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ACT Raising Safe Kids Program improves parenting practices, beliefs about physical punishment, management of anger, and mental health: Initial evidence from a study in Brazil

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ABSTRACT

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The exposure to child maltreatment has negative consequences for children's health and development. These serious consequences demonstrate how important it is to develop and implement effective prevention strategies. The ACT Raising Safe Kids Program was developed to prevent child maltreatment and teach positive parenting skills to parents and caregivers. The aim of the present study was to evaluate initial evidence of effectiveness of the ACT Program in Porto Alegre, capital of the Brazilian state of Rio Grande do Sul. The study is based on an intervention with one-group pretest-protest design. The sample comprised 47 mothers and 5 fathers with a mean age of 38.73 years (SD = 6.81). Parenting meetings were implemented over nine weeks with groups, on average, composed of nine participants. Parenting practices, physical punishment beliefs, anger, and mental health outcomes were assessed through self-report measures before and after participation in the ACT Program. Measures included sociodemographic data, ACT Evaluation Questionnaire, Physical Punishment Beliefs Scale, State-Trait Anger Expression Inventory (STAXI-2), and Depression, Anxiety and Stress Scale (DASS-21). Within-group comparisons were analyzed through paired samples t-test. The results indicated that parenting practices (emotional and behavioral regulation, communication, and positive discipline), physical punishment beliefs, levels of anger (angry temperament, angry reaction, anger expression-out, and anger control-in), and mental health outcomes (depression and stress) improved significantly from pretest to posttest. The findings indicate the messages were enacted by parents. Further evaluation is required to determine the impact on parenting of the ACT Program in this context employing a randomized controlled design.

1. Introduction

Violence is a major public health concern and a serious human rights violation. Children are at particular high risk of exposure to violence (World Health Organization [WHO], 2020), and in 2015, it was estimated that globally over half of all children experienced violence (Hillis et al., 2016). Nearly three in four children aged two to four years regularly suffer physical punishment and/or psychological violence perpetrated by parents or caregivers (WHO, 2020). Despite the high numbers, the prevalence rates of child maltreatment are likely to be underestimated, as measurement errors, stigma, and social normativity tend to mask the true magnitude of the problem (Finkelhor et al., 2014).

Brazil is the largest country in South America and in Latin America &

the Caribbean, with over 211 million people (Brazilian Institute of Geography and Statistics [IBGE]. 2010). The country is classified as an upper-middle income economy by the World Bank (2020). However, Brazil is also recognized for its social inequality and high levels of violence (UNICEF, 2018). A multilevel *meta*-analysis examined the effects of geographical and economic factors on child maltreatment estimates measured by the Childhood Trauma Questionnaire (CTQ) shortform (Bernstein et al., 1994; Viola et al., 2016). Results indicated that Brazil has one of the highest rates of child maltreatment worldwide (Viola et al., 2016). In 2018, a total of 76.216 notifications of violations against children and adolescents were reported through the Human Rights Dial (Dial 100). Neglect was the most common reported form of violence (72.66%), followed by psychological (48.76%), physical

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(40.62%), and sexual abuse (22.40%). Parents were the main perpetrators of violence (Ministry of Women, Family, and Human Rights, 2019). An analysis of 14.564 cases of child maltreatment reported by health professionals between 2010 and 2014 in the state of Rio Grande do Sul (South of Brazil) indicated that girls were more vulnerable to psychological and sexual violence, especially in middle childhood. Boys were more likely to experience neglect and physical violence (Macedo et al., 2020).

The consequences of child maltreatment are costly, numerous, and severe. Child maltreatment affects children's physical, cognitive, emotional, and social development (Pinheiro, 2006; Van der Put et al., 2015). While children of all ages are at risk, experiencing violence at a young age can be particularly harmful (UNICEF, 2020). The body's stress response can be over activated, which harms the development of the brain, increases the risk for stress-related illness, and impairs children's capacity to think, learn, and understand (Wessels et al., 2013). Moreover, child maltreatment is a risk factor for poor mental health, education, employment, and relationship problems later in life (Afifi et al., 2017; Wessels et al., 2013). Victims of child maltreatment are also more likely to become perpetrators and victims of other types of violence during adulthood (Kennedy et al., 2017; Till-Tentschert, 2017). The serious consequences of child maltreatment demonstrate how important it is to develop and implement effective prevention strategies. The cost of inaction results in higher expenses related to treating victims' health problems in later life, increased welfare costs, and lowered economic productivity (Wessels et al., 2013).

2. Risk factors for child maltreatment

A multiplicity of risk factors is associated with child maltreatment, such as demographic variables, family relationships, parental characteristics, and child characteristics (Belsky & Vondra, 1989; Brown et al., 1998). Risk factors are defined as conditions or variables that increase the likelihood of negative or undesirable outcomes (Cowan, Cowan, & Schulz, 1996). Numerous indicators of parenting and parent functioning have been linked to maltreatment, including low levels of parent involvement and poor parent-child interactions (Brown et al., 1998). Child maltreatment is more likely to occur in families that have difficulties developing positive, stable, and warm relationships. Children are at increased risk of being maltreated if a parent or caregiver has a poor understanding of child development, is less responsive, has a harsh or inconsistent parenting style, and believes that physical punishment is an acceptable form of discipline (Wessels et al., 2013). Child maltreatment also results from anger, frustration, lack of understanding of the harm it can cause, and limited familiarity with non-violent discipline methods (United Nations Children's Fund [UNICEF], 2020). Likewise, children who have a parent or caregiver suffering from a mental health disorder, such as depression, are at risk of being maltreated (Dodge et al., 2017). In this sense, interventions should be developed and implemented to address risk factors and prevent child maltreatment.

