



Growing Up on the Edge: A Community-Based Mental Health Intervention for Children in Gaza

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Abstract

The Gaza Strip is a notoriously high-conflict area, but few large-scale studies have examined the rates of psychiatric distress and emotional/behavioral problems among Gaza youth, and there are few trauma-informed, scaleable intervention options. Studies in existence have used smaller samples or have examined focal problems such as posttraumatic stress disorder (PTSD) or aggression. Here, we examine the mental health burden of young individuals (ages 8–13) in Gaza across a broad range of symptoms, and demonstrate the impact of a community-based, trauma-informed program, Eye to the Future. At the outset of this supportive youth program, over 2000 children and adolescent youth and their parents reported on child well-being using standardized measures with established global norms (the Child Behavior Checklist and Youth Self Report). These measures examine symptoms broadly (e.g. anxiety, depression, social problems, attention problems, aggression, etc.). Relative to U.S. population estimates, children in Gaza had between 2.5- and 17-times higher point prevalence of clinical mental health problems. The most significant clinical concern was anxiety, but overall, their symptoms were not confined to post-traumatic stress as a disorder and were instead broadly dispersed. However, these concerns were responsive to intervention: over the course of a six-month community psychosocial program, symptoms ameliorated, with approximately 50–70% showing reliable improvement at post-program (varying by measure). These gains were maintained in a 9-month follow-up. Future work should consider the broader mental health impact, beyond PTSD and aggression, and incorporate community supports into addressing mental health among children in the region.

Keywords Gaza · Child mental health · Psychiatric distress · Internalizing · Externalizing · Global mental health

The Gaza Strip has occupied international attention since the end of World War II. It is one of the most densely populated places on earth and has been exposed to virtually unrelenting conflict for the past 60 years. The Gaza Strip has been a focal point of the Israeli-Palestinian conflict for decades, and has witnessed multiple military operations that led to the loss of many

lives, destruction of infrastructure, displacement of Gazans, and profound trauma for the population (Amnesty International, 2014). Residents of the Gaza Strip also face a host of social and economic challenges; according to a recent report from Amnesty International (Israel's Apartheid against Palestinians: Cruel System of Domination and Crime against Humanity, 2022), Palestinians in Gaza have been continuously subjected to escalating issues of overcrowding and inadequate housing due to lack of available land and housing options, inadequate health care services, and severely restricted flow of goods, services and people in and out of the territory, due to an Israeli-Egyptian blockade since 2007. Existing data point to a significant psychological toll on the residents of Gaza from the cumulative effect of ongoing violence and restricted living conditions (Boxer et al., 2013; Dubow et al., 2010; Garbarino & Kostelny, 1996; Loughry et al., 2006; Thabet et al., 2004; Zakrison et al., 2004). We aim to a) quantify Gaza children's mental health burden across a broad range of symptoms, and b) provide preliminary data on the

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impact of a community-based intervention. This unremitting conflict has had a devastating impact on every aspect of life in Gaza. The current generation of youth in Gaza are doubly affected: they are at once directly exposed to the conflict, while also being brought up by war-exposed adults. The family structure as a whole is under tremendous strain: poverty is profound, unemployment is high, and families are large (*Gaza Situation Report 149* | UNRWA, n.d.).

Though little data exists on Gaza, other studies have examined the effect of growing up in a war zone on a society's children (Paardekooper et al., 1999; P. Smith et al., 2002; Vizek-Vidović et al., 2000; Zakrisson et al., 2004). Previous research has focused on children with direct experiences of violence (Garbarino & Kostelny, 1993; Qouta et al., 1995), or focused specifically on aggression or post-traumatic stress disorder (PTSD) as a diagnosis. However, in other high-conflict settings, the impact of ongoing political violence affects mental health more broadly than the PTSD diagnosis (Hassan et al., 2016; Sagi-Schwartz, 2008). A broader approach, which focuses on establishing psychological safety to reduce a range of manifestations of distress, is consistent with Jensen and Shaw's (1993) recommendation for research on the "low-to-moderate effect of war", or the consequences of being in close proximity to conflict with or without direct victimization (1993). Accordingly, this paper measures a broad psychological symptom set in a large sample with parent-and child reports to examine the mental health among youth in Gaza. Furthermore, this work seeks to demonstrate that despite ongoing political conflict, community-based support for mental health may be beneficial to youth in Gaza.

Given the context of ongoing violence, several studies have demonstrated elevated PTSD rates in the region. In one of the larger studies (Boxer et al., 2013; Dubow et al., 2010) to report on mental health in Gaza youth (N=600), Boxer and Dubow find significant PTSD symptoms elevation. However, their work does not report on broader child mental health problems, such as anxiety, depression, or social problems beyond aggression. Indeed, there is evidence that Gazans are at elevated risk for a range of mental health problems that are not restricted to trauma-related symptoms alone. A study of 400 children living in refugee camps in Gaza found that direct exposure to trauma was not only associated with PTSD, but also had a strong association to depression (Thabet et al., 2004). Additionally, Garbarino (1993) found that 20% of children in Gaza were in the clinical range for psychiatric symptoms based on a broad symptom assessment. Among 150 Gaza youth, Loughry et al. (2006) similarly reports broad mental health burdens.

Mental health symptoms may be exacerbated in the context of strained social contexts. In Gaza, two key institutions that provide a "safe base" for children to develop positive social behavior—the family and the school—are under enormous pressure. Profound poverty—68 percent of the population is dependent on food aid, and 70% of the young adult

population is unemployed (BBC News, 2012; *Food Insecurity in the oPt: 1.3 Million Palestinians in the Gaza Strip Are Food Insecure*, n.d.)—is paired with the stressors of ongoing physical threats to safety associated with the conflict. Children in Gaza have further elevated mental health risk because they and their parents are left without positive structures to support social development, because supporting community structures such as schools, community centers, out of school programming, and community health services have disbanded or been diminished due to lack of resources. For example, school resources in Gaza are also stretched thin, with large class sizes (averaging 41 students/class) and shortened school days (BBC News, 2012).

Some important inroads have been made in attempting to support the mental health of people in a variety of high-distress situations, and provide important directions for elaboration and integration with youth in high conflict regions. Three such approaches include Psychological First Aid (PFA; Brymer et al., 2006); Attachment, Regulation and Competency (ARC; Kinniburgh et al., 2005); and Positive Youth Development (PYD; Catalano et al., 2004; Granger, 2002). These approaches draw from global mental health, clinical psychology/social work and community mental health, respectively, and each has contributions and limitations. While PFA focuses on psychoeducation and social support in the immediate aftermath of traumatic events, such as natural disasters, acts of terrorism, or events causing migration, and is provided by lay-personnel, the model is relatively time-limited with contact lasting several meetings at most (Hermosilla et al., 2023); and, it tends to be implemented with adults. In contrast, the ARC model is designed for longer-term trauma-informed engagement and incorporates lay mental health workers, but is usually implemented with youth whose program engagement is driven by serious mental illness and childhood maltreatment, rather than within settings where war and violence are primary concerns. PYD uses play- or sports-based approaches to capitalize on long-term relationships in community-based settings, including high-conflict and post-disaster areas. The goal is to intentionally create engaging programming to foster self-regulation and self-efficacy in the context of caring relationships. However, while PYD goals are aligned with the aims of clinical interventions, PYD programs have not historically incorporated measurement of clinically-focused mental health outcomes. Meanwhile, the ARC and PYD models have had success in US and Canadian contexts (Arvidson et al., 2011; D'Andrea et al., 2013; Fehrenbach et al., 2022), but have had limited application outside of North America. Thus, drawing from all three approaches allows for a program which is culturally responsive, incorporates a trauma-informed stance, addresses mental health concerns, and engages youth through play-based community supports.

