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Prevention of Aggression, Violence, and Mental Health Problems in Childhood and Adolescence: Innovative and Sustainable Approaches from Around the World: Introduction and Overview

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Abstract This special issue, *Prevention of Aggression, Violence, and Mental Health Problems in Childhood and Adolescence: Innovative and Sustainable Approaches from Around the World*, represents a broad set of studies from lower- and middle-income countries. The intent of the special issue was to expand our knowledge of evidence-based programs in less-resourced settings, given that most of the current evidence comes from the USA and other higher-income countries. Many of the articles describe adaptations of evidence-based programs developed in higher-income countries, and their findings suggest that this can be an effective approach. Other studies present evidence for context-specific programs that match cultural norms, are efficient and cost-effective to implement, and are aligned with infrastructure and available resources. We also include articles that provide evidence for the preventive effects of everyday activities such as orchestra participation and after-school programs. Our hope is that the studies reported in this special issue will provide useful guidance for policy makers, funders, and key leaders looking for innovative, affordable, and sustainable solutions to preventing violence in childhood and adolescence and promoting mental health and adjustment around the world.

Keywords Prevention · Aggression · Violence · Mental health · Global

There is a growing evidence base for effective programs to prevent aggression and violence and promote mental health and positive development in childhood and adolescence. This is important in a climate where policy makers, funding agencies, and practitioners increasingly are aware of the importance of implementing evidence-based programs. To facilitate program adoption, many evidence-based programs are catalogued on some type of governmental or agency listing of best practices. Although studies that are included on the most well-vetted lists are rigorous in terms of experimental methodology, defined samples, quality of assessments, and other standard criteria, replications of the original studies often are non-existent or at an incipient stage. Further, most of the evidence in the field comes from higher-income countries, primarily the USA. This is somewhat problematic to guide practice given the considerable variation across institutional, economic, and cultural contexts within the USA alone. It is even more problematic in lower-resource and culturally distinct settings around the world where programs may be too costly to implement, poorly matched to local cultural norms, and/or require institutional resources and technical capacity for implementation beyond what is available and sustainable.

It may be the case that well-established evidence-based programs from higher-resource settings can be modified and adapted successfully across diverse contexts, although perhaps only under certain conditions. On the other hand, it may be necessary to develop programs specifically tailored to the unique characteristics of a given population that can draw on best practices from the theoretical, risk, and evaluation literature. A relatively unexplored possibility is that activities embedded in mainstream programs that do not require

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new and costly interventions, such as recreation, music, or arts, can have preventive impacts on problem behaviors and promotive effects on mental health and resilience.

This special issue, *Prevention of Aggression, Violence, and Mental Health Problems in Childhood and Adolescence: Innovative and Sustainable Approaches from Around the World*, seeks to advance work in this area by presenting a selection of evaluations of innovative preventive interventions that are likely to be practical in lower- and middle-income settings around the world. Some of the articles provide encouraging evidence for the feasibility of adapting specific programs across different settings, although with certain caveats and concerns. Other studies evaluate programs developed in specific contexts, and still other articles examine how everyday activities such as sports and music can have preventive and/or promotive effects. Our primary goal for this special issue is to showcase examples of how each of these strategies can be successful, as well as to present challenges that must be considered.

We first want to congratulate all of the authors. Anyone who has implemented a rigorous experimental or quasi-experimental trial of prevention or promotion programs knows just how difficult this can be under the best conditions. These challenges are magnified in lower- and middle-income countries, particularly in communities with fragile institutions and weak infrastructure, multiple and intertwined risk factors for maladaptive outcomes, low levels of professional training in agencies tasked with the well-being of children and families (e.g., lack of professional training or certification for teachers and counselors), and high levels of inequality coupled with precariously low levels of resources to implement and evaluate interventions. Indeed, some of the studies were limited in the designs that could be implemented as well as the types of data that could be collected, and relied primarily on self-reports or reports of teachers/interventionists who delivered the program. Other studies were limited to relatively small samples or short-term post-intervention follow-up. Still, the majority of studies included in this special issue used randomized controlled trials (RCTs), and some included several thousand youth, suggesting that the global database of solid empirical studies on prevention of aggression, violence, and mental health problems is expanding. Many of the study designs relied on interdisciplinary teams, reflecting the returns to integrating the theory of change from psychology or medicine with empirical measurement from statistics or economics.