2.1. Child maltreatment prevention

Child maltreatment prevention is a global health priority (Mikton & Butchart, 2009). The Sustainable Development Goals (SDG), Target 16.2, contain a specific call to protect children from abuse, exploitation, trafficking, and violence (United Nations [UN], 2015). The prevention of child maltreatment does require macro-level attention. However, parents' attitudes and behaviors can also be targeted through parenting interventions (Mejia et al., 2017). Parenting interventions have proven to be effective in high-income (Mikton & Butchart, 2009; Wessels et al., 2013) and low- and middle-income countries (LMICs; Puffer et al., 2015; Sumargi et al., 2015; Ward et al., 2020). Such interventions have contributed to increasing positive parenting practices and to improving caregiver-child interactions (Puffer et al., 2015; Ward et al., 2020). Children in disadvantaged contexts, in particular, are at high risk of

maltreatment related to the stressors surrounding families, such as poverty, poor-quality education, lack of access to services, and neighborhood violence (Mercy et al., 2013). A challenge often encountered is that many programs to prevent child maltreatment and support positive parenting are developed in high-income countries, which require further study, adaptations, and evaluations to determine their effectiveness in a diverse range of global settings (Sanders et al., 2014).

Brazil was one of the first countries to adjust its laws to the UN Convention on the Rights of the Child (CRC; Sacco et al., 2015) through the Child and Adolescent Statute (ECA), which came into force in 1990 (Law No. 8.069, 1990). Although much progress has been made in the last 30 years in terms of guaranteeing children's and adolescents' rights, Brazil is far from achieving the ideals determined by the CRC and the ECA (Sacco et al., 2015). In Brazil, the high numbers of child maltreatment are partly related to social tolerance (Donoso & Ricas, 2009; Koller et al., 2017). The change of beliefs, values, and behaviors occur gradually. Thus, physical punishment remains a practice used and often with the justification of educating children (Carmo et al., 2016). In 2014, Law No. 13.010, known as "Menino Bernardo Law", began to take effect in Brazil. The law determines the right of children and adolescents to receive proper education and care without physical punishment, cruel, or degrading treatment (Law No. 13.010, 2014). Although the law has been approved, its effects on Brazilian society have yet to be assessed. Brazil still faces the issue of underreported violence, which is associated with poor specific training for health professionals, social workers, and protection entities on acting in these cases based on legal guidelines. In addition, there is a lack of investments in the implementation and evaluation of violence prevention programs (Koller et al., 2017).

2.2. ACT Raising Safe Kids Program

The American Psychological Association (APA) Violence Prevention Office developed the ACT Raising Safe Kids Program to prevent child maltreatment and teach positive parenting skills to parents and caregivers of children from birth to 10 years. Professionals from different fields (e.g., psychologists and social workers) are trained to deliver the intervention. The ACT Program is a not-for-profit universal program, based on Social Learning Theory, and organized in nine weekly sessions lasting two hours. Parents and caregivers learn about the stages of child development, emotion regulation, positive communication, and problems solving techniques (Silva, 2007). The ACT Program has been implemented in several communities across the United States as well as in Bosnia and Herzegovina, Brazil, Colombia, Croatia, Greece, Japan, Peru, Portugal, Romania, Taiwan, and Turkey (Howe et al., 2017). In Brazil, the Portuguese version of the ACT Program was used with minor adaptations by adding new videos adapted to the cultural context (Altafim et al., 2016; Howe et al., 2017).

Most evaluations of the ACT Program have been implemented in the United States (Burkhart et al., 2013; Knox & Burkhart, 2014; Portwood et al., 2011; Weymouth & Howe, 2011). One of these studies was performed to examine the impact of ACT Program in parents' knowledge, behaviors, and attitudes using a randomized controlled trial. Results indicated that parents who participated in the ACT Program presented a reduction in the use of harsh verbal and physical discipline (medium effect size), and an increase in nurturing behavior (medium effect size). Only those parents who had participated in the ACT Program exhibited further increases in nurturing behavior at three-month follow-up (Portwood et al., 2011).

In the city of Ribeirão Preto (state of São Paulo, Brazil), Pedro et al. (2016) evaluated initial evidence of effectiveness of the ACT Program in different socioeconomic contexts. The sample included 64 mothers of children aged 3–8 years, and 64 other caregivers. Maternal parenting practices and children's behaviour were evaluated pre- and post-intervention. Results indicated that, despite families' socioeconomic level and children's type of school (public or private), participation in

the ACT Program contributed to improve parenting practices (large effect size) and children's behaviour (large effect size). Altafim and Linhares (2019) conducted a randomized controlled trial to evaluate the effectiveness of ACT Program also in the city of Ribeirão Preto. Mothers were randomly allocated into the intervention (n=40) or wait list control (n=41) groups, and caregivers (n=67) were second informants on the children's behaviours. Results indicated that, after participation in the ACT Program, mothers reported improvements in their parenting practices (medium effect size). Moreover, mothers and other caregivers reported less child behaviour problems (medium effect size). The positive changes were maintained at the three-four months follow-up.

The high frequency and seriousness of child maltreatment in Brazil indicate the necessity for implementing and evaluating preventive interventions. Although the results of the prior ACT Program evaluations are promising, replications should be carried in distinct cultural settings in Brazil. Further, a full breadth of measures related to the intervention content have not yet been evaluated, such as parents' physical punishment beliefs, anger management, and mental health outcomes. The assessment of these measures is important because they may contribute to the occurrence of child maltreatment (Dodge et al., 2017; Wessels et al., 2013). The main goal of the present study is to evaluate initial evidence of effectiveness of the ACT Program in Porto Alegre, the capital and largest city of the Brazilian state of Rio Grande do Sul. Parenting practices, physical punishment beliefs, anger, and mental health outcomes were assessed through self-report measures before and after parents' participation in the program.

3. Method

3.1. Study design

The present study is based on an intervention with one-group pretest-posttest design to evaluate initial evidence of effectiveness of the ACT Program.