The Eye to the Future Intervention

In this critical context, the last author and CARE International developed and implemented a new program designed to provide extracurricular support during late childhood and early adolescence called Eye to the Future (E2F). Focused on reinforcing the positive social development with family and in school, E2F was designed to provide on-going social and academic support to children ages 9 to 13 living in 10 different communities across the Gaza Strip. Research has consistently demonstrated the role that caring adults play both as protective factors against stress and trauma and in the positive social development of children (Benard, 2004). Therefore, E2F centered on the development of safe spaces for children to socially engage with each other and with assigned mentors.

E2F differs importantly from other existing programs, but is built on established models of community violence response such as Psychological First Aid (PFA; Brymer et al., 2006), the Attachment, Self-Regulation, and Competency (ARC) model (Kinniburgh et al., 2005), and the Positive Youth Development (PYD) model (Catalano et al., 2004; Granger, 2002). However, differently from these approaches, E2F was designed to emphasize social support and connection with caring, local lay adults trained in understanding child mental health in a culturally-specific manner over a longer time-frame. The program lasted six months per cohort, and mentors provided academic support as well as a variety of experiences ranging from more organized sporting and interactive theater activities to opportunities for free play, conversation among peers, and one-on-one time with mentors.

The E2F program in particular sought to address youth mental health by leveraging caring mentors to provide sustained social and academic support to youth. The use of mentors was modeled after the success of PYD-informed programs in the US, such as Big Brother-Big Sister (Benard, 2004; DeWit et al., 2016; Howell & Miller-Graff, 2014; Reese et al., 2000). Activities were designed in accordance with the ARC model (Kinniburgh et al., 2005) to a) use a phase-based approach to build alliance and trust between youth and mentors and b) provide children with the ability to build emotion regulation and conflict resolution skills. Most importantly, the program was designed in partnership with participating community based organizations (CBOs), and attempted to build connections between mentors and families in their community. For example, mentors were all drawn from the community in which they were to be employed. They made dedicated efforts to build trust in ways appropriate to the cultural context, for example by visiting families in their homes for tea, to learn about each family's needs. This allowed for each E2F site to have

programming that was culturally relevant and specific to the communities in which they were based.

Study Overview and Aims

Building on a) smaller-scale studies demonstrating mental health burden among Gazan youth, and b) applicable mental health approaches, this paper aims to provide a better understanding of the effect an environment of war can have on the mental health of children by looking at a broad range of symptoms as reported by both parent and child. Documenting the mental health challenges among children in the Gaza Strip may help in the development of targeted humanitarian aid programs, and inform theory on the intergenerational political conflict.

Collecting data systematically in high-conflict areas is practically challenging, and gaps may be attributable to these challenges. One of the limitations of extant research is the lack of collateral report: using multiple reporters is recommended in research with children (Rosenthal & Rosnow, 1991), but most studies provide only a single perspective. Another is availability of validated measures appropriate for the cultural context. A third is the practical ability to deploy individuals trained in assessment and with the ability to engage participants. And finally, given that conflict in Gaza occurs in waves, mental health burdens may be cohort-specific and tied to eruptions in violence, requiring continual updating in order to stay relevant. This paper attempts to address some of these gaps.

Establishing broad mental health needs helps to define the scope of intervention; if the mental health burden is relatively circumspect, then models of intervention may be best enacted within settings such as clinics, for example, to focus specifically on anxiety, mood symptoms, peer problems, or issues with learning or behavioral regulation. However, if the mental health burden is pervasive and ubiquitous, it may be more feasible and impactful to integrate services into community settings which are readily accessible and for which the barrier to entry is not tied to diagnosis. Accordingly, demonstrating that well-trained but nonetheless lay youth workers are able to successfully intervene with children in Gaza is critical to seeding a long-term mitigation of the impact of the conflict. Showing that the mental health conditions of youth living with extreme stress in Gaza are in fact responsive to intervention, and not intractable despite ongoing adversity, may create opportunities for community-based organizations to bring much-needed services to youth in the region. Further, showing that mental health stress can be reduced through approaches which draw on clinical interventions, but which are fundamentally community-based, may address resource gaps and improve access to care.

In sum, we hypothesized that children who live in the Gaza Strip will exhibit a broad range of psychiatric symptoms, with severity and prevalence higher than that of geographically and culturally close countries. We further hypothesized that a community-based program which emphasizes safe and caring social connections, play as a means of developing emotion regulation, and semi-structured opportunities for building competency can reduce the mental health burden of children in Gaza.

Method

Overview

The goal of Eye to the Future is to mitigate the impact of trauma and violence in Gaza, an area that is on the frontline of the Palestinian-Israeli conflict. Baseline mental health was reported by parents and children within the first and last three weeks of the program; a subset of youth completed follow-up measures at nine months post-program. The evaluation plan was reviewed and approved by the New School for Social Research Institutional Review Board.

Participants

This program engaged approximately 5,000 children in Gaza. The children and their parents were enrolled through a full selection process, where community-based organizations advertised within their premises, community centers, sports and social clubs, and websites about the project requesting the parents to fill out applications for the children in order to join the after-school academic and psychosocial program. All applications were reviewed by mentors, coaches, psychosocial specialists, and executive managers at each organization with a goal towards recruiting cohorts who would be balanced in terms of age, gender, and initial reports of presenting problems (such that groups were attempted to be comprised of youth with few reported problems alongside youth with notable struggles). However, neither a history of behavioral or psychological problems nor past clinical involvement was required for inclusion in the program. Children ages 8–13 were included because, in Gaza, these are ages in which children begin to spend more time away from their parents. While the measures would be valid with youth over 13, the upper end of the age range was curtailed, as older adolescents would require substantially different programming from the youngest children in the group to be developmentally appropriate.

Children ages 8–13 and parent/s, were recruited for program evaluation purposes, with a total of 1783 completed datasets for both reporters at baseline, and 1433 had completed data for parent and child at baseline and post-program,

yielding reports on 2341 youth from either self or caregiver report. From these, 287 children completed 9-month follow up data; owing to the grant period, follow-up data were only available for cohorts 1 and 2. Further, a subgroup of children only completed post-program data and not baseline data ($n=90$), in order to test for a potential impact of multiple administrations on reporting.

Materials and Measures

Mental health was assessed with the *Youth Self Report* (YSR; Achenbach & Edelbrock, 1991b) and, for parent report, by the *Child Behavior Checklist* (CBCL; Achenbach & Edelbrock, 1991a), which are companion measures used to assess problem behaviors in children who are 4–18 years old. The YSR is a 112-item, self-administered instrument wherein children and adolescents report whether now or within the past 6 months they had experienced any of the target problems, using a 3-point response scale: 0 (not true or not at all), 1 (sometimes or somewhat true), and 2 (very true or often). The YSR yields eight syndrome scores: Withdrawn, Somatic Complaints, Anxious-Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior. The Syndrome scales in turn contribute to three broadband scores of Internalizing Problems, Externalizing Problems, and Total Problems (Achenbach & McConaughy, 1992). Four items that focus on sexual behavior, alcohol, and tobacco use, were deemed culturally inappropriate and thus eliminated; the elimination of these items is consistent with administration in the region and does not impact severity scores. In this sample, Chronbach's alpha for YSR was good ($\alpha = .87$).