Some of the common challenges in program evaluation are relevant for the interventions included, notably, (i) the fact that boutique pilot projects may not be representative of outcomes under less-resourced scenarios and (ii) the challenge for scaled-up projects to show results (Duflo 2004). The set of studies in the special edition pays special attention to these issues, with the new evidence in four programs contributing to the external validity of existing programs. The set also includes the evaluation of the youth orchestra program in

Venezuela (Aleman et al.) where important results are found across multiple sites for a project that has been brought to scale for many years.

Five of the studies in this special issue present adaptations of programs developed in the USA and Europe as implemented in Italy, Pakistan, Brazil, Ecuador, and Thailand. Three of these programs were school-based, and two programs served families of children and adolescents. Two of the studies tested an adaptation of the same program, *Coping Power*. Four of the studies demonstrated positive or encouraging findings whereas one study found mixed results, including iatrogenic effects, suggesting a need to adapt and evaluate each program in each setting with the utmost caution. We briefly review these findings as they illustrate the process of program adaptation, the extent to which adaptations can be successful, and potential challenges to consider.

Muratori and colleagues adapted the targeted *Coping Power* program developed and evaluated in the USA as a universal prevention tool delivered by teachers for 3rd and 4th grade students across 40 classrooms in six schools in Lucca, Pisa, and Spoleto, Italy. This adaptation was necessary because of cultural norms against targeted interventions in Italian schools (parents do not want their children to lose class time or to be stigmatized) as well as the lack of universal, empirically tested prevention programs for schools with escalating overall rates of aggression and bullying and, hence, a need for evidence-based universal programs. The adaptation followed three core principles—the theoretical foundation of the core program was retained, program delivery was guided by the same set of principles, and practices were the same in both programs. Process data indicate that the program was successfully implemented by teachers across multiple classrooms. Using random assignment by classroom, results indicated that compared to students in control classrooms ($n = 413$), students in the intervention classrooms ($n = 488$) showed significant reductions in hyperactivity, inattention, conduct problems, and emotional symptoms, although ratings were limited to teacher evaluations of classroom behavior immediately following the intervention.

In Rawalpindi, Pakistan, Mushtaq and colleagues implemented the targeted child component of *Coping Power* for aggressive 4th grade boys across 15 classrooms in five public schools. Although the theoretical and empirical foundations were determined to be equally relevant for Pakistani aggressive children, several modifications were made including translation to Urdu language, grounding anger management and control practices in Pakistani religious and social norms, and adding an additional session for labeling of feelings. Children were randomly assigned to intervention groups ($n = 52$) or wait list control ($n = 61$), and data were collected from self-reports, teacher reports, and parent reports at baseline and post-test. Participants in the intervention demonstrated significant decreases in teacher- and mother-rated

aggression over time, as well as improvements on other related outcomes.

The success of the Coping Power program in a higher-income (Italy) and lower-income (Pakistan) country suggests that programs that tap basic and potentially universal skills such as anger management may be relatively easy to adapt across different contexts. As shown in both programs, adaptations largely were limited to surface structure characteristics of the interventions such as language, adherence to local customs and norms, and bolstering sessions with areas that were important to reinforce, such as the additional session for labeling feelings in the Pakistan adaptation.

