our current social media-driven climate.

After its initial development, the *Start Strong* Curriculum manual was reviewed externally by Eliza Campbell who formerly worked with Break the Cycle, a US-based national teen dating violence prevention organization (Break the Cycle 2014). Peer Leaders played important roles in the vetting and pilot testing of the manual. They participated in discussions and gave feedback during the *Start Strong* Peer Leadership Summer Institute. The manual was continually refined over the first 4 years of intervention delivery in afterschool programs around the city of Boston with middle-school youth. The latest 11-session format of the curriculum was piloted over the course of the 2013–2014 academic year at three community centers.

The goal of this teen dating violence prevention effort is to go beyond individual prevention tactics to build a community-wide, rigorously-researched prevention model that will have a significant impact on adolescents in Boston. By including Boston adolescents in every part of the programming, from planning to implementation to evaluation (the focus of the present manuscript), the program goes beyond talking *about* adolescents, to talking *to* them and *with* them. Having Peer

Leaders be part of the solution to the very serious issue of teen dating violence benefits both them and the participants in the program.

Developing a YPAR Evaluation

The Evaluation Research Team

The Boston Public Health Commission partnered with study investigators from the Institute on Urban Health Research at Northeastern University to develop a model for a YPAR evaluation of the *Start Strong* program. Initial funding was received from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) in 2016 to assess the acceptability and feasibility of conducting a larger trial of the *Start Strong* program (Grant 1R21HD083587; PI: Molnar). The evaluation team is comprised of multiple investigators, including violence prevention and community-based participatory research (CBPR) experts, a graduate student who serves as the project manager, and a team of “Peer Researchers”.

Peer Researchers The YPAR model builds upon the ethos of the *Start Strong Boston* program, through the inclusion of Peer Researchers. Peer Researchers are young adults hired and paid by the research study, aged 18 to 23, who are from the neighborhoods where the *Start Strong* program is administered. The initial model included the recruitment of Peer Researchers from the pool of former Peer Leaders. Former Peer Leaders were ideal candidates to join the evaluation team because of their lived experiences in the community, as well as intimate familiarity with the program curriculum, administration, and goals. The Boston Public Health Commission circulated the employment description, including the scope of work and age requirements, through the Peer Leader alumni network. Additionally, undergraduate students from Northeastern University who are from the communities served by the *Start Strong* program were recruited. Peer Researchers were selected based on their interest in the project and dating violence prevention, experience growing up in Boston, and desire to develop research skills. We recruited youth who are approachable in age to the middle-school youth and Peer Leaders, and reflect the diversity of the neighborhoods where the program was implemented. Peer Researchers did not need to have any prior experience conducting research.

Throughout the course of the evaluation, a total of nine Peer Researchers were hired who all identify as either Black or Latino. Peer Researchers have various educational backgrounds; between high school graduates to two who completed college during the study. These Peer Researchers join the larger research team consisting of a doctoral student

who was the project manager, and two Northeastern University faculty investigators.

Peer Researcher Trainings Once identified and hired, Peer Researchers participated in a three-module training. These trainings were designed and implemented to highlight opportunities for cross-training among the participants, co-learning, and opportunities for team-building. First, the group learned about teen dating violence from multiple perspectives, including a review of the current research in the area and rationale for the project. Peer Researchers also shared their knowledge and drew upon their lived experience to inform the group. Next, a broad introduction to research was provided, including research topics such as: introduction to research (e.g. “Why do research?”), “What is good research?”, types of research, and research methodology); research ethics and challenges of CBPR methods; and understanding data analyses strategies. In addition, Peer Researchers were trained in the specific skills needed to support the research process ranging from supporting the administration of the assent process with youth participants to focus group facilitation. To build a sense of trust within the team, the training period was also used to develop shared operating rules and procedures for the group. The full research team generated these with active participation from the Peer Researchers. For example, the team agreed on ways to develop professional practices related to being on time, what to do if they would be unable to attend a session, and how to operationalize a respectful working environment. Finally, each Peer Researcher completed the NIH Human Subjects Research Training and certification required by the university to allow for participation in human subjects research.

Given the diversity in educational background and research experience, in keeping with a YPAR model, efforts were continually made to acknowledge power differentials and to privilege the voices and experiences of Peer Researchers. For instance, efforts to support shared power were made through an emphasis on transparent communication such that the investigators and project manager communicated all aspects of the project with Peer Researchers. Peer Researchers were able to directly communicate with all members of the team to share their suggestions and concerns. This was particularly useful in developing the interview guide as our Peer Researchers helped us to assess the appropriateness of questions and to remain aware of the concerns of participant burden as our interview grew in length. As an example of where their advice was followed, the first round of surveys was deemed too difficult for participants by the Peer Researchers. Although pilot testing had occurred with a group of adolescents of similar ages participating in another public health program, the adolescents in the *Start Strong* groups took much longer to complete the surveys and had many questions about meanings of terms. The survey was shortened and simplified, and pilot

tested again before the second round; administration was much smoother in the next round.