The CBCL is a companion measure to the YSR and is a self-administered instrument to be completed by the primary caregiver of children ages 6–18. It is also designed to assess potential behavioral issues, including 113 problem-related behaviors items rated as 0 (not at all typical of the child), 1 (somewhat typical of the child), and 2 (often typical of the child). As with the YSR, scores are used to calculate ratings on the same eight syndrome scales, which are then used to generate three broadband scores (Achenbach & McConaughy, 1992). As with the YSR, items focused on sexual behavior, alcohol, tobacco and drug use were deemed culturally insensitive and were removed. Cronbach's alpha for the CBCL was good ($\alpha = .90$) in this sample.

Both the YSR and the CBCL have been translated into 52 languages (Ivanova et al., 2007; Rescorla et al., 2007). The syndromes have been validated across 30 societies across Asia, Africa, Australia, the Caribbean, Europe, the Middle East and North America (Ivanova et al., 2007). All measures are standardized for population norms, gender and age. Though these measures have been previously translated to Arabic, owing to regionally-specific dialects, new versions

were translated and back-translated, with the approval of the measures' authors.

For both the YSR and CBCL, raw scores are converted to region-specific *t*-scores, and clinical cutoffs are $t = 70$ for syndrome (e.g., social problems, aggression) scales, and 65 or higher for summary (e.g., internalizing) scales; borderline ranges are $t = 65\text{--}69$ and $60\text{--}63$, respectively. For reference, *t*-scores of 70 or higher on the syndrome scales would be expected at 2% prevalence in a population. The CBCL and YSR norms are divided into three groups. Group 2 contains norms for the US, as well as Israel and Lebanon, the countries geographically closest to Palestine with established norms; countries in the region, such as Turkey, Iran, and Algeria, which share the same language and religion as Palestine, are also in Group 2. Thus, as there are no established Palestinian norms, we utilized Group 2 norms and reported the proportion of children within the clinical range. Because analyses with large samples can yield significant correlations that are not necessarily clinically meaningful, we limit inferences to small-medium effect sizes or larger (e.g., $r = .2$, $d = .35$, $\eta^2 = .1$; Gignac & Szodorai, 2016).

Auxiliary Measures

According to the program's aims, several other measures were distributed to subsets of participants: The Brief Resilience Scale (Smith et al., 2008), to measure resilience; The Normative Beliefs about Aggression Scale (Huesmann & Guerra, 1997), to measure attitudes towards the acceptability of physical violence; the Peer Network and Dyadic Loneliness Scale (Hoza et al., 2000), to measure social connections and perceived loneliness; and The Life Orientation Test (Scheier et al., 1994), to measure optimism. These measures are not presented in this manuscript, as they are beyond the current aims.

Procedure

Assessment

All parents provided written informed consent and all children provided assent to participate in the program and its evaluation prior to the start date. Children participated once each in seven successive cohorts each with a program duration of six months. Both children and participating parents completed the measures as part of the intake process and upon completion of the program. All children in Cohort 1 were included in the assessment; in subsequent cohorts, approximately 30% of participants per site were selected for participation in the evaluation. The evaluation participants were selected randomly, except for being balanced for age and gender to minimize staff burden and allow focus on program activities. Cohort 1 did not differ in demographics

relative to the subsequent subset of participants; while some cohort differences did emerge (see Supplemental Table 1), Cohort 1 was roughly in the middle range of symptoms relative to other cohorts on both the YSR and CBCL, suggesting that the subset of participants measured in Cohorts 2–7 are representative of the entire group of enrolled children. As part of the intake process, children and parents both completed the YSR and the CBCL. Parents completed the questionnaires privately; children completed the questionnaires in a group, where the group leader read each question aloud and each child responded privately on their own paper copies.

Program Setting

Assessment took place in the context Eye to the Future, in cooperation with eight community-based organizational partners (CBO) and the 10 communities they served: Al Ataa' Charitable Society (Beit Hanoun), Beit Lahia Development Association (Beit Lahia), Eastern Gaza Society for Family Development (Eastern Gaza City), El Amal Rehabilitation Society (Southeast Rafah and Mawasi Rafah), Human Development Association (Al Qarara and Mawasi Khanyounis), Jabalia Rehabilitation Society (East Jabalia), Maghazi Community Rehabilitation Society (Juhor Al Deik), and Palestine Save the Children Foundation (Easy Deir Al Balah). The program was administered in an extracurricular setting via these community-based organizations.

Program Structure

Eye to the Future was run in two major phases. Phase I (E2F-I) ran three consecutive 6-month cohorts between 2009 and 2010 across three community sites. Based on initial assessment collected during this period, the program was expanded in Phase II (E2F-II) to include five additional sites for three more 6-month cohorts across a total of eight sites. Per six month cohort, each CBO site provided 16 mentors to a total of approximately 50 children. The children were divided into two groups of approximately 25, with each group attending a total of 7.5 h of program time each week, spread across three afternoons. The two groups were further divided into teams of 3–5 children which were assigned to one or two mentors who stayed with their assigned team throughout the duration of the cohort's involvement.

The program was highly structured, primarily providing social and academic support to the participating children, while also providing regular opportunities for play and a sub-curriculum of skill development in conflict mitigation and prosocial engagement; resilience through developing competence (e.g., academic and social-emotional competence); and stress tolerance and emotion regulation. These skills were conceptualized as based upon capacity for emotional expression in the context of safe peer-to-peer and

peer-to-mentor relationships. The incorporation of play served multiple functions: first, to provide room to physically explore and express imagination; second, to provide insight into the inner experiences of children, which allowed mentors to shape the program activities; and third, as a means for facilitating competency and a sense of accomplishment through lightly competitive games and sports. The sites were tasked with developing program cultures that facilitated the social development of participating children both directly, through sports and group play, theater-based activities, and meaningful conversations with mentors, and indirectly, through the provision of a safe environment staffed with caring adults (Fig. 1).

Across the 6-month involvement period, children received daily academic support specific to their current curriculum in school, as well as daily opportunities to engage with their larger group and time to converse and engage with their smaller teams. Samples of daily routines as well as the overarching structure of the program's evolution over each 6-month group can be found in Figs. 3 and 2, respectively. Each afternoon session opened with group activities, which were typically followed by academic support. The sub-curriculum activities, such as the interactive theater sessions, were offered periodically throughout the program. Each session then closed with at least 15 min of "team time," where the small teams of children could meet and converse with their one or two assigned mentors (Fig. 3).

Mentor Selection and Supervision

Twenty potential staff attended a 4-day training and assessment. Then, the CARE team, the CBO leadership, and lead mentor met to determine who would be selected in the initial Mentor pool and who would be called for future work, based on readiness for the initiating the program vs. need for further training. Staff were varied in terms of educational attainment, background, and gender, but were all from each local community.

Each site had a Program Coordinator on site. CARE provided program managers that were full-time and rotated weekly to through sites. CARE and the last author provided structural, logistical, and training support to each host CBO. This was provided in the form of a 4-day mentor and leadership training program, follow-up in-person trainings mid-program for each site, as well as the facilitation of mentor focus-groups and on-going availability for programmatic and problem-solving support.