3.2. Participants

The sample comprised 47 mothers and five fathers from Porto Alegre. The city is the capital of the state of Rio Grande do Sul and has 1,483,771 inhabitants (IBGE, 2020). According to the last population census, conducted every ten years, the Human Develop Index of Porto Alegre was 0.762, considered high. The measure includes three dimensions of human development (e.g., longevity, education, and income) and ranges from 0 to 1. In 2010, 21.37% of the population was formed by individuals under the age of 15 years (IBGE, 2010).

The state of Rio Grande do Sul, located in Southern Brazil, is recognized for its patriarchal standards that contribute to legitimizing the use of violence as a way of educating children. The origin of the people is linked to a rural lifestyle, and the economy is based on agricultural activities. Traditional culture follows a patriarchal model anchored in honor. The principles of the culture of honor reinforce differences in gender roles in which men are responsible for ensuring the morals of women and children through violence (Leites, Meneghel, & Hirakata, 2014).

In the present study, inclusion criteria specified caregivers had to be biological parents, step parents, or adoptive parents of the child. Parents with apparent cognitive impairment were excluded as well as caregivers participating in other interventions aimed to improve parenting practices. For inclusion in the analysis, participants had to attend at least seven of the nine sessions (75%) of the ACT program and have completed both the pre- and posttest assessment.

Regarding the composition of the sample, a total of 118 parents and caregivers showed interest in the program. The adherence assessment considered the 75 parents and caregivers present at the first meeting. Of this total, 65 (86.6%) completed at least seven of the nine sessions of the program, which indicates good adherence to the intervention. In this

study, of the analytic sample includes 52 biological parents, step parents, or adoptive parents who attended at least seven sessions and completed both the pre- and post-intervention assessments. The composition of the study sample is shown in Fig. 1.

3.3. Intervention description

The ACT Program is organized into nine weekly meetings lasting two hours. The materials were translated by a native Portuguese speaker and include the ACT Facilitator Manual, Motivational Interviewing Manual, Parents' Handbook, Evaluation and Instruments Guide, ACT attendance card, and compact disk with slides and homework sheets. The intervention involves a preliminary meeting and eight sessions exploring different themes related to child development and parenting practices. In the preliminary meeting, parents are introduced to the objectives of the program, as well as to the facilitators and other group members. In the first session, basic elements of child development are presented and discussed with parents. The second session aims to help parents understand how exposed to violence impacts children's health and development. The third session includes a discussion about emotions and how parents can control their anger. In the fourth session parents learn about children's emotions and how they can help their children to understand and control anger. The fifth session aims to help parents to understand the impacts of electronic media on children's behavior and health. In the sixth session discipline and parenting styles are discussed. Parents learn the way they educate their children has an impact on the child's behaviors for life. The seventh session aims to teach parents ways to prevent difficult behaviors and how to use positive ways to discipline their children. The eighth and last session helps parents to identify what they learned from the program and how to use the tools. The parents who completed the program received a certificate. The template for intervention description and replication (TIDieR; Hoffmann et al., 2014) is presented in Table 1.

3.4. Measures

In this study, five measures were included. One of them was performed only in the pretest (sociodemographic data) and four in the pretest–posttest (parenting practices, physical punishment beliefs, levels of anger, and mental health outcomes).

Sociodemographic data. Participants completed a sociodemographic questionnaire at baseline including information on caregiver age, gender, race/ethnicity, marital status, education level, employment, family monthly income, number of children, children's age, and gender.

Parenting practices. Participants' parenting practices were assessed through the ACT Evaluation Questionnaire (Silva, 2007). The questionnaire was adapted from the Parenting Scale (Arnold et al., 1993) and translated to Brazilian Portuguese (Silva, 2011). It is part of the materials developed by the American Psychological Association (APA) and includes two sections. The first section encompasses 11 items related to how parents behave when they need to deal with inappropriate behavior of children (e.g., "When my child misbehaves I do a long sermon or I talk straight to the point"). The second section includes 10 items on the parents' attitudes in different situations with the child, as well as their contribution to violence prevention (e.g., "I calmed myself down when I was angry so my child could learn how to do the same"). Items responses for both sections are made on a 5-point Likert scale, with each question ranging from 1 to 5. For all items, higher scores indicate more positive parenting practices. According to Altafim et al. (2018), who examined the factorial structure of the scale in Brazil, three latent parenting practices were identified: emotional and behavioral regulation, communication, and positive discipline. In this study, all participants completed the questionnaire at pre and posttest. The internal consistency in pretest was 0.70 for emotional and behavioral regulation, 0.63 for communication, and 0.66 for positive discipline. In posttest, the internal consistency was 0.79 for emotional and behavioral regulation,

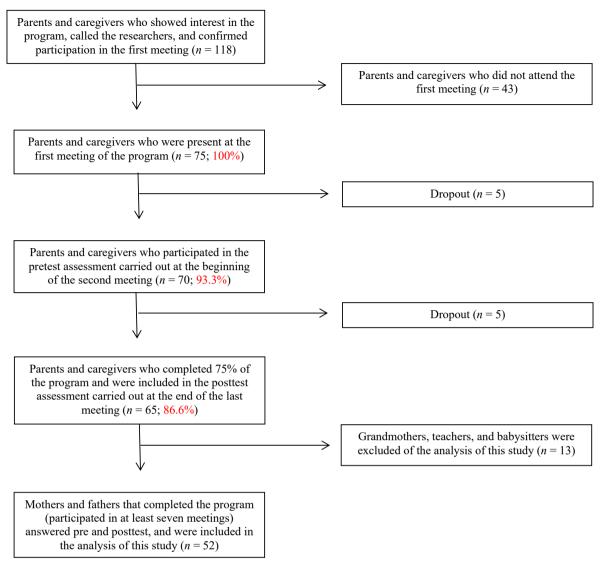


Fig. 1. Composition of the study sample.

0.53 for communication, and 0.66 for positive discipline.