Details of Role and Scope of Work The Peer Researchers are integrated throughout the evaluation, from the development of the evaluation measurement tools through final analysis. Their scope of work was developed by the Northeastern University investigators in collaboration with the Boston Public Health Commission. The scope and approach of the project shifted throughout the study period, and transformations in the Peer Researchers' role reflected that shift. Details of the Peer Researchers' role within the evaluation follow.

Designing and Implementing the Study

Overview To assess the acceptability and feasibility of evaluation efforts and a larger trial of the *Start Strong* program, we aimed to: (1) develop and refine the *Start Strong* intervention; (2) assess the feasibility a future trial; and (3) assess the feasibility of using a YPAR framework in a future trial. To achieve these aims, the Peer Researchers aided in developing study instruments, collecting quantitative and qualitative data, as well as preparation and participation in all dissemination activities, including the development of this manuscript (three are co-authors: Simmons, Ibeh, Figueroa). Peer Researchers are directly supervised by the project manager, whom they meet with weekly. Weekly meetings serve as a regular opportunity to reflect as a team on challenges and successes of the project and are a necessary part of developing camaraderie and trust within the team. The research team, including the Northeastern University investigators, the project manager and partners at the Boston Public Health Commission meet quarterly to assess study progress, develop future priorities and strategies, and troubleshoot challenges that emerge throughout the evaluation.

Developing Study Instruments To assess the readiness of the *Start Strong* project for a larger future trial, the current evaluation includes development of both qualitative and quantitative measures. Reviews of existing instruments, key informant interviews with program administrators at *Start Strong* and a preliminary focus group were used to develop the instruments during the first 6 months of the evaluation. Instruments were developed in the following order: First, to refine and assess consistency of the *Start Strong* curriculum, the project team – including the Peer Researchers – developed a direct observation instrument to be used to evaluate *Start Strong* sessions. A Peer Researcher who was a former Peer Leader and thus had personal experience with all aspects of the *Start Strong* curriculum, Peer Leader training, administration and leadership, piloted the direct observation instrument. This took place over

several sessions at a site not included in the evaluation. Based on the insights gained during this piloting process, the items on the direct observation instrument were modified so that they were “semi-structured”, allowing for quick, structured jotting of notes and open-ended responses that are filled in with many more details soon after the session. (See Appendix 1.)

Second, Peer Researchers worked with the project manager to develop multiple focus group guides – one to assess Peer Leaders' perceptions of the program and a second to assess middle school-aged youth's perceptions of dating, relationships, and dating violence. (The data from these would later be used to develop age-appropriate pre- and post-surveys). Peer Researchers were instrumental in developing the specific aims and items included in the focus group guides. For example, Peer Researchers knew that the broad objective of one focus group was to understand Peer Leaders' perceptions of the *Start Strong* program. Peer Researchers then developed items around the challenges of being a Peer Leader ranging from whether Peer Leaders were appropriately trained to teach the lesson to whether Peer Leaders had sufficient time to get to program sites from their own high schools. (See Appendix 2.)

Finally, Peer Researchers helped develop the quantitative survey instrument that was used as a pre-test and post-test for the program. The development of this survey instrument was an iterative process throughout the study period. First, Peer Researchers conducted a literature review of all existing, validated survey instruments around teen dating violence and healthy relationships, especially those developed for middle school-aged youth. Items were considered, and in some cases piloted, from the (i) Adolescent Interpersonal Competence Questionnaire (AICQ) (Buhrmester 1990), (ii) Attitudes Towards Dating Violence Scales (Price et al. 1999), and (iii) Conflict in Adolescent Dating Relationships Inventory (CADRI) (Wolfe et al. 2001). Peer Researchers combined and consolidated items and under the supervision of the project manager, piloted the instrument twice with youth who did not participate in the *Start Strong* program. The instrument was then piloted as a pre-survey and post-survey at three sites that completed the *Start Strong* curriculum. The evaluation team modified the instrument after each stage of the piloting process. An additional set of focus groups was conducted to assess the unique needs and appropriateness of evaluation instruments for middle-school youth. The need for these additional focus groups was identified by the Peer Researchers through their unique viewpoints while observing implementation of the *Start Strong* survey instrument. As expected based on these observations, the focus groups showed that the survey instrument based on previously validated instruments had several weaknesses for use with middle school-aged youth in this program. The survey instrument was too

long, and had some language that was developmentally challenging for the literacy-level and cognitive ability of the youth. For example, the Peer Researchers were often asked by the participants to explain the word “compromise” which led to the deletion of a question that used this word. Peer Researchers marked questions and sections of the survey that were challenging and a final version was created by the investigative team.