Data Analysis

Data were analyzed with SPSS versions 24 and 27. We structured our reporting of program impact by reporting child- and parent-report separately, focusing on total symptoms,

internalizing symptoms as a subscale, and externalizing symptoms as a second subscale; next, we report on parent-child agreement. We then report each of the eight subscale scores (e.g., anxiety, depression, and so on) for children and parents, reporting mean scores (see Table 1). For the internalizing symptoms, externalizing symptoms, and total scores, we also report the percentage of participants meeting clinical cut-off scores.

We report program impact using several metrics: first, we used standard significance testing in our within-subjects pre-post analyses. We conducted an additional analysis with the subgroup who had 9-month follow-up data, using a repeated-measures ANOVA. We also report effect sizes, reporting Cohen's *d*, Pearson's *r*, and partial η^2 values where appropriate. Next, we report proportions of children whose scores show change on the YSR and CBCL, as indicated by a) change from above- to below-threshold scores on Total, Internalizing, Externalizing, and Subscale scores; and b) reliable improvement or deterioration on Total and Internalizing, Externalizing, using a Reliable Change Index (RCI) score (Jacobson & Truax, 1991), following Thoder et al. (Thoder et al., 2011) and McClendon et al. (McClendon et al., 2011). The RCI is computed as follows: drawing only from among the sample of children whose scores were above the clinical or subclinical threshold of 65 points on the YSR and the CBCL, the post-intervention score is subtracted from the pre-intervention score. That result is divided by the standard error of the YSR and CBCLs; scores 1.96 points away from this result are considered reliably improved (or deteriorated) (*Reliable Change Criterion Calculator*, n.d.). Thus, the RCIs for the YSR are as follows: Total, 9.20; Internalizing, 13.89; Externalizing, 10.46; and the RCIs for the CBCL are as follows: Total, 8.44; Internalizing, 13.20; and Externalizing, 10.65.

We also built in several validity checks, by design: a subset of participants completed post-program data without completing baseline data; in order to eliminate the possibility that scores changed because of repeated test administrations. Reciprocally, we also measured the pre-program scores of youth who did not have post-program data, to examine whether program outcome scores were falsely inflated by differential attrition among more vs. less symptomatic participants at program entry. Change as tied to specific sites and cohorts is in the supplement.

Results

Overall, data from 2341 Palestinian children are represented in the program evaluation, representing nearly 1% of the total number of children in Gaza, which has approximately 240,000 children in this age range (*Gaza Situation Report 149 | UNRWA*, n.d.). The sample was evenly divided by gender, with 49.9% ($n = 1167$) male, 49.3% ($n = 1153$) female

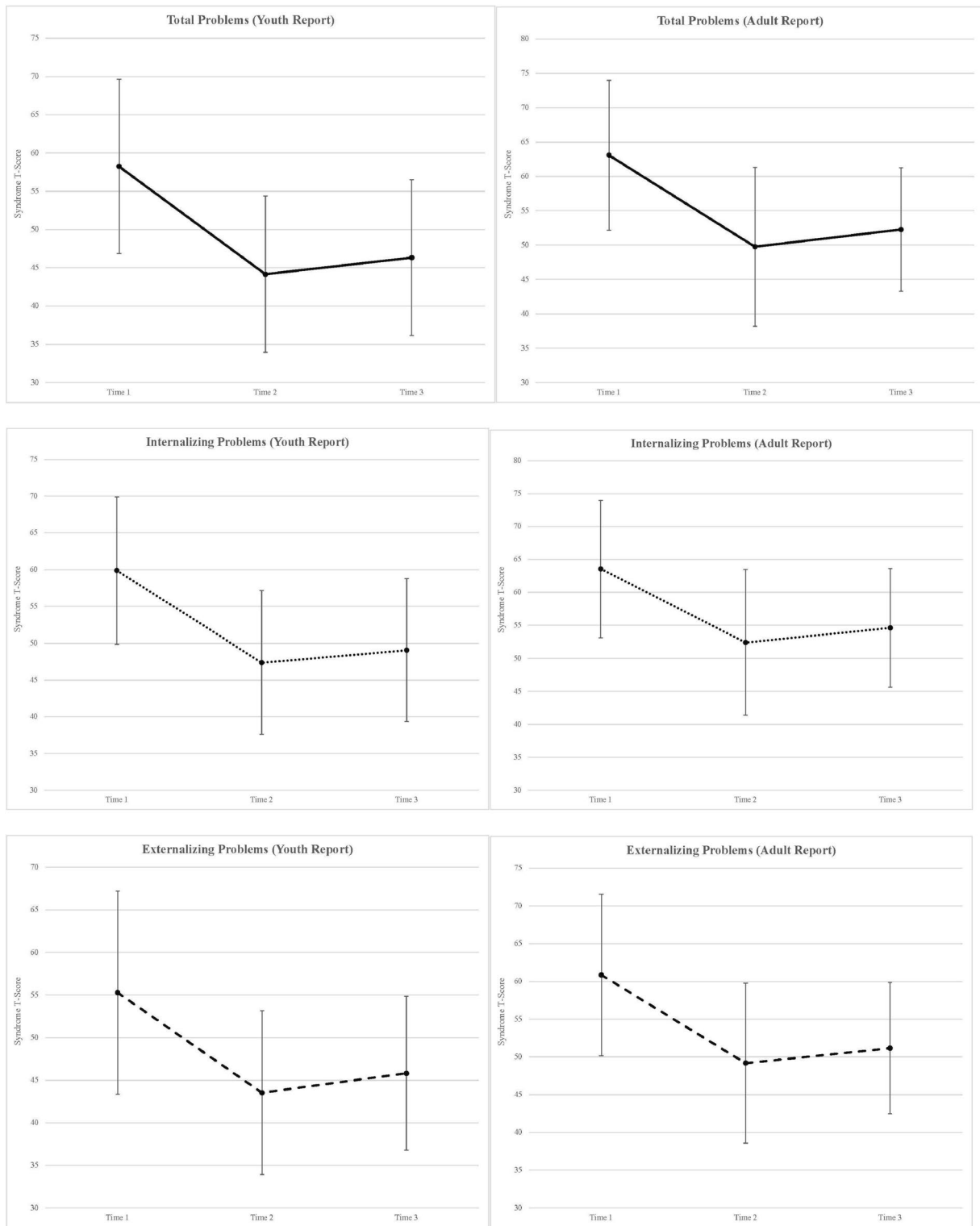


Fig. 1 Symptom Scale Scores by Measure and Time Point. Note: Error bars indicate standard deviation. Time 1 corresponds to pre-intervention testing, Time 2 corresponds to post-intervention testing, and Time 3 corresponds to follow-up testing