Sanchez and colleagues implemented the European school-based drug prevention program Unplugged in 72 public schools across six Brazilian cities (Sao Paulo, Sao Bernardo do Campo, Florianopolis, Tubarao, Fortaleza, and Distrito Federal). This program is based on the social influence model and had been found to be effective in European studies. The first year of implementation was dedicated to adaptations to reflect cultural policies and standards and to optimize fit with public educational practices in Brazil. Renamed #Tamojunto, initial piloting demonstrated that the program could be implemented effectively in Brazilian schools. During the following year, 7th and 8th grade students were randomly assigned by classroom to the intervention ($n = 3340$) or the no treatment control group ($n = 4213$). Results indicated a potential protective effect on first inhalant use, no effects on drug use, and an iatrogenic effect on first alcohol use. As the authors indicated, the negative effects on alcohol use could have been due to the lack of match between program components developed in Europe to the realities of the Brazilian social context where control and taxation of alcohol is lax and there is relatively little enforcement of underage drinking laws. They also suggest that teachers in Brazil are under much more stress than typical teachers in Europe and that interactive techniques used in the program are less familiar to Brazilian teachers.

Focusing on prevention of conduct problems through family intervention, Molleda and colleagues implemented Familias Unidas in two low-income communities in Guayaquil, Ecuador. This program has been developed and tested with Latino populations in the USA. Initial piloting adaptations were made to fit the Ecuadorian context, although no changes in the core activities or underlying principles were made. Youth and their families were randomly assigned to the intervention ($n = 129$) or control group ($n = 110$). The intervention was found to significantly reduce conduct problems in the intervention sample based on parent ratings, and this was partially mediated by improvements in parent-child communication but not monitoring of peers. Attendance rates were also exceptionally high, possibly due to the relative dearth of available programs for parents in Ecuador.

Annan and colleagues tested an adapted version of the Strengthening Families Program with Burmese migrant and

displaced children and families in 20 communities in the northwestern province of Tak, Thailand, on the border with Burma. Although this program had been developed in the USA, over the past 2 decades, it has been adapted and tested in over 30 countries, with positive effects on children and families (Van Ryzin et al. 2015). Relabeled the “Happy Families Program” and focusing on children ages 8–12, families were randomly assigned to the intervention ($n = 240$) or wait list control ($n = 239$) condition. Based on caregiver and child self-report, the program achieved significant decreases in externalizing behaviors and improvements in prosocial protective factors. This is particularly encouraging given that participants in this study were children and families exposed to high levels of adversity.

These five studies suggest that adaptations can be successful when there is a match between core program principles and when the adaptation takes local context into account. Each of these studies provides useful details regarding the process of adaptation, typically involving a substantial amount of time for program modifications and pilot testing. Moving forward, this points to the importance for programs to specify the mechanisms or mediators of program impact so that adaptations remain true to these essential components. As Sanchez and colleagues report, there may be macro level issues related to cultural norms or country policies that may be more difficult to anticipate but nevertheless important to consider.

Another set of five programs built on the prevention literature but developed context-specific programs. Two of these programs were school-based and targeted gender-based violence in Mexico City and Nairobi, Kenya. The third program has a universal school-based component along with targeted parent and peer-group activities, all aimed at preventing aggression in the context of high levels of community violence in Colombia. The fourth program presents follow up data to a large-scale evaluation of a school-based program to prevent teacher violence and peer violence in Uganda. The fifth program, also conducted in Uganda, was a father mentoring program designed to reduce child exposure to family violence. Of particular interest, these studies looked at moderators including gender, variations of gender composition of intervention groups, and variations in levels of implementation.

Sosa-Rubi and colleagues evaluated the effectiveness of the “True Love” intervention to reduce dating violence among youth in Mexico City. Their intervention consisted of individual and school-level activities delivered over 16 weeks across two semesters on a variety of gender violence-related topics. A primary focus was to build skills and change attitudes and beliefs about gender-based violence. Youth from two urban, public high schools ($n = 1604$) were exposed to a school-wide climate improvement program, with a subgroup of youth ($n = 744$) participating in one or two components of an individually focused intervention comprised of either classroom lessons alone or classroom lessons plus participation in

targeted school activities (e.g., campaigns against gender-based violence). In terms of impact on actual perpetration and victimization, the quasi-experimental estimation found that the climate plus individual curriculum lessons resulted in significant reductions in psychological violence perpetration and psychological victimization among males, and for females a reduction in attitudes toward violence but no reduction in psychological, physical, or sexual victimization. Further changes in attitudes and norms were noted, which are important mediators of actual behavior.