Collecting Data Peer Researchers were the primary collectors of the study data at all stages of data collection. Prior to beginning the *Start Strong* program at any site, the Peer Researchers, the project manager, and *Start Strong* staff visited the program site to introduce the evaluation and recruit interested youth. Peer Researchers explained the *Start Strong* program and the importance of the evaluation components to the youth. In accordance with the protocol approved by the Institutional Review Board, parental consent was obtained for all youth prior to participating in the evaluation study. Youth assent was obtained by the project manager who was present to support the Peer Researchers during the pre- and post-test sessions. At the first and last *Start Strong* sessions, Peer Researchers administered the pre-survey and post-survey. Peer Researchers answered clarifying questions regarding the survey, including literacy-related questions. When necessary, Peer Researchers worked with the youth one-on-one to read the survey aloud. Use of a YPAR approach allowed us to have greater confidence that youth participants shared their concerns and questions with the research staff throughout the process.

Next, Peer Researchers attended each of the *Start Strong* sessions and conducted semi-structured observations assessing the fidelity of curriculum implementation. While Peer Researchers were exclusively observers of the curriculum implementation, efforts were made to ensure that the youth participating in the program, as well as the Peer Leaders, became comfortable with their presence. Peer Researchers debriefed and reviewed their observations in their weekly project meetings. The team synthesized feedback from the observations to share with the Boston Public Health Commission staff to potentially improve program implementation. Once fully analyzed, the data from the observations will be shared in a final report for the staff, including recommendations for manual revisions.

Data Entry and Analysis The project manager trained the Peer Researchers in developing databases and entering data into them. All quantitative data were double-entered and checked for quality. Peer Researchers were also trained in qualitative data entry, including transcription of focus group data and entering session observation data. Peer Researchers were trained in basics of quantitative and qualitative data analyses, data interpretation, and dissemination of findings. Peer

Researchers conducted within subject ANOVA to look at changes between pre- and post-test surveys and thematic analysis (Braun and Clarke 2006) to extract major/minor themes and insights from the focus group and participant observation data. Peer Researchers’ insights into the data provided a necessary contextual perspective to the data analysis team. Peer Researchers presented findings from the direct observations of all sessions taught across five locations, four focus groups, and survey analysis of 39 paired assessments to the Boston Public Health Commission, including *Start Strong* program staff and program staff from other relationship violence prevention programs. Their perspectives and co-authorship have been an integral part of the development of this manuscript.

Lessons Learned

Our efforts to incorporate a YPAR framework into the evaluation, building upon the innovative partnerships and integration of Peer Leadership in the development and administration of the *Start Strong* Program, have been quite successful. While the results of this feasibility study are currently being analyzed, we demonstrate that the inclusion of youth Peer Researchers in the design and conduct of the evaluation of an after-school based TDV prevention program for middle-school youth is both acceptable and feasible. The present evaluation using the YPAR model successfully: (1) developed, tested, revised, and analyzed the psychometric properties of TDV survey instruments that were appropriate to be used with middle school aged youth, (2) conducted and analyzed six focus groups, (3) administered and analyzed 39 pre- and post-survey pairs, (4) observed 11 weeks of *Start Strong* sessions in five sites, and (5) disseminated findings to academic and programmatic stakeholders. In many ways the framework strengthens our teams’ ability to design and conduct a thoughtful and rigorous evaluation. Here, we identify challenges that we encountered specific to the YPAR model, as well as the elements and approaches that have been instrumental in the success of this project. Importantly, we reflect on the unique and substantial contributions of youth participation in the evaluation of the *Start Strong* program.

Identifying and Training Youth as Researchers

As previously mentioned, we have hired and trained Peer Researchers, several of whom were formerly employed as Peer Leaders in the *Start Strong* program, and included them as active participants in all aspects of our evaluation efforts. Specifically, they assisted in developing study instruments, collecting study data, and participating in all dissemination

activities. Three of them are co-authors on this manuscript (Simmons, Ibeh, Figueroa).