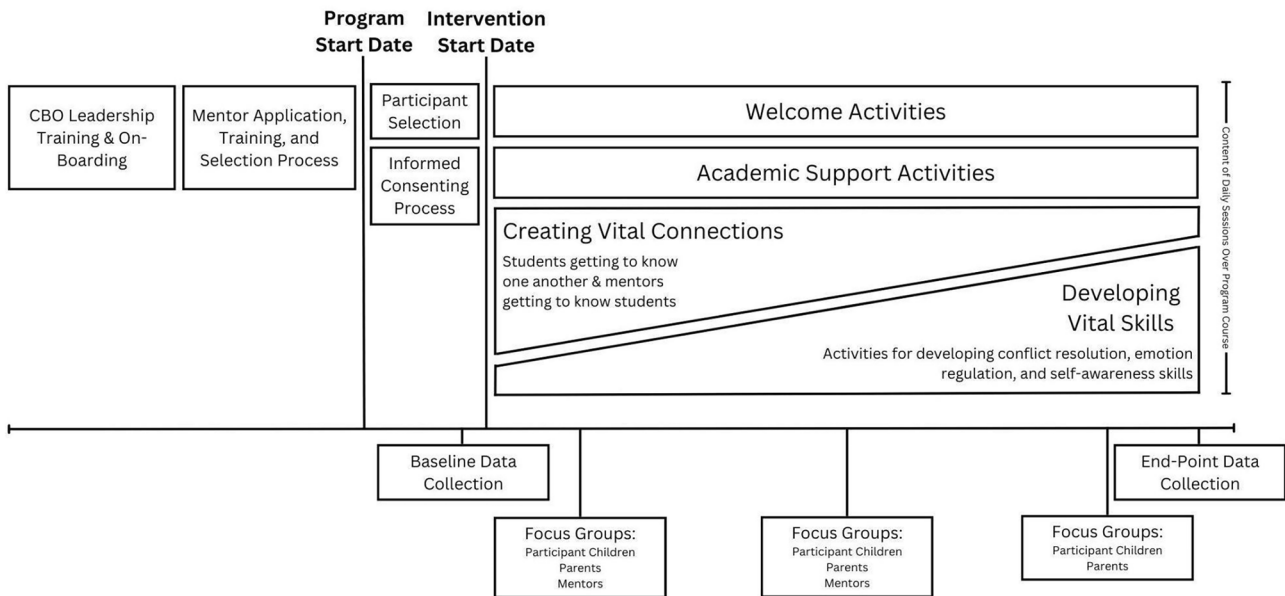


Fig. 2 Program Cohort Timeline. Note: Figure depicts the standard program arc across a single cohort, from CBO training through the completion of the intervention

and .7% ($n = 17$) undeclared. The mean age was 10.70 years old ($SD = 1.22$). Gender distribution and mean age were intentionally balanced across cohorts. Data collection dates are listed in Supplemental Table 1. Because of the cultural context, data on sexual orientation, gender identity, and religious adherence were not asked.

Baseline Symptom Prevalence

See Fig. 3. Based on children’s self-reports of symptoms, 41.5% ($n = 871$) met criteria for one or more psychiatric syndromes at the subscale level, with an average of 2.02 syndromes met ($SD = 2.32$). For internalizing symptoms, 33.1% ($n = 695$) met threshold cutoffs, and for externalizing symptoms, 24.7% ($n = 517$) met threshold cutoffs. For Total symptoms—a measure of global distress—30.2% ($n = 634$) met criteria. Children further reported that anxiety and social problems were their most significant concerns, followed by withdrawal, aggression, attention problems, rule-breaking, thought problems, and somatic complaints.

According to parent reports, 53% ($n = 1010$) of children met for one or more psychiatric syndromes at the subscale level, meeting clinical cutoffs for an average of 2.96 ($SD = 2.63$) subscales. Parent reports indicated that over half (52%, $n = 990$) of children had clinically significant internalizing symptoms, and 37.7%, ($n = 717$) had externalizing symptoms. Almost half (48.1%, $n = 902$) of children met clinical cutoffs for total symptoms. As with the child report, parents reported the most significant concern was anxiety, and that the least was somatic complaints. For both parents and children reports, syndrome subscales were significantly inter-correlated within reporters (r 's $> .35$, $p < .001$).

Parent-Child Agreement

Of the participants for whom both child and parent reports were completed, either children or their parents reported that the children had clinically significant syndromes for 66.9% of the sample ($n = 1214/1812$); however, taking the most exclusive approach requiring parent–child agreement, parents and children agreed that the child had at least one clinically significant problem for 26.5% of children ($n = 481/1812$).

For the total sample, parents and children endorse similar symptom patterns, with parent and child reports showing moderate and statistically significant correlations (all r 's $> .25$, all $p < .05$, except somatic complaints and thought problems). However, parents nonetheless reported significantly higher symptoms in all areas except social problems ($p = .142$). See Table 1.

Age and Gender

There were no notable effect sizes associating age and symptoms. As shown in Table 2, boys reported more symptoms of anxiety, withdrawal/depression, rule-breaking, and aggression, compared to girls (all significant at the $p < .001$ level and Cohen’s $d = .2 - .44$); additionally, parents reported their sons having more symptoms of anxiety, withdrawal/depression, and aggression than their daughters (all significant at the $p < .05$ level and Cohen’s $d = .2 - .24$).

Fig. 3 Sample Program Daily Schedule. Note: Figure depicts a sample schedule of a single afternoon in the middle of a 6-month program cohort

	Mentors Arrive to CBO at least 20-30 minutes before children
	Children Arrive to CBO Attendance Taken
Activity 1 (in large group)	Welcome Activity Mentors lead the student group in a play-based activity, such as learning and singing a new song, playing a game, or participating in a small sporting event.
Activity 2 (in large group)	Academic Support Time Mentors provide 1-1 support as needed while students complete supplementary academic work. Children may use this time to complete homework or receive support in subjects where they are struggling.
Activity 3 (in small teams)	Stage Time Mentors lead students in a theater-based activity, where they can practice conflict resolution skills in a safe and supported environment. Daily Recognition of Student Successes Mentors offer public recognition of student successes. Mentors maintain records of all student successes and ensure every child is recognized regularly.
Team Time (in small teams)	Mentors spend at least 15 minutes in small groups of 3-5 children, providing direct attention and support. Mentors facilitate activities such as journaling, Praise Circles (where student successes are once again mentioned), and "checking-in" discussions.
Wrap-Up (in large group)	Final Opportunity for Play

Impact of Intervention

Attrition in both the program and the evaluation was minimal. We first examined pre-post change in total YSR and CBCL scores; specific model parameters and values are in Table 3. First, a paired-samples t-test indicated statistically-significant symptom reductions from the first three weeks of the intervention to the last three weeks of the intervention, across all symptom measures. Findings were consistent for the overall symptom scores (e.g., Total, Internalizing and Externalizing, and all eight subscales), and for the YSR and CBCL. Pre-post effect sizes ranged from moderate to large, Cohen’s $d = .47 - .97$.

We then examined the number of children whose symptoms were above clinical thresholds at baseline relative to the end of the program (here, reporting on youth who had only complete pre-post data; thus, figures may differ somewhat from baseline reporting). On the YSR, 61.3% of children reported clinically significant Total scores at baseline,

compared to 15.6% at the end of the program; scores for internalizing went from 70.2% at baseline to 22.9% at the end of the program, and externalizing went from 50.7% to 14%. Results were mirrored on the CBCL: 78.6% of parents reported their children had clinically significant Total scores at baseline, compared to 31.3% at the end of the program; scores for internalizing went from 80.8% at baseline to 40.4% at the end of the program, and externalizing went from 73.8% to 31.3%.