Physical punishment beliefs. Participants' beliefs about physical punishment were evaluated through the Physical Punishment Beliefs Scale (Machado et al., 2000). The aim of the scale is to evaluate beliefs about parenting practices, specifically the degree of tolerance or acceptance towards the use of violence as a disciplinary strategy. It was developed in Portugal by Machado et al. (2000) and adapted to Brazil by Lawrenz et al. (2020). It consists of 21 items (e.g., "Hitting is often the only solution to bad behavior") answered through a 5-point Likert scale ("Strongly disagree" to "Strongly agree"). Participants are asked to answer in accordance with their way of thinking in relation to the statements presented. Higher scores indicate more tolerance or acceptance towards the use of violence as a disciplinary strategy. All participants completed the scale at pre and posttest. In this study, the internal consistency was 0.93 in pretest and 0.93 in posttest.

Levels of anger. Participants' levels of anger were assessed through the State-Trait Anger Expression Inventory (STAXI-2), which was developed by Spielberger (1999) and adapted to Brazil by Biaggio (2003). It is a 57-item inventory which measures the intensity of anger as an emotional state (state anger) and the disposition to experience angry feelings as a personality trait (trait anger). An example of an item is: "Nothing forces me to show anger." Items consist of a 4-point scale that assess intensity of anger at a moment and the frequency of anger

experience, expression, and control. Higher scores indicate higher levels of anger in the subscales "feeling angry," "feel like expressing anger verbally," "feel like expressing anger physically," "angry temperament," "angry reaction," "anger expressing-out,", and "anger expressing-in." On the other hand, higher scores indicate higher levels of anger control in the subscales "anger control-out" and "anger control-in." Participants completed the scale at pre and posttest. The internal consistency in pretest was 0.87 for "feeling angry," 0.88 for "feel like expressing anger verbally," 0.73 for "feel like expressing anger physically," 0.76 for "angry temperament," 0.70 for "angry reaction," 0.70 for "anger expressing-out," 0.83 for "anger expressing-in," 0.83 for "anger controlout," and 0.78 for "anger control-in." In posttest, the internal consistency was 0.89 for "feeling angry", 0.89 for "feel like expressing anger verbally," 0.73 for "feel like expressing anger physically," 0.73 for "anger temperament," 0.75 for "angry reaction," 0.66 for "anger expressing-out," 0.77 for "anger expressing-in," 0.87 for "anger controlout," and 0.87 for "anger control-in."

Mental health outcomes. The mental health of participants was evaluated through the Depression, Anxiety and Stress Scale (DASS-21). The aim of the scale is to assess depression, anxiety, and stress symptoms over the last week. It was developed by Lovibond and Lovibond (1995) and adapted to Brazil by Vignola and Tucci (2014). The responses are given on a 4-point Likert scale ("Did not apply to me at all" to "Applied").

Table 1Template for intervention description and replication (TIDieR).

	TIDieR			
Brief name	ACT Raising Safe Kids Program			
Why	To prevent child maltreatment and to teach positive parenting skills.			
What	ACT Parents Handbook, Facilitators Handbook, Evaluation Handbook, computer, data show, table, chairs, cardboard boxes, pencils, colorful pens, balloons, sheets, scissors, glues, modeling clays, cardboard, children's books, snacks, coffee, and tea.			
	The sessions are organized as follows: - Preliminary meeting: Parents are introduced to the objectives of the program, as well as facilitators and other group members			
	- Session 1: Understanding your child's behaviors - Session 2: Violence in children's lives			
	- Session 3: How parents and caregivers can understand and control anger			
	- Session 4 : Understanding and helping children when they are angry			
	- Session 5: Children and the electronic media			
	 Session 6: Discipline and parenting styles Session 7: Discipline and positive behaviors 			
	- Session 7: Discipline and positive behaviors - Session 8: Take the ACT Program to your home and community			
Who provided	The intervention was carried out by a psychologist certified as ACT facilitator and a researcher assistant (Psychology student).			
How	Parenting meetings were implemented over nine weeks consisting of groups composed of nine participants in average. Participants did not receive remuneration for participating in the intervention.			
Where	The groups' meetings took place at the university and one of them at a public school.			
When and how much	The intervention consisted of nine weekly sessions lasting two hours each. Seven different parent groups participated in the nine session program during March and December 2019.			
Tailoring	The intervention was developed for parents and caregivers of children from birth to age 10.			
Modifications	The pretest assessment, which usually takes place at the end of the preliminary meeting, was carried out at the beginning of the second meeting and before the contents of the intervention were delivered. The change was made because there was no time to carry out the assessment at the first meeting.			

to me very much or most of the time"). An example of a scale item is as follows: "I was worried about situations in which I might panic and make a fool of myself". Scores correspond to levels of symptoms, ranging from "normal" to "extremely serious." Higher scores indicate higher levels of depression, anxiety, and stress symptoms. All participants completed the questionnaire at pre and posttest. In this study, the internal consistency in pretest was 0.86 for depression, 0.73 for anxiety, and 0.87 for stress. In posttest, it was 0.88 for depression, 0.74 for anxiety, and 0.75 for stress.

3.5. Data collection procedures

The ACT Program was advertised through postings on social media (e.g., Facebook). The postings contained information about the objectives, inclusion criteria, duration, locality, and contact number. Parents interested in participating called the researchers and received information about the meetings. Seven groups were held with parents from March to December 2019. On-average, each group was composed of nine participants. The program was conducted by one psychologist certified as an ACT facilitator and a researche assistant (psychology student). Participation in the groups was free of charge. Most of the groups met at the university and one group met at a public school. To enable participation in the program, parents had the option of leaving their children in the care of two research assistants (psychology students) while attending the meetings. With respect to the fidelity to

content delivery, the pretest evaluation, which usually takes place at the end of the preliminary meeting, was carried out at the beginning of the second meeting and before the contents of the intervention. The change was made because there was no time to carry out the assessment at the first meeting as initially intended. The pretest assessment was completed during a group meeting and included self-report measures. The posttest assessment was carried out at the end of the last group session and was also parent completed. Participants did not receive remuneration for participating in the intervention.