Our initial model prioritized the hiring of Peer Researchers who were “graduating” from being Peer Leaders in the *Start Strong* program. We considered the Peer Leader alumni ideal candidates for integration into the evaluation team because of their deep knowledge of the *Start Strong* program and the program participants. Several challenges quickly arose related to scheduling and recruitment. First, many of these youth were graduating from high school and their schedules were highly fluid. For example, those initially hired as Peer Researchers were beginning college as they began working on the evaluation, and did not anticipate the variability and demands of their new schedules. This required our team to create a scheduling system with a high level of flexibility to respond to demands of school or work. In addition, the *Start Strong* program had little flexibility as to the days of the week that surveys could be administered, as the sessions often occurred at a given site on one specific afternoon of the week. This created challenges in working out schedules to maximize the Peer Researchers’ time on program days.

Thus, despite persistent efforts to reconcile the need for flexibility with the Peer Researchers’ schedules with the constraints of the programming sites’ schedules, retention of the first cohort of peer researchers was a challenge. This required us to expand our recruitment of Peer Researchers to Northeastern University students who grew up in the neighborhoods that the *Start Strong* program served, but had not previously served as Peer Leaders for *Start Strong*. The Peer Researchers who were recruited from Northeastern University had fewer barriers in getting to weekly meetings and work obligations. The current team of Peer Researchers includes both former *Start Strong* Peer Leaders as well as Northeastern University students who grew up in Boston and who have personal experience with the neighborhood community centers that serve as *Start Strong* sites. This team of young adults has worked quite well and has allowed us to include diverse youth perspectives and experiences of growing up in Boston. Echoing findings by others who advocate for YPAR methods, the diversity of this group was one of the strongest assets of our team (C. B. Powers and Allaman 2012).

Transitioning to “Peer Researcher”

Working with Peer Researchers to help them understand and develop appropriate boundaries in their new role as researchers (including those who had been Peer Leaders) was very important. While our Peer

Researchers were able to draw upon their lived experiences and training to develop strong rapport with the students in the program, there were challenges as well. Peer Researchers gathering structured observational data sometimes led to challenging interactions with current Peer Leaders. This was particularly true when the Peer Leaders were not told ahead of time by program administrators about the presence or role of the Peer Researchers. Occasionally, difficulties arose including distrust and suspicion. We learned it was imperative for us to make clear the role of the Peer Researchers to the Peer Leaders and the student participants before sessions began.

Relatedly, there were situations when the Peer Researchers (with years of experience as Peer Leaders and facilitators of youth programming) were tempted to step in and help the current Peer Leaders in leading the lesson or aiding in classroom management. In situations where the Peer Leaders were struggling to keep the middle-school youth engaged, navigating the boundaries between Researcher and (former) Leader was particularly challenging. For example, one Peer Researcher who previously served as a Peer Leader found herself wanting to advise Peer Leaders before sessions she believed were challenging to teach. Support from other Peer Researchers and reflection on the training she received about the responsibilities of her new role helped her to overcome urges to step in. Our work highlights the importance of clearly articulating boundaries and roles when youth are involved as researchers in community interventions.

Communication and Flexibility

Developing a cadre of young adult Peer Researchers has required us to think flexibly about how our evaluation project was structured. The project manager role was critical and in our case, was filled by a doctoral student who had primary supervision and was in frequent contact with all Peer Researchers. Regular communication, including weekly meetings and a willingness to adapt to changing circumstances, was needed to keep everyone engaged and connected to the project. In particular, identifying an appropriate and timely way to communicate was essential given the last-minute nature of changes at sites; in our case, use of both text messaging and group messaging were very successful.

Contextualizing Research Challenges for Youth Researchers

Finally, we faced many of the same problems that non-YPAR program evaluation teams face: challenges with

recruitment of study sites, delays with IRBs, a steady flow of scheduling changes from study sites and senior investigators on the team, and the need to balance needs of the community program with those of the research design. Each of these areas required attention to the needs of our Peer Researchers and a positive learning and work environment for the team. As inevitable delays in the timeline occurred, it was important to keep the Peer Researchers invested and engaged in the research process. For example, when we needed to delay data collection at the sites, we took that time as an opportunity to train the Peer Researchers in other facets of research, such as refining library skills as a means for conducting comprehensive literature reviews.

Youth Researcher Perspective in TDV Research

The present evaluation added to the mounting body of research supporting youth inclusion to improve the quality and relevance of research. Including Peer Researchers as an integral part of the current evaluation allowed for greater ease and candidness between the research team, the middle-school youth, and the Peer Leaders, which in turn improved the quality of the data that the evaluation team were able to collect. For example, as Peer Researchers got to know the youth and the Peer Leaders, their relationships encouraged the participants to be themselves. Peer Researchers felt they got a more accurate portrayal of the program that way. One Peer Researcher described that “forming a relationship with the Peer Leaders helped when conducting the focus groups [with the Peer Leaders] because they were more open with us and it was easier to get deeper information from them.” Similarly, these relationships allowed youth to openly communicate with the Researchers; for example, the middle-school youth were comfortable asking the Peer Researchers for clarification when they didn’t understand the vocabulary used in our survey. The ease with which youth researchers communicate with their peers and near peers has been well documented in the literature (e.g. C.B. Powers and Allaman 2012).