Our last examination of baseline- to program-end utilized RCIs, and, as is a common protocol for RCI-based evaluations, focused only on youth who had clinically-significant concerns at baseline (Thoder et al., 2011). As measured by the YSR Total symptoms, 73% of youth had reliably improved, 26% stayed the same, and 1% had reliably worsened. On the internalizing scale, 59% reliably improved, 41% stayed the same, and none reliably worsened. On the externalizing scale, 60% reliably improved, 37% stayed the same, and 3% reliably worsened. As measured by the CBCL,

Table 1 Descriptive Statistics and Paired Comparison of Child (Youth Self-Report) and Adult (Child Behavior Checklist) Symptom Scale T-Scores at Pre- and Post-Intervention Time Points

	Child (YSR)	Adult (CBCL)	Comparison		
	M(SD)	M(SD)	t(df)	ES (d)	r
Pre-Intervention					
Anxious-Depressed	62.81 (8.72)	64.50 (9.57)	$t(1809) = 6.55^*$	0.15	.28*
Withdrawn	59.32 (8.15)	64.36 (9.99)	$t(1809) = 19.56^*$	0.46	.28*
Somatic Complaints	56.57 (8.37)	57.77 (8.69)	$t(1807) = 4.67^*$	0.11	.18*
Social Problems	63.13 (9.89)	63.51 (9.55)	$t(1808) = 1.47$	0.04	.34*
Thought Problems	57.23 (7.76)	60.53 (9.58)	$t(1810) = 12.56^*$	0.30	.18*
Attention Problems	58.34 (8.93)	61.66 (8.77)	$t(1809) = 13.87^*$	0.33	.34*
Delinquent Behavior	55.90 (6.79)	60.28 (8.67)	$t(1807) = 20.17^*$	0.47	.31*
Aggressive Behavior	59.19 (10.36)	61.98 (9.91)	$t(1808) = 10.47^*$	0.25	.38*
Internalizing Problems	59.80 (9.73)	63.50 (10.35)	$t(1807) = 12.81^*$	0.30	.25*
Externalizing Problems	55.62 (11.73)	60.88 (10.64)	$t(1808) = 18.38^*$	0.43	.33*
Total Problems	58.17 (11.14)	63.02 (10.89)	$t(1782) = 15.78^*$	0.37	.31*
Post-Intervention					
Anxious-Depressed	56.26 (7.20)	54.55 (5.85)	$t(1741) = 9.97^*$	0.24	.41*
Withdrawn	56.77 (7.33)	53.04 (4.95)	$t(1741) = 20.64^*$	0.50	.29*
Somatic Complaints	53.36 (6.01)	51.99 (4.43)	$t(1739) = 9.68^*$	0.23	.39*
Social Problems	55.84 (6.69)	54.42 (6.20)	$t(1740) = 8.37^*$	0.20	.40*
Thought Problems	54.36 (6.84)	52.35 (4.48)	$t(1741) = 12.46^*$	0.30	.35*
Attention Problems	54.20 (5.69)	51.79 (3.78)	$t(1741) = 18.49^*$	0.44	.40*
Delinquent Behavior	54.32 (5.92)	51.70 (3.61)	$t(1740) = 18.18^*$	0.44	.28*
Aggressive Behavior	54.04 (6.55)	52.16 (4.95)	$t(1741) = 12.02^*$	0.29	.38*
Internalizing Problems	52.75 (11.06)	47.51 (9.84)	$t(1741) = 21.26^*$	0.51	.52*
Externalizing Problems	49.46 (10.64)	43.59 (9.66)	$t(1740) = 23.16^*$	0.56	.46*
Total Problems	50.17 (11.51)	44.24 (10.28)	$t(1741) = 23.99^*$	0.58	.56*

*Indicates significance of comparison at the $p < .001$ level

Total symptoms, 59% of youth had reliably improved, 34% stayed the same, and 6% had reliably worsened. On the internalizing scale, 50% reliably improved, 49% stayed the same, and 1% reliably worsened. On the externalizing scale, 62% reliably improved, 37% stayed the same, and 1% reliably worsened. Because the program inclusion criteria did not require a clinical diagnosis, we also examined the RCIs for the entire sample, and findings were similar, with the difference that approximately 10% fewer children improved, and 10% more stayed the same.

Finally, we examined the sustained impact of the program, using measures at a 9 month follow-up. On both the YSR and CBCL, total symptoms were significantly lower at follow-up than baseline and at program's end. Internalizing and externalizing showed the same pattern, as did all the majority of the syndrome scales. In all cases, follow up was lower than baseline, though in some cases, not lower than immediately post-program. See Table 3 for values. For the sample with clinically significant total scores at baseline, 68% were reliably improved on the YSR-total and 65% were reliably improved on the CBCL-total. Much of the sample showed improvement in internalizing (YSR: 52%; CBCL:

43%) and externalizing (YSR: 81%; CBCL: 62%) scores. In all cases, under 3% of youth were reliably worse at follow-up than baseline.

Validity of Reporting

Measurement of youth on the waitlist was not feasible due to program staffing and structure. Thus, we built in several steps to guard against possible over- or under-reporting of program change. For example, youth who do not complete the program (and thus only have baseline measurements) systematically differ from those who do complete the program. Also, repeated measurement of clinical constructs may change reporting of those same constructs (Lana, 2009). In order to guard against these possibilities, a subset of youth completed only baseline data, and a second subset of youth completed only end-of-program data. Youth who completed only baseline data and not post-program data were not different in baseline total YSR scores than those who completed data at post-program as well ($t(467.80) = .26, p = .79$), suggesting no differential attrition based on baseline total YSR symptom severity.

Table 2 Descriptive Statistics and Paired Comparison of Child and Adult Report by Participant Gender

Scale	Item	Male, M(SD)	Female, M(SD)	Comparison	ES (d)
Anxious-Depressed	YSR	64.84 (8.98)	61.02 (8.40)	<i>t</i> (2094) = 10.05**	0.44
	CBCL	65.23 (9.72)	63.31 (9.54)	<i>t</i> (1904) = 3.20**	0.20
Withdrawn	YSR	60.35 (8.71)	58.49 (7.98)	<i>t</i> (2075.95) = 5.09**	0.22
	CBCL	65.69 (10.44)	63.31 (9.55)	<i>t</i> (1884.56) = 5.21**	0.24
Somatic Complaints	YSR	57.48 (9.05)	56.02 (8.17)	<i>t</i> (2069.70) = 3.85**	0.17
	CBCL	57.97 (8.79)	57.55 (8.54)	<i>t</i> (1901) = 1.05	0.05
Social Problems	YSR	63.87 (9.79)	62.49 (10.14)	<i>t</i> (2092.32) = 3.17*	0.14
	CBCL	64.18 (9.65)	62.97 (9.49)	<i>t</i> (1903) = 2.78*	0.13
Thought Problems	YSR	57.71 (8.46)	57.10 (7.90)	<i>t</i> (2082.62) = 1.72	0.07
	CBCL	60.96 (9.69)	60.07 (9.57)	<i>t</i> (1904) = 2.00*	0.06
Attention Problems	YSR	58.86 (9.27)	57.91 (8.74)	<i>t</i> (2085.60) = 2.42*	0.11
	CBCL	61.02 (8.44)	62.38 (9.11)	<i>t</i> (1894.63) = -3.38*	0.15
Delinquent Behavior	YSR	56.67 (7.52)	55.29 (6.37)	<i>t</i> (2033.62) = 4.52**	0.20
	CBCL	60.74 (9.24)	59.83 (8.19)	<i>t</i> (1870.69) = 2.27*	0.10
Aggressive Behavior	YSR	60.87 (11.21)	57.66 (9.47)	<i>t</i> (2031.90) = 7.07**	0.31
	CBCL	63.16 (10.51)	60.85 (9.29)	<i>t</i> (1869.86) = 5.09**	0.23
Internalizing Problems	YSR	61.93 (9.64)	57.85 (9.96)	<i>t</i> (2095) = -1.54**	0.41
	CBCL	64.27 (10.14)	62.82 (10.59)	<i>t</i> (1901) = 3.06*	0.14
Externalizing Problems	YSR	56.80 (12.24)	53.78 (11.43)	<i>t</i> (2075.60) = 5.46**	0.26
	CBCL	62.07 (10.58)	59.66 (10.70)	<i>t</i> (1902) = 4.94**	0.23
Total Score	YSR	59.85(11.26)	56.63 (11.30)	<i>t</i> (2095) = 1.60	0.29
	CBCL	63.86 (10.92)	62.34 (10.83)	<i>t</i> (1872) = 3.03*	0.14

*Indicates significance at the $p < .05$ level and ** indicates significance at the $p < .001$ level

Youth who completed measures at the end of the program but not baseline measures were slightly different at the program’s end from those who did complete the baseline measures, with youth who completed baseline measures having slightly worse YSR scores at post-program ($t(207.25) = 4.55, p < .001, d = .35$).