3.6. Ethical procedures

The research project was submitted to the Research Ethics Committee of the Pontifical Catholic University of Rio Grande do Sul and approved under opinion 3.118.436. All participants were informed about the purpose of the study and signed the Free and Informed Consent Form.

3.7. Data analysis

Primarily, frequency and percentage were calculated for the categorical variables. For the descriptive variables, mean, standard deviation, minimum, and maximum were calculated. The Kolmogorov-Smirnov test was performed to assess normality. Within-group comparisons were analyzed through paired samples *t*-test (equal variance assumed) and included parenting practices (emotional and behavioral regulation, communication, and positive discipline), physical punishment beliefs, levels of anger (feeling angry, feel like expressing anger verbally, feel like expressing anger physically, angry temperament, angry reaction, anger expression-out, anger expression-in, anger control-out, and anger control-in), and mental health outcomes (depression, anxiety, and stress). Cohen-*d* (effect size) was calculated to indicate the standardized difference between means. The Statistical Package for Social Sciences 23.0 was used and the level of significance was 5% for analysis.

4. Results

In relation to sociodemographic data, parents had a mean age of 38.73 years (SD = 6.81), most of them were biological mothers and fathers (96.2%), female (90.4%), white (86.5%), married or in a stable union (88.5%), graduated (48.1%), employed (67.3%), and families' monthly income was more than six minimum wages (53.8%). Parents had, in average, 1.29 children (SD = 0.57). Children were mostly male (57.7%) and had a mean age of 49.37 months (SD = 27.63; see Table 2).

At baseline, parents presented high averages of emotional and behavioral regulation, communication, and positive discipline, which indicates good parenting practices. Regarding beliefs about physical punishment, parents presented low averages of legitimizing beliefs of physical punishment. It was possible to verify that parents presented low levels of "feeling angry," "feel like expressing anger verbally," "feel like expressing anger physically," "angry temperament," "angry reaction," "anger expression-out," "anger expression-in", "anger control-out", and "anger control-in". With respect to mental health outcomes, low levels of depression, anxiety, and stress were identified.

The effectiveness of the ACT Program was assessed by analyzing the averages in pre and posttest. Results indicated statistically significant differences in relation to parenting practices, with a large effect size for emotional and behavioral regulation, a medium effect size for communication, and a small effect size for positive discipline. A significant difference was found regarding physical punishment beliefs with a medium effect size. Significant differences in relation to levels of anger, with a small effect size, for angry temperament, angry reaction, anger expression-out, and anger control-out were indentified. A medium effect size for anger control-in was observed. With respect to mental health outcomes, significant differences regarding depression and stress, with a

 Table 2

 Participants' sociodemographic characteristics.

Variables	M (SD; range)		
Age (Years)	38.73 (6.81; 25–56)		
Number of children	1.29 (0,57; 1–4)		
Variables	n (%)		
Type of bond with the child			
Biological mothers or fathers	50 (96.2)		
Adoptive mother	1 (1.9)		
Stepfather	1 (1.9)		
Gender			
Feminine	47 (90.4)		
Masculine	5 (9.6)		
Race/ethnicity			
White	45 (86.5)		
Black	4 (7.7)		
Brown	3 (5.8)		
Marital status			
Married/stable union	46 (88.5)		
Single	3 (5.8)		
Separated	2 (3.8)		
Divorced	1 (1.9)		
Education level			
Graduation (completed or in progress)	25 (48.1)		
Complete higher education	14 (26.9)		
Incomplete higher education	8 (15.4)		
Complete high school	3 (5.8)		
Incomplete high school	2 (3.8)		
Employment			
Yes	35 (67.3)		
No	17 (32.7)		
Family monthly income			
More than six minimum wages	28 (53.8)		
Four to six minimum wages	9 (17.3)		
Two to four minimum wages	9 (17.3)		
One to two minimum wages	4 (7.7)		
Up to a minimum wage	2 (3.8)		

small effect size, were identified. Pre and posttest assessment data are presented in Table 3.

5. Discussion

The main goal of the present study was to evaluate initial evidence of effectiveness of the ACT Program in Porto Alegre, Brazil. Results indicated that parenting practices (emotional and behavioral regulation, communication, and positive discipline), physical punishment beliefs, levels of anger (angry temperament, angry reaction, anger expressionout, and anger control-in), and mental health outcomes (depression and stress) improved significantly from pre to posttest. Other studies, carried out in United States (Portwood et al., 2011; Weymouth & Howe, 2011) and Brazil (Altafim & Linhares, 2019; Altafim et al., 2016; Pedro et al., 2016), had already indicated the effectiveness of ACT Program for improving parental practices. This study demonstrates that the program may also contribute to the reduction of beliefs that legitimize physical punishment, as well as to decrease levels of anger, depression, and stress. In general, results provide interesting patterns that are suggestive that the intervention can be successfully implemented in this new and distinct cultural context of Brazil compared to prior studies in the country.

The strategies to prevent child maltreatment include parenting programs that promote nurturing, stable, and safe relationships between parents and children (Britto et al., 2017; WHO, 2009). These prevention strategies provide opportunities to parents to learn effective parenting practices (Altafim & Linhares, 2016). In this study, although parents had already reported good parenting practices before participating in the program, it was possible to observe evidence of improvements in emotional and behavioral regulation, communication, and positive discipline. Improving parenting practices tends to have positive repercussions for children, such as positive behavior, communication, task

Table 3Parenting practices, physical punishment beliefs, levels of anger, and mental health outcomes in pre and posttest.