Additionally, incorporating the expertise and voices of the Peer Researchers as a part of the evaluation allowed us to strengthen the content and administration of the evaluation. The Peer Researchers were instrumental in helping us adapt previously validated instruments (such as surveys and direct observation tools) so that our tools were appropriate for the cultural context of the youth and the programming (C.B. Powers and Allaman 2012; J.L. Powers and Tiffany 2006).

Adolescents who participated in the evaluation were majority Black and Latino middle-school students from various neighborhoods of Boston. Aside from being four to 6 years older, Peer Researchers matched the participants’ demographics. Peer Researchers were able to make informed suggestions for adapting language used in previously validated instruments to be in sync with language used by youth participants when needed. Peer Researchers were also able to help choose questions to remove from the survey tool that they believed were not suited for the evaluation. New focus group guides benefited particularly from the Peer Researchers leading the development of questions; items were able to adeptly capture nuances of the lives of our middle-school youth and Peer Leaders. For most of the Peer Researchers, this was their first time being tasked with developing a tool that would be used out in the field. Another Peer Researcher described the first-time experience as “empowering because our opinions were being heard and taken seriously every time we voiced a concern or wanted to make a change to something.” Simply stated, the Peer Researchers were instrumental in identifying which concepts were important, what questions were needed to capture those concepts, and how to ask those questions appropriately and respectfully.

Conclusion

In our work, we have demonstrated that a YPAR evaluation model of a middle school intervention program is acceptable and feasible and leverages many research and community strengths. Overall our use of this model greatly enhanced the evaluation process. Our young adult Peer Researchers brought to the team a unique ability to shape study instruments for cultural and educational appropriateness and were often more familiar with intervention settings than researchers on the team. Their implementation suggestions were frequently very useful to both the research and program teams. In addition, their work as Peer Researchers helped to develop their capacity and skills for future academic, research, and professional efforts.

Acknowledgments This research was supported by the National Institutes of Health (1R21HD083587-01A1; PI: Molnar).

Appendix 1. Example Observation Tool

Start Strong Boston Feasibility Study

Direct Observation Tool, Summary Sheet

Peer Researcher: _____

Site: _____

Date: _____

Week number: _____

Lesson topic: _____

Number of youth (beginning of lesson): _____

End of lesson: _____

Time started: _____

Time ended: _____

Any breaks during the lesson? (If so: how many and for how long?) _____

Data entered: _____

Date & Initial: _____

Start Strong Boston Feasibility Study

Direct Observation Tool, Summary Sheet

Comments on the lesson: (Complete this section at the *end* of each lesson. Refer back to notes taken during lesson.)

What questions raised by students that went deeper into the material? (Describe)

What were any periods when students seemed confused by the lesson?(If so: describe including how this was addressed?)

What activities and/or objectives added to the lesson that are not in the manual?

What sections that were in the manual were skipped? Any sections that seemed rushed?

Any environmental considerations that may have affected the lesson? (i.e. loud, cold, etc.)

Were there any times that Peer Leaders behaviors seemed out of the ordinary?

Did the conversation ever go “off-topic”? When? Please describe:

Any observations of youth’s perception/feelings about the lesson? Please describe:

Other observations:

Fidelity Ranking Scores:

0: Section/exercise not covered
 1: Section/exercise covered, but not in the way described in the manual
 2: Section/exercise started, but objective not fully met
 3: Section/exercise covered, all objectives met in the way described in the manual

Lesson ____ : Part 1

Lesson ____ :					
Exercise	Fidelity Goal	Fidelity Ranking (0-3)	Discussion led to other topics? (Y/N and topics?)	Anyone seemed confused? (Y/N and when?)	Environmental concerns? (Y/N and what?)

Fidelity Ranking Scores:

0: Section/exercise not covered
 1: Section/exercise covered, but not in the way described in the manual
 2: Section/exercise started, but objective not fully met
 3: Section/exercise covered, all objectives met in the way described in the manual

Lesson ____ : Part 1

Lesson ____ :			
Exercise Activity (From Last Page)	Peer Leader Observations	Discussion went “off-topic”	Perceptions of youth feelings

Fidelity Ranking Scores:

0: Section/exercise not covered
 1: Section/exercise covered, but not in the way described in the manual
 2: Section/exercise started, but objective not fully met
 3: Section/exercise covered, all objectives met in the way described in the manual

Lesson ____ : Part 2

Lesson ____ :					
Exercise	Fidelity Goal	Fidelity Ranking (0-3)	Discussion led to other topics? (Y/N and topics?)	Anyone seemed confused? (Y/N and when?)	Environmental concerns? (Y/N and what?)