Additional Analyses

Supplemental Tables 2 and 3 describe findings by cohort and by CBO (site), and Supplemental Table 1 notes data collection dates.

Discussion

These findings confirm our hypotheses: overall the rate of child distress in Gaza was high, but were attenuated through the course of participating in a community-based psychosocial program. Our data call attention to significant mental health burdens among Gazan youth. Using the most conservative estimates (requiring parent and child agreement), a quarter of children in Gaza screened positively for clinically significant psychopathology. Using more inclusive criteria, whereby either children or parents flagged distress,

three-quarters of the children were in clinical ranges. These findings must be taken in a global and historical context. In the US, 10% of youth are expected to experience a Serious Emotional Disturbance during some point in their childhood; the point prevalence rates for mood, anxiety, and behavioral disorders hovers around 3% (Costello et al., 2005). Thus, this Gaza sample-not specifically selected for distress-had somewhere between 2.5–17 times greater prevalence of psychopathology. Indeed, their psychopathology rates were consistent with populations with direct, severe, and continual trauma exposure, as noted with Prisoners of War (Bremner et al., 1993). For further context, in a meta-analysis of over 7,000 war-exposed youth, 43% had clinically-significant depression symptoms, whereas 27% had clinically significant anxiety (Attanayake et al., 2009).

While the youth in this study were not specifically examined for trauma exposure, prior work establishes that most people in Gaza have experienced a traumatic event according to PTSD criteria (Lavi & Solomon, 2005; Solomon & Lavi, 2005). It is likely that these traumatic exposures from the ongoing political violence in the region account, at least in part, for the elevated rates of mental health problems observed in this study (Al-Krenawi et al., 2009). Moreover, our most conservative estimates, based on parent report only, indicate that over half of children had at least one area of significant clinical concern. The present findings also suggest that the mental health

Table 3 Comparison of Pre- and Post- Intervention Symptom Scores and Pre-, Post-, and Follow-Up Symptom Scores

Measure	Pre	Post	Follow-Up	Pre, Post		Pre, Post, Follow-Up		
	M(SD)	M(SD)	M(SD)	t(df)	d	n	F(df)	Pairwise
Child Report (YSR)								
Anxious-Depressed	63.0 (8.8)	54.6 (5.8)	55.2 (6.3)	35.65 (1741)	.854	272	90.56 (2, 542)	Pre > Post > Follow-Up
Withdrawn	59.4 (8.2)	53.1 (5.0)	53.6 (5.0)	27.75 (1742)	.665	270	54.48 (2, 538)	Pre > Post > Follow-Up
Somatic Complaints	56.6 (8.3)	52 (4.4)	52.3 (4.8)	22.89 (1740)	.549	270	47.62 (2, 538)	Pre > Post, Follow-Up
Social Problems	63.2 (9.8)	54.5 (6.3)	54.5 (5.8)	32.3 (1740)	.774	269	105.83 (2, 536)	Pre > Post > Follow-Up
Thought Problems	57.2 (7.7)	52.3 (4.4)	53.1 (5.3)	23.77 (1742)	.569	270	32.514 (2, 538)	Pre > Post, Follow-Up
Attention Problems	58.4 (9.0)	51.9 (3.9)	52.4 (5.0)	28.3 (1742)	.678	270	37.683 (2, 538)	Pre > Post, Follow-Up
Delinquent Behavior	55.9 (6.8)	51.7 (3.6)	52.1 (3.8)	23.7 (1741)	.568	269	26.80 (2, 536)	Pre > Post, Follow-Up
Aggressive Behavior	59.3 (10.4)	52.2 (5.0)	52.7 (5.6)	26.4 (1742)	.632	270	36.28 (2, 538)	Pre > Post, Follow-Up
Internalizing Problems	60.0 (9.7)	47.7 (9.8)	49.1 (9.7)	40.3 (1742)	.966	270	113.00 (2, 538)	Pre > Post > Follow-Up
Externalizing Problems	55.3 (11.8)	43.8 (9.7)	45.8 (9.0)	32.9 (1742)	.788	270	62.53 (2, 538)	Pre > Post, Follow-Up
Total Problems	58.3 (11.1)	44.4 (10.3)	46.3 (10.1)	40.39 (1742)	.967	270	111.70 (2, 538)	Pre > Post > Follow-Up
Adult Report (CBCL)								
Anxious/Depressed	64.9 (9.6)	56.5 (7.3)	57 (7.5)	29.06 (1592)	.728	227	49.50 (2, 452)	Pre > Post > Follow-Up
Withdrawn	64.8 (10.1)	56.9 (7.4)	57 (6.5)	26.34 (1591)	.660	218	36.20 (2, 434)	Pre > Post > Follow-Up
Somatic Complaints	57.9 (8.7)	53.5 (6.1)	53.4 (5.8)	18.55 (1589)	.465	217	15.00 (2, 432)	Pre > Post > Follow-Up
Social Problems	63.9 (9.7)	56 (6.8)	56.3 (6.7)	27.82 (1591)	.697	218	34.90 (2, 434)	Pre > Post, Follow-Up
Thought Problems	60.8 (9.7)	54.5 (7)	54.5 (6.1)	22.02 (1592)	.552	218	25.46 (2, 434)	Pre > Post > Follow-Up
Attention Problems	61.9 (8.9)	54.3 (5.7)	54.3 (5.7)	31.25 (1591)	.783	218	46.48 (2, 434)	Pre > Post, Follow-Up
Delinquent Behavior	60.5 (8.8)	54.4 (6.0)	54.1 (5.0)	24.02 (1589)	.602	218	47.78 (2, 434)	Pre > Post > Follow-Up
Aggressive Behavior	62.2 (10.0)	54.2 (6.6)	54.3 (6.1)	27.69 (1590)	.694	217	32.16 (2, 432)	Pre > Post > Follow-Up
Internalizing Problems	63.9 (10.2)	53 (11.2)	54.6 (9.0)	30.29 (1589)	.760	217	41.50 (2, 432)	Pre > Post > Follow-Up
Externalizing Problems	61.3 (10.5)	49.7 (10.7)	51.2 (8.7)	31.78 (1590)	.797	218	43.19 (2, 434)	Pre > Post > Follow-Up
Total Problems	63.5 (10.5)	50.5 (11.7)	52.3 (9.0)	34.42 (1562)	.871	208	53.50 (2, 414)	Pre > Post > Follow-Up

All Pre, Post and Pre, Post, Follow-Up comparisons were significant ($p < .001$)

burden on Palestinian children has increased over time, as prior studies (Garbarino & Kostelny, 1996) found that only 20% of children in the West Bank in 1996 were in the clinical range for mental health symptoms. Garbarino and Kostelny's data were collected at the beginning of a period of relative amity; whereas these data were collected during a period of more assertive Israeli resettlement policies associated with intensified violence erupted from 2011–2013 (2014). As such, the relatively higher prevalence rates in this study may reflect the continued escalation of violence and other adversities in the region. The West Bank and Gaza, however, differ in important ways in their sociopolitical circumstances and exposure to violent conflict, and as such, we are limited in drawing conclusions about change in symptom prevalence in Gaza over time.