Baiocchi and colleagues conducted a cluster-randomized, matched-pairs trial of a sexual assault prevention program in 30 primary schools in the informal settlements in Nairobi, Kenya. Two 6-h classroom sessions were delivered separately for girls and boys. These programs were developed by a US-based NGO, No Means No WorldWide, focused on the unique needs of young people in Nairobi. The girls' program emphasized empowerment, self-defense, and gender relations. The boys' program promoted healthy gender norms. Outcomes focused on risk of sexual assault among girls ($n = 3147$) only. Results indicated that sexual assault risk decreased significantly and generalized self-efficacy scores increased.

In Colombia, Chaux and colleagues developed a school-based program to reduce aggression in communities with high levels of violence and incorporated family and peer-based components inspired from the Montreal Prevention Experiment (Tremblay et al. 1996). The quasi-experimental evaluation of Classrooms in Peace (Aulas en Paz) was conducted with a sample of 1154 2nd to 4th grade students from 55 classrooms in the cities of Cali and Palmira, Colombia. After adjustments for implementation challenges in the evaluation such as missing data, significant positive results were found in prosocial behavior and in reduction of aggressive behavior, according to teacher reports, and in assertiveness and reduction of verbal victimization, according to student reports. The cost of the intervention at US\$25 per student per year stands out as relatively low, particularly in comparison with interventions in developed countries.

Given that child maltreatment is a pressing problem around the globe, and that this can happen at the hands of teachers and school staff, DeVries and colleagues developed a targeted intervention, The Good School Toolkit, for Ugandan schools. The program focuses on a school-wide approach to prevention, focusing on changing the culture of the school and highlighting the importance of respect and participation. It is one of the few interventions focused specifically on preventing violence from school personnel to student. The authors previously reported significant findings for reductions in violence against students from the intervention that was randomized across 42 schools. In this paper, they examine the effects by gender on severe physical violence by teachers and staff and peer-to-peer emotional, physical, and sexual violence. Based on student surveys ($n = 3820$) across the participating schools, the intervention was associated with significant reductions in

victimization of students by staff and peers, although effects were larger for boys than for girls. Students also reported significantly fewer injuries from school staff and some reductions in emotional violence. However, girls did report an increase in sexual violence victimization in intervention schools, which the authors interpret as possibly due to girls' increased willingness to report after the intervention. And, as they note, even with reductions in victimization for some outcomes, overall levels of violence in primary schools remain extremely high. Another program in Uganda, REAL Fathers Initiative, targeted child maltreatment prevention by engaging fathers. Using a RCT design, 250 fathers received a 12-week mentoring program compared to 250 control fathers. Based on parent reports immediately after the program and at longer-term follow up, the intervention resulted in positive effects on parenting and nonviolent discipline and reduced IPV exposure.

These five studies provide compelling evidence for the importance of tailoring interventions to specific cultural and community contexts across different settings when conditions are unique and local interventions are not available. For example, there are marked variations in cultural norms about disclosure in same-sex versus mixed-sex groups and cultural differences in norms around gender-based violence that must be addressed. Although it may be possible to select a defined set of mechanisms (e.g., gender-based norms regarding violence against women), how they play out in different settings must be considered. Even with targeted programs, these studies demonstrate that results are mixed and that certain subgroups based on gender and/or age may be more amenable to certain types of interventions. When these programs are taken to scale at the community level, as these studies demonstrate, there may be other economic, political, and societal factors not addressed that can attenuate results.

Finally, two studies describe the preventive impacts of everyday activities such as music and after-school programs. The unique feature of these activities is that they are not developed to target specific mechanisms or risk/protective factors, per se, or as targeted interventions. Yet, on closer examination, they clearly have the potential for indirect benefits on positive youth development that can mitigate risk and prevent violence and mental health problems. Further, because they are implemented within broad systems such as health and social inclusion, they tend to reach greater numbers of children and families and do not carry any stigma associated with targeted prevention programming.