Fidelity Ranking Scores:

0: Section/exercise not covered
 1: Section/exercise covered, but not in the way described in the manual
 2: Section/exercise started, but objective not fully met
 3: Section/exercise covered, all objectives met in the way described in the manual

Lesson ____ : Part 2

Lesson ____ :			
Exercise	Peer Leader Observations	Discussion went “off-topic”	Perceptions of youth feelings
Activity (From Last Page)			

Appendix 2. Example Focus Group Guide

Middle School Focus Group Guide

Start Strong Feasibility and Acceptability Study

Thank you for talking to us today. We asked you here today to find out what kids your age think about dating. We won't ask you about your own personal experiences dating, but we do want to find out what your opinions are. Anything that you say stays in this room. We ask that you be honest with us. We want to hear everyone's opinions. There are no right or wrong answers and you do not have to all agree. We will be taking notes and recording this session. It will be helpful and respectful if only one person talks at a time.

1. We want to start by getting to know a little bit about who is in the room. Can we go around the table and say how old you are, what grade you are in, and what's your favorite summer food?
2. Now, I want to know what you picture in your head. If I told you that two kids your age were in a dating relationship. What would that look like?
 - a. (Probe: what are some things that they do together? What do they say about each other? Call each other? Note: same-sex relationships may or may not be given as examples – let them bring them up if they choose)
3. If those two kids have a crush on each other but aren't dating, what is the difference?
4. In your opinion, when is a good age for kids to start dating? Why? (Why not younger? Why not older?)
5. We want to learn the words or slang that you use to talk about relationships. It can be for not very serious relationships, like flirting, to very serious relationships, like marriage. What are some slang words that you use to talk about relationships? (Probe if any terms aren't clear what they mean.)
6. When you are learning about relationships, where do you get information about relationships? <Probe: family members, friends, online, TV?>

There are many different kinds of romantic relationships. By 'romantic relationship' we mean any of the

words you just gave us (use words from Q5). Some of them are more healthy and less healthy, or even bad for the people who are in the relationship. We want to ask you about what you think makes a romantic relationship healthy or unhealthy.

7. What are some qualities of a healthy romantic relationship? Or what are some things that make a relationship good for the people who are in the relationship?
 - a. (If this seems over their head, follow up with: There are good and bad romantic relationships. A good relationship makes the people feel good inside and happy. What are some things that make a romantic relationship good or bad?)
8. What are some qualities of an unhealthy relationship? What types of relationships are bad for the people who are in them?
9. What is dating violence? <Probe: what are some types of dating violence? For example, hitting.>
10. What would you do if you were in a bad or unhealthy relationship? What would you do if your friend was in a relationship that was bad for them?

For these next questions, we want you to think about romantic relationships that you see in the media or on TV. These might be celebrity relationships, relationships from TV or movies, or relationships from books.

11. Do you think that romantic relationships on TV or in movies are like relationships in real life? How are they the same or different?
12. Can you tell me about a romantic relationship that you think is healthy? What makes that relationship healthy? Be as specific as you can.
13. Can you tell me about a romantic relationship that you think is unhealthy? What makes that relationship unhealthy? Be as specific as you can.
14. Is there anything else that you think we should know to help us better understand how people your age think about romantic relationships?

Thank you for your time and honesty! We will stick around for a few minutes in case you want to speak to any of us privately.

Appendix 3. Pre- and Post-Test Survey Overview

Start Strong Feasibility Study Survey

Section	Example items
Demographics	Age, Grade, Gender identity
Knowledge	“Which of these can be types of dating abuse? (Check all that apply.)”, “What is empathy?”
Your experiences	“During a conflict or argument with a dating partner in the past year, how often did you...?” (Adapted from CADRI)
How to have a break-up	How much do you agree? “Sharing something negative about your ex on social media is okay.”
What counts as unhealthy?	In your opinion are these behaviors unhealthy? “Snooping through a dating partner’s text messages, email or cell phone call list is unhealthy”
Gender norms	How much do you agree? “Guys who act soft don’t get girls”
Acting as a bystander	In the past year, did you do any of the following? “Someone was being hurt by a dating partner, and I told him or her that it wasn’t OK.”
Relationship values	How much do you agree? “Most good relationships involve some physical fights and some drama.”