The present findings reinforce that growing up in an unsafe, unstable environment where actual violence has occurred and the potential for more violence is ever present, can lead to significant and broad symptom burdens. With over 50% of children meeting criteria for a psychiatric syndrome, the children of Gaza are at risk for developing chronic and severe mental illness as they progress

into adulthood. Indeed, these rates are alarming when considering prior meta-analytic work (Steel et al., 2009) showing prevalence estimates of 30.6% and 30.8% for PTSD and MDD, respectively, in adults exposed to mass conflict or displacement.

In the best of circumstances, an intact community of parents, families, schools, social clubs, and religious institutions can mitigate the harmful effects of trauma exposure. Yet, community and individual resilience in the aftermath of trauma may depend on the existence of economic, social, and physical resources, which currently are severely limited due to the ongoing conflict. Indeed, in areas with chronic conflict, it may be especially critical to develop psychosocial and mental health supports that can foster community building alongside the pursuit of political peace-building efforts.

The intervention data presented in this manuscript are promising. Our findings suggest that enriched community resources, in the form of physically- and emotionally safe interaction with trained adults, have the capacity to mitigate mental health stress among youth in Gaza. The substantial reductions in mental health symptoms observed in this study,

surpasses the effects of other interventions for trauma exposure. For example, in a recent trial comparing a novel treatment for PTSD (adaptive disclosure) to an established, gold standard treatment (cognitive processing therapy), reliable improvement was observed in 40–45% of completers, and in only 25% of all enrolled participants (Litz et al., 2021). Another recent trial compared individual cognitive processing therapy to group cognitive processing therapy, and demonstrated reliable change in PTSD symptoms in 52% and 30% of participants, respectively (Resick et al., 2017). A recent systematic review of skills-focused, mostly brief, psychosocial interventions (including PFA) found that among studies that reported reliable change, few participants showed reliable improvement (Ottisova et al., 2022). In comparison, this study shows reliable improvement in 50–73% of participants who were symptomatic at the start of the Eye to the Future program. These comparison studies differ in important ways: they are adult participants whose intervention is aimed at their specific diagnosis of PTSD, which overlaps with clinical syndromes presented here, but is not identical. These studies are delivered by highly trained professionals in a relatively stable and safe environment; and are shorter-term (12 h). In contrast, Eye to the Future was enacted by people with limited or no professional training and a short training window, geared towards children with varying concerns, allowed but did not direct specific trauma processing, and involved approximately 120 h of intervention. While the intent of this intervention is not to provide a competitive alternative to existing gold-standard treatments, these differences represent important trade-offs—relatively little intervention by highly-trained professionals vs a longer time frame by community nonprofessionals—that are relevant to consider in areas where professional mental health resources are scarce.

Limitations and Future Directions

First, while we attempted to use measures that have global relevance, the translation and back-translation of the measures within this study does not guarantee measure equivalence. Unfortunately, at the time data were collected, other measures utilized in the Palestinian context, such as the Harvard Trauma Questionnaire, are either adult-focused or specific to PTSD, or are primarily validated for use in other Middle Eastern countries or with Arabic populations generally (for example, Manzanero et al., 2021; Staehr, 1993). As there is no comparison intervention or symptom reporting prior to program enrollment, the intervention data are vulnerable to questions about the validity of reporting (Table 4). The use of repeated measurement in this study may have sensitized participants to their mental health concerns, which would reduce the magnitude of symptom improvements. It is also possible that youth with more severe symptoms were unable to be maintained in this non-clinical

Table 4 Number of Participating Children and Completed Reports by Reporter and Time Point

	n(%)
Total Child Participants (N = 2341)	
Total Completed Pre-Intervention Reports	
Children (YSR)	2097(89.6%)
Adults (CBCL)	1874(80.1%)
Both (YSR & CBCL)	1627(69.5%)
Total Completed Post-Intervention Reports	
Children (YSR)	1908(81.5%)
Adults (CBCL)	1874(79.8%)
Both (YSR & CBCL)	1523(65.1%)
Total Completed Pre- & Post-Intervention Reports	
Children (YSR)	1743(74.5%)
Adults (CBCL)	1563(66.8%)
Both (YSR & CBCL)	1433(61.2%)
Follow-Up Child Participants (N = 290)	
Total Completed Follow-Up Reports	
Children (YSR)	287(99%)
Adults (CBCL)	263(90.7%)
Both (YSR & CBCL)	260(89.7%)

This table provides an overview of the number and distribution of completed reports among participating children at all three time points. Some children were not included in the baseline reporting condition to control for effects of repeated measure administration. The number of children included in the follow-up condition was selected based on statistical need and program logistics.

program, or would not benefit from it, although attrition rates were minimal, and there were no significant differences at baseline among participants who were later missing post-program data. And finally, the cohort effects which might arise when administering group-based interventions can be analyzed by examining differences among multiple cohorts of participants engaged over a three-year time span. There were small cohort effects such that slightly different cohorts differed on baseline symptom severity, however these differences were not linear and there was similar symptom reduction across the program sites. These precautions aside, future studies should incorporate a comparison condition and more robust measures beyond questionnaires.

Furthermore, future studies could further elaborate the contextual factors that influence mental health symptom reporting and interventions, which may help with translating this work to other settings. Subsequent studies should establish whether other areas of ongoing conflict, such as South Sudan (which, like Gaza, has had consistent ongoing violent conflict spanning decades), demonstrate similar rates of mental health stress among children, including PTSD, Complex PTSD, and broader symptom sets; existing studies with larger samples have focused on adults (Ayazi et al., 2012). Future studies should focus on assessing

parents' well-being in addition to children's, and on other factors such as family and school violence, in order to better understand intergenerational stressors; stressed parents may influence their children's stress, but their reporting may also reflect negativity biases. While the sample cannot be considered a truly random sample, a large group of children were assessed, suggesting a good degree of representativeness of the sample, particularly for an intervention study. Finally, future work should examine whether such programs have a lasting impact on their participants; the youth in this sample are now young adults.

Conclusions

These limitations notwithstanding, these findings may be useful in substantiating the impact of ongoing conflict in children living in Gaza, calling attention to the pervasive impact of the political context, and may be relevant to children living in other similarly conflictual areas. These findings also highlight the beneficial potential of community-based programs which incorporate play and safe adult relationships into curricula which focus on emotion regulation and expression. Finally, a word of caution: while it is promising that a community-based intervention could have a substantial impact on youth mental health, such efforts are not a substitute for establishing physical security and political safety. Rather, reducing mental health burden and building safe communities go hand in hand.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s10802-023-01124-2>.

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Compliance with Ethical Standards

Conflict of Interest Drs. D'Andrea, Aboagye and Freed served as consultants to the program to design the monitoring and evaluation plan. Mr. Bergholz was contracted to design the intervention.

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