	Pretest Mean (SD)	Posttest Mean (SD)	t (df)	p value	Cohen's d
Parenting					
practices					
Emotional and	20.47	23.45	-5.784	0.000	-0.83
behavioral regulation	(3.89)	(3.26)	(50)		
Communication	16.37	17.60	-4.490	0.000	-0.57
	(2.48)	(1.75)	(51)		
Positive discipline	21.40	22.04	-2.220	0.031	-0.26
	(2.94)	(1.68)	(47)		
Physical	35.81	29.88	5.337	0.000	0.54
punishment beliefs	(11.66)	(10.24)	(41)		
Levels of anger					
Feeling angry	5.98	5.98	0.000	1.000	0
recining anigry	(2.51)	(2.58)	(49)	1.000	U
Feel like expressing	5.82	5.65	0.526	0.601	0.08
anger verbally	(2.47)	(1.61)	(50)	0.001	0.00
Feel like expressing	5.08	5.06	0.144	0.886	0.02
anger physically	(1.07)	(0.23)	(50)	0.000	0.02
Angry temperament	10.28	9.34	3.160	0.003	0.39
ringry temperament	(2.45)	(2.35)	(49)	0.000	0.00
Angry reaction	8.75	8.10	2.093	0.041	0.25
ringry redection	(2.66)	(2.52)	(50)	0.011	0.20
Anger expression-	15.46	14.24	3.342	0.002	0.33
out	(3.70)	(3.52)	(49)	0.002	0.00
Anger expression-in	17.80	17.02	1.386	0.172	0.16
	(5.00)	(4.59)	(50)	0.17.2	0.10
Anger control-out	21.40	22.62	- 1.961	0.056	-0.26
	(4.56)	(4.63)	(49)		
Anger control-in	20.56	22.90	- 3.911	0.000	-0.50
inger control in	(4.18)	(5.03)	(49)	0.000	0.00
Mental health	(110)	(0.00)	(12)		
outcomes					
Depression	3.54	2.26	2.604	0.012	0.36
	(4.00)	(2.98)	(49)		
Anxiety	2.30	1.54	1.495	0.141	0.27
	(3.03)	(2.54)	(49)		
Stress	6.86	5.16	3.080	0.003	0.46
	(4.22)	(2.96)	(49)		

involvement, and responsiveness (Tamis-LeMonda et al., 2009; Vallotton et al., 2016). Further studies evaluating the ACT Program should include measures to assess how parental participation in the intervention contributes to children's health and development.

The results of this study indicate that it is possible to reduce beliefs that legitimize physical punishment through the participation of parents in the ACT Program. There are few studies on this topic in Brazil and further research should investigate whether the reduction of beliefs that legitimize physical punishment contributes to reducing aggressive behavior. A study conducted in the United States examined the extent to which parental belief in the value of corporal punishment moderates the association between level of parenting stress and physical child abuse potential. Results indicated that the level of parenting stress was positively associated with physical child abuse potential among parents who reported high levels of belief in the value of corporal punishment. In contrast, level of parenting stress was not associated with physical child abuse potential among parents who reported low belief in the value of corporal punishment (Crouch & Behl, 2001).

In this study, it was possible to identify evidence of reduction of parents' angry temperament, angry reaction, and anger expression-out. There was also an increase in anger control-in after participating in the intervention. During ACT Program meetings, parents were able to learn how to identify and manage anger. Child maltreatment may be related to the difficult some parents have to deal with anger (WHO, 2006). Better characterization of the emotional environments in which children develop is critical for understanding how and why violence affects them

and has important implications for informing interventions (Plate et al., 2019). When high levels of anger are experienced, but not adequately controlled, anger is likely to be manifested in the form of aggressive acts directed at others. Parents' elevated levels of anger are consistently associated with abusive and punitive practices that include coercive and hostile discipline (Del Vecchio et al., 2017). Further studies can assess whether the reduction in anger levels of parents who participated in the ACT Program contributes to reducing child maltreatment.

Although the ACT Program is not primarily aimed at improving parents' mental health, a decrease in the levels of depression and stress were identified between the participants of this study. It is important to evaluate these variables because parents with high levels of depression and stress may find it difficult to manage children's behaviors and end up using punitive and abusive practices (Wessels et al., 2013). It is hypothesized that the improvement in parents' mental health is related with the opportunity to talk in a safe space about the anguish and difficulties related to raising their children. In addition, learning how to deal with emotions, especially anger, may contribute to reduce depression and stress. This is because anger has been associated with internalizing symptomology. Difficulties regulating anger can maintain or exacerbate depression, thereby resulting in increased emotional distress and impaired social functioning (Go et al., 2015). Depression can influence mood, affect, and behavior, disrupting the sensitive parent-child relationship necessary for children's development (Dubowitz et al.,

Despite the contributions of this study, it is possible to identify limitations. The findings indicate the messages were enacted by parents. However, further evaluation is required to determine the impact on parenting of the ACT Program in this context employing a randomized controlled design. The small number of participants means that the results need to be interpreted with caution and cannot be generalized. Evaluations were carried out through self-report measures and no comparison groups were included. This design was used because it was not possible to perform a randomization process. In addition, communication and positive discipline subscales for the parenting practices measure do not have great reliability. It is also important to notice that parents participated because they were interested, probably meaning the group was relatively motivated. Furthermore, even though the core content of the intervention was not delivered until the second meeting, the first meeting could influence expectations of parents and readiness to change, so failing to assess prior to the start of the group meeting may result in an underestimate of the intervention effect.