References

- Ackard, D. M., Eisenberg, M. E., & Neumark-Sztainer, D. (2007). Long-term impact of adolescent dating violence on the behavioral and psychological health of male and female youth. *Journal of Pediatrics*, *151*(5), 476–481. <https://doi.org/10.1016/j.jpeds.2007.04.034>.
- Ali, A. Z., Ali, & H. N. (2015). Teen dating violence. *International Journal of Women Empowerment*, *1*. <https://doi.org/10.29052/2413-4252.v1.i1.2015.30-32>.
- Alleyne-Green, B., Coleman-Cowger, V. H., & Henry, D. B. (2012). Dating violence perpetration and/or victimization and associated sexual risk behaviors among a sample of inner-city African American and Hispanic adolescent females. *Journal of Interpersonal Violence*, *27*(8), 1457–1473. <https://doi.org/10.1177/0886260511425788>.
- Benson, M., & Fox, G. L. (2004). *When violence hits home: How economics and neighborhood play a role*. Washington, DC: National Institute of Justice.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>.
- Break the Cycle. (2014). About us. Retrieved from <https://www.breakthecycle.org/>.
- Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development*, *61*(4), 1101–1111. <https://doi.org/10.2307/1130878>.
- Cascardi, M., & Avery-Leaf, S. (2014). Case study of a school-based universal dating violence prevention program. *SAGE Open*, *4*(3). <https://doi.org/10.1177/2158244014551716>.
- Centers for Disease Control and Prevention. (2016). Youth Risk Behavior Surveillance System (YRBSS). Retrieved from <https://www.cdc.gov/healthyyouth/data/yrbs/index.htm>
- Centers for Disease Control and Prevention. (2017). Teen dating violence. Retrieved from https://www.cdc.gov/violenceprevention/intimatepartnerviolence/teen_dating_violence.html
- De La Rue, L., Polanin, J. R., Espelage, D. L., & Pigott, T. D. (2017). A meta-analysis of school-based interventions aimed to prevent or reduce violence in teen dating relationships. *Review of Educational Research*, *87*(1), 7–34. <https://doi.org/10.3102/0034654316632061>.
- Exner-Cortens, D., Eckenrode, J., & Rothman, E. (2013). Longitudinal associations between teen dating violence victimization and adverse health outcomes. *Pediatrics*, *131*(1), 71–78. <https://doi.org/10.1542/peds.2012-1029>.
- Fedina, L., Howard, D. E., Wang, M. Q., & Murray, K. (2016). Teen dating violence victimization, perpetration, and sexual health correlates among urban, low-income, ethnic, and racial minority youth. *International Quarterly of Community Health Education*, *37*(1), 3–12. <https://doi.org/10.1177/0272684X16685249>.
- Hickman, L. J., Jaycox, L. H., & Aronoff, J. (2004). Dating violence among adolescents: prevalence, gender distribution, and prevention program effectiveness. *Trauma Violence Abuse*, *5*(2), 123–142. <https://doi.org/10.1177/1524838003262332>.
- Johnson, R. M., Parker, E. M., Rinehart, J., Nail, J., & Rothman, E. F. (2015). Neighborhood factors and dating violence among youth: a systematic review. *American Journal of Preventive Medicine*, *49*(3), 458–466. <https://doi.org/10.1016/j.amepre.2015.05.020>.
- Lau, G., Netherland, N. H., & Haywood, M. L. (2003). Collaborating on evaluation for youth development. *New Directions for Evaluation*, *2003*(98), 47–59. <https://doi.org/10.1002/ev.84>.
- London, J. K., Zimmerman, K., & Erbstein, N. (2003). Youth-led research and evaluation: tools for youth, organizational, and community development. *New Directions for Evaluation*, *2003*(98), 33–45. <https://doi.org/10.1002/ev.83>.
- Malhotra, K., Gonzalez-Guarda, R. M., & Mitchell, E. M. (2015). A review of teen dating violence prevention research: what about