Looking specifically at the effects of the Venezuelan National System of Youth and Children's Orchestras, or as it is better known as "El Sistema," Aleman and colleagues randomly assigned families ($n = 2529$) to early admission to the program or a 1-year delayed admission control group. They hypothesized that the intervention would have multiple protective benefits on self-regulation and other skills and, in turn, reduce aggressive behavior in children and youth. They also

examined whether the orchestra impact was moderated by gender and community stressors. After 1 year for the full sample of children ages 6 to 14, those offered early admission to the program had higher self-control and lower behavioral difficulties. The impacts were more pronounced and at a higher level of significance for the more vulnerable children, specifically children whose mothers had less education and boys exposed to higher rates of violence at the baseline. Additionally, as they report, the opportunity to enter the music program resulted in lower levels of aggressive behavior among boys exposed to higher rates of violence at the baseline. They suggest that the engagement with the music program and the subsequent strengthening of skills serves as a preventive strategy to promote positive outcomes among disadvantaged children. They suggest that the opportunity for healthy engagement through music may mitigate the effects of violence exposure for males.

Cid assessed a broad range of after-school programs to examine whether they can be effective tools for preventing aggression and violence, given their increasing popularity in Latin America and the Caribbean. As he noted, most evaluations of these programs have been conducted in the USA and higher-income countries. Consequently, he was able to identify only a small set of studies in the region to review. Overall, he presents some encouraging evidence for these programs, particularly when they are structured and when they increase commitment by parents to be engaged in their children's lives. As he notes, not only are more rigorous evaluations needed, but these evaluations must consider factors such as the quality of the program, qualifications of staff, nature of the peer group, involvement of the family and community, and specification of potential mechanisms of impact.

Although the interventions implemented were all thoughtfully adjusted for the local context, some research designs did not anticipate the greater challenges with respect to data collection in the replicated projects. For example, high drop-out rates and poor attendance in secondary school in low- and middle-income countries often imply that follow-up surveys conducted in schools will suffer from attrition. Chaux et al. lost 20% of their follow-up sample because of school absences due to security, weather, or illnesses. In the case of the Unplugged program in Brazil and the Classrooms in Peace

program (Chaux et al.), attrition may have been lower had data collection occurred at home rather than in the schools, following the original project designs. Future studies should include more tracking information at the time of the baseline with the aim of minimizing sample attrition. More generally, the adaptation of data collection plans in consideration of the local context warrants more attention.

In summary, we hope that this special issue will be useful to guide policy makers, funders, and key leaders looking for innovative, affordable, and sustainable solutions to preventing violence in childhood and adolescence and promoting mental health and adjustment. To our knowledge, no existing publication has focused primarily on violence prevention, mental health, and resilience in childhood and adolescence, concentrated on lower- and middle-income countries, and emphasized mechanisms and conditions associated with positive outcomes. Yet in most of the world resources are scarce, problems linked to childhood aggression, violence, mental health, and adjustment loom large, and the need for evidence-based or evidence-informed solutions is urgent. In this regard, we hope that the articles in this special issue can make a substantive contribution to practice as well as serve to guide and direct future research.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

References

- Duflo, E. (2004). Scaling up and evaluation, Annual World Bank Conference on Development Economics. The World Bank.
- Tremblay, R.E., Masse, L.C., Pagani, L. & Vitaro, F. (1996). From childhood physical aggression to adolescent maladjustment: The Montreal Prevention Experiment. In: R.D. Peters & R.J. McMahon (Eds.), Preventing childhood disorders, substance abuse, and delinquency. Thousand Oaks: Banff International Behavioral Science Series, Vol. 3., Sage.
- Van Ryzin, M., Kumpfer, K., Fosco, G. M., & Greenberg, M. (Eds.). (2015). *Family-based prevention programs for children and adolescents: Theory, research, and large-scale dissemination*. New York: Psychology Press.