The present study was not a randomized controlled trial and clustering is not accounted for in the analysis. Further, only caregiver report measures are used. However, it provides initial evidence on intervention take-up with good adherence to parenting meetings and change in parent knowledge and practices. Further studies may include a randomized control trial design, as well as observation measures. It is important that these studies assess the implementation and effectiveness of ACT Program considering social and cultural differences found in Brazil. As mentioned earlier, Brazil is a country of large territorial extension and it is still a challenge to implement parenting programs in remote areas and with less resources. Ultimately, it is important to highlight the difficulties encountered when it comes to implementing interventions in developing countries. In general, Brazilians are not used to participating in research. For ethical reasons, it is not possible to provide any type of benefit to encourage participation in interventions. In addition, research is carried out without the financial and human resources that would contribute to expansion of work.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. The research was financed by two Brazilian agencies - the National Council for Scientific and

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References

- Afifi, T. O., Ford, D., Gershoff, E. T., Merrick, M., Grogan-Kaylor, A., Ports, K. A., ... Bennett, R. P. (2017). Spanking and adult mental health impairment: The case for the designation of spanking as an adverse childhood experience. *Child Abuse and Neglect*, 71, 24–31. https://doi.org/10.1016/j.chiabu.2017.01.014
- Altafim, E. R. P., & Linhares, M. B. M. (2016). Universal violence and child maltreatment prevention programs for parents: A systematic review. *Psychosocial Intervention*, 25 (1), 27–38. https://doi.org/10.1016/j.psi.2015.10.003
- Altafim, E. R. P., & Linhares, M. B. M. (2019). Preventive intervention for strengthening effective parenting practices: A randomized controlled trial. *Journal of Applied Developmental Psychology*, 62, 160-172. 10.1016/j.appdev.2019.03.003.
- Altafim, E. R. O., Pedro, M. E. A., & Linhares, M. B. M. (2016). Effectiveness of the ACT Raising Safe Kids Program in a developing country. *Children and Youth Services Review*, 70, 315–323. https://doi.org/10.1016/j.childyouth.2016.09.038
- Altafim, E. R. P., McCoy, D. C., & Linhares, M. B. M. (2018). Relations between parenting practices, socioeconomic status, and child behavior in Brazil. *Children and Youth Services Review*, 89, 93-102. 10.1016/j.childyouth.2018.04.025.
- Arnold, D. S., O'Leary, S. G., Wolff, L. S., & Acker, M. M. (1993). The Parenting Scale: A measure of dysfunctional parenting in discipline situations. *Psychological Assessment*, 5, 137–144. https://doi.org/10.1037/1040-3590.5.2.137
- Belsky, J., & Vondra, J. (1989). Lessons from child abuse: The determinants of parenting. In D. Cicchetti, & V. Carlson (Eds.), Current research and theoretical advances in child maltreatment (pp. 153–202). Cambridge, England: Cambridge University Press.
- Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., ... Ruggiero, J. (1994). Initial reliability and validity of anew retrospective measure of child abuse and neglect. *American Journal of Psychiatry*, 151(8), 1132–1136. https:// doi.org/10.1176/ajp.151.8.1132
- Biaggio, A. M. B. (2003). Inventário de Expressão de Raiva como Estado e Traço (S.T.A.X.I.) Manual Técnico. São Paulo: Vetor.
- Brazilian Institute of Geography and Statistics [IBGE]. (2010). Censo 2010. https://censo2010.ibge.gov.br/.
- Brazilian Institute of Geography and Statistics [IBGE]. (2020). Projeção da população brasileira e das unidades da federação. https://www.ibge.gov.br/apps//populacao/ projecao/.
- Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., ... Bhutta, Z. A. (2017). Nurturing care: Promoting early childhood development. *The Lancet*, 389, 91–102. https://doi.org/10.1016/S0140-6736(16)31390-3
- Brown, J., Cohen, P., Johnson, J. G., & Salzinger, S. (1998). A longitudinal analysis of risk factors for child maltreatment: Findings of a 17-year prospective study of officially recorded and self-reported child abuse and neglect. *Child Abuse & Neglect*, 22(11), 1065–1078. https://doi.org/10.1016/S0145-2134(98)00087-8
- Burkhart, K. M., Knox, M., & Brockmyer, J. (2013). Pilot evaluation of the ACT Raising Safe Kids Program on children's bullying behavior. *Journal of Child and Family Studies*, 22, 942–951. https://doi.org/10.1007/s10826-012-9656-3
- Carmo, P. H. B., Alvarenga, P., & Lins, T. C. S. (2016). Crenças de mães de diferentes níveis socioeconômicos sobre punição física e privação de privilégios. *Estudos e Pesquisas em Psicologia*, 16(3), 911-929. https://www.e-publicacoes.uerj.br/index. php/revispsi/article/ view/32953/23426.
- Cowan, P. A., Cowan, C. P., & Schulz, M. S. (1996). Thinking about risk and resilience in families. In E. M. Hetherington, & E. A. Blechman (Eds.), Stress, coping and resiliency in children and families (pp. 1–38). Erlbaum.
- Crouch, J. L., & Behl, L. E. (2001). Relationships among parental beliefs in corporal punishment, reported stress, and physical child abuse potential. *Child Abuse & Neglect*, 25, 413–419. https://doi.org/10.1016/s0145-2134(00)00256-8
- Del Vecchio, T., Jablonka, O., DiGiuseppe, R., Noti, J., & David, O. (2017). Psychometric evaluation of the Parent Anger Scale. *Journal of Child and Family Studies*, 26(11), 3013-3025. 0.1007/s10826-017-0824-3.
- Dodge, J. C., Higgins, D. J., Delfabbro, P., & Segal, L. (2017). Risk factors for child maltreatment in an Australian population-based birth cohort. *Child Abuse & Neglect*, 64, 47–60. https://doi.org/10.1016/j.chiabu.2016.12.002
- Donoso, M. T. V., & Ricas, J. (2009). Perspectiva dos pais sobre educação e castigo físico. Revista de Saúde Pública, 43(1), 78–84. https://doi.org/10.1590/S0034-89102009000100010
- Dubowitz, H., Kim, J., Black, M. M., Weisbart, C., Semiatin, J., & Magder, L. S. (2011). Identifying children at high risk for a child maltreatment report. *Child Abuse & Neglect*, 35, 96–104. https://doi.org/10.1016/j.chiabu.2010.09.003
- Finkelhor, D., Shattuck, A., Turner, H. A., & Hamby, S. L. (2014). Trends in children's exposure to violence, 2003 to 2011. JAMA Pediatrics, 168(6), 540–546. https://doi. org/10.1001/jamapediatrics.2013.5296
- Go, M., Chu, C. M., Barlas, J., & Chng, G. S. (2015). The role of strengths in anger and conduct problems in maltreated adolescents. *Child Abuse & Neglect*, 67, 22–31. https://doi.org/10.1016/j.chiabu.2017.01.028
- Hillis, S., Mercy, J., Amobi, A., & Kress, H. (2016). Global prevalence of past-year violence against children: A systematic review and minimum estimates. *Pediatrics*, 137(3), 1–13. https://doi.org/10.1542/peds.2015-4079
- Hoffmann, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., Altman, D. G., Barbour, V., Macdonald, H., Johnston, M., Lamb, S. E., Dixon-Woods, M., McCulloch, P., Wyatt, J. C., Chan, A., & Michie, S. (2014). Better reporting of interventions? Template for intervention description and replication (TIDieR) checklist and guide. *British Medical Journal*, 348, 1-12. 10.1136/bmj.g1687.

- Howe, T. R., Knox, M., Altafim, E. R. P., Linhares, M. B. M., Nishizawa, N., Fu., T. J., Camargo, L., Ormeno, G. R., Marques, T., Barros, L., & Pereira, A. I. (2017). International child abuse prevention: Insights from ACT Raising Safe Kids. Child and Adolescent Mental Health, 22(4), 194-200. https://doi.org/10.1111/camh.12238.
- Kennedy, A. C., Bybee, D., Palma-Ramirez, E., & Jacobs, D. (2017). Cumulative victimization as a predictor of intimate partner violence among young mothers. *Psychology of Violence*, 7(4), 533–542. https://doi.org/10.1037/vio0000071
- Knox, M., & Burkhart, K. (2014). A multi-site study of the ACT Raising Safe Kids Program: Predictors outcomes and attrition. *Children and Youth Services Review*, 39, 20–24. https://doi.org/10.1016/j.childyouth.2014.01.006
- Koller, S. H., Lawrenz, P., Macedo, D. M., Hohendorff, J. V., & Habigzang, L. F. (2017). Undestanding and combating domestic violence in Brazil. Global responses to domestic violence. Switzerland: Springer.
- Law No. 8.069. (1990). Provides for the Child and Adolescent Statute (ECA). Brasilia, DF:
- Law No. 13.010. (2014). Provides for the establishment of the right of children and adolescents to be educated and cared for without the use of physical punishment, cruel, or degrading treatment. Brasilia, DF: Planalto Palace.
- Lawrenz, P., Freitas, C. P. P., Matos, M., & Habigzang, L. (2020). Adaptação da Escala de Crenças sobre Punições Físicas para o Contexto Brasileiro. Manuscript submitted for publication.
- Leites, G. T., Meneghel, S. N., & Hirakata, V. N. (2014). Homicídios femininos no Rio Grande do Sul. Revista Brasileira de Epidemiologia, 17(3), 642–653. https://doi.org/ 10.1590/1809-4503201400030006
- Lovibond, S. H., & Lovibond, P. F. (1995). Manual for the Depression Anxiety Stress Scales. Sydney: Psychology Foundation.
- Macedo, D. M., Lawrenz, P., Hohendorff, J. V., Freitas, C. P. P., Koller, S. H., & Habigzang, L. F. (2020). Characterization of child maltreatment cases identified in health services. *Paidéia*, 30, 1–11. https://doi.org/10.1590/1982-4327e3018
- Machado, C., Gonçalves, M. & Matos, M. (2000). E.C.P.F. Escala de crenças sobre a punição física. In Machado, C., Gonçalves, M. & Matos, M. (Coords.), Manual da escala de crenças sobre a punição física e do Inventário de práticas educativas parentais. Psignilibrios Edicões.
- Mejia, A., Haslam, D., Sanders, M. R., & Penman, N. (2017). Protection children in lowand middle-income countries from abuse and neglect: Critical challenges for successful implementation of parenting programs. The European Journal of Development Research, 29, 1038–1052. https://doi.org/10.1057/s41287-017-0105-4
- Mercy, J. A., Saul, J., & Hillis, S. (2013). The importance of integrating efforts to prevent violence against women and children. In: UNICEF (Ed.), New York: UNICEF.
- Mikton, C., & Butchart, A. (2009). Child maltreatment prevention: A systematic review of reviews. Bulletin of the World Health Organization, 87(5), 353–361. https://doi.org/ 10.2471/blt.08.057075
- Ministry of Women, Family, and Human Rights. (2019). Crianças e adolescentes: Balanço do Disque 100 aponta mais de 76 mil vítimas. https://www.mdh.gov.br/ todas-asnoticias/2019/junho/criancas-e-adolescentes-balanco-do-disque-100-aponta-maisde-76-mil-vitimas.
- Pedro, M. E. A., Altafim, E. R. P., & Linhares, M. B. M. (2016). ACT Raising Safe Kids Program to promote positive maternal parenting practices in different socioeconomic contexts. *Psychosocial Intervention Online Journal*, 70, 315–323. https://doi.org/10.1016/j.psi.2016.10.003
- Pinheiro, P. S. (2006). World report on violence against children. https://www.unicef.org/violencestudy/reports.html.
- Plate, R. C., Bloomberg, Z., Bolt, D. M., Bechner, A. M., Roeber, B. J., & Pollak, S. D. (2019). Abused children experience high anger exposure. Frontiers in Psychology, 10, 1–4. https://doi.org/10.3389/fpsyg.2019.00440
- Portwood, S. G., Lambert, R. G., Abrams, L. P., & Nelson, E. B. (2011). An evaluation of the Adults and Children Together (ACT) Against Violence Parents Raising Safe Kids Program. The Journal of Primary Prevention, 32, 147–160. https://doi.org/10.1007/ s10935-011-0249-5
- Puffer, E. S., Green, E. P., Chase, R. M., Sim, A. L., Zayzay, J., Friis, E., ... Boone, L. (2015). Parents make the difference: A randomized-controlled trial of a parenting intervention in Liberia. Global Mental Health