- hispanic youth? *Trauma Violence Abuse*, 16(4), 444–465. <https://doi.org/10.1177/1524838014537903>.
- Miller, S., Williams, J., Cutbush, S., Gibbs, D., Clinton-Sherrod, M., & Jones, S. (2015). Evaluation of the start strong initiative: preventing teen dating violence and promoting healthy relationships among middle school students. *Journal of Adolescent Health*, 56(2), S14–S19. <https://doi.org/10.1016/j.jadohealth.2014.11.003>.
- Niolon, P. H., Vivolo-Kantor, A. M., Latzman, N. E., Valle, L. A., Kuoh, H., Burton, T., ... Tharp, A. T. (2015). Prevalence of teen dating violence and co-occurring risk factors among middle school youth in high-risk urban communities. *Journal of Adolescent Health*, 56(2 Suppl 2), S5–13. doi:<https://doi.org/10.1016/j.jadohealth.2014.07.019>.
- Noonan, R. K., & Charles, D. (2009). Developing teen dating violence prevention strategies: formative research with middle school youth. *Violence Against Women*, 15(9), 1087–1105. <https://doi.org/10.1177/1077801209340761>.
- Oudekerk, B., Blachman-Demner, D., & Milford, C. (2014). *Teen dating violence: How peers can affect risk & protective factors*. Washington, DC: National Institute of Justice.
- Powers, C. B., & Allaman, E. (2012). How participatory action research can promote social change and help youth development. Retrieved from <http://cyber.harvard.edu/sites/cyber.harvard.edu/files/KBWParticipatoryActionResearch2012.pdf>
- Powers, J. L., & Tiffany, J. S. (2006). Engaging youth in participatory research and evaluation. *Journal of Public Health Management and Practice*, Suppl, S79–87.
- Price, E.L., Byers, E.S., Belliveau, N., Bonner R., Caron B., Doiron D, ... Moore R. (1999). The attitudes towards dating violence scales: development and initial validation. *Journal of Family Violence*. 14(4), 351–375. <https://doi.org/10.1023/A:1022830114772>.
- Ritchwood, T. D., Albritton, T., Akers, A., Dave, G., Carthron, D., Adimora, A., ... Grace, P. (2015). The effect of teach one reach one (TORO) on youth acceptance of couple violence. *Journal of Child and Family Studies*, 24(12), 3805–3815. <https://doi.org/10.1007/s10826-015-0188-5>.
- Rothman, E. F., & Xuan, Z. (2013). Trends in physical dating violence victimization among U.S. high school students, 1999–2011. *Journal of School Violence*, 13(3), 277–290. <https://doi.org/10.1080/15388220.2013.847377>.
- Rothman, E. F., McNaughton Reyes, L., Johnson, R. M., & LaValley, M. (2012). Does the alcohol make them do it? Dating violence perpetration and drinking among youth. *Epidemiologic Reviews*, 34(1), 103–119. <https://doi.org/10.1093/epirev/mxr027>.
- Sabo, K. (2003). A Vygotskian perspective on youth participatory evaluation. *New Directions for Evaluation*, 2003(98), 13–24. <https://doi.org/10.1002/ev.81>.
- Spriggs, A., Halpern, C., & Martin, S. (2009). Continuity of adolescent and early adult partner violence victimization: association with witnessing violent crime in adolescence. *Journal of Epidemiology & Community Health*, 63(9), 741–748. <https://doi.org/10.1136/jech.2008.078592>.
- Stueve, A., & O'Donnell, L. (2008). Urban young women's experiences of discrimination and community violence and intimate partner violence. *Journal of Urban Health*, 85(3), 386–401. <https://doi.org/10.1007/s11524-008-9265-z>.
- Tharp, A. T. (2012). Dating matters™: the next generation of teen dating violence prevention. *Prevention Science*, 13(4), 398–401. <https://doi.org/10.1007/s11121-012-0307-0>.
- Vagi, K. J., Rothman, E. F., Latzman, N. E., Tharp, A. T., Hall, D. M., & Breiding, M. J. (2013). Beyond correlates: a review of risk and protective factors for adolescent dating violence perpetration. *Journal of Youth and Adolescence*, 42(4), 633–649. <https://doi.org/10.1007/s10964-013-9907-7>.
- Vagi, K. J., O'Malley Olsen, E., Basile, K. C., & Vivolo-Kantor, A. M. (2015). Teen dating violence (physical and sexual) among US high school students: findings from the 2013 National Youth Risk Behavior Survey. *JAMA Pediatrics*, 169(5), 474–482. <https://doi.org/10.1001/jamapediatrics.2014.3577>.
- Wincentak, K., Connolly, J., & Card, N. (2017). Teen dating violence: a meta-analytic review of prevalence rates. *Psychology of Violence*, 7(2), 224–241. <https://doi.org/10.1037/a0040194>.
- Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A. L. (2001). Development and validation of the conflict in adolescent dating relationships inventory. *Psychological Assessment*, 13(2), 277–293. <https://doi.org/10.1037/1040-3590.13.2.277>.
- Yonas, M. A., Burke, J. G., & Miller, E. (2013). Visual voices: a participatory method for engaging adolescents in research and knowledge transfer. *Clinical and Translational Science*, 6(1), 72–77. <https://doi.org/10.1111/cts.12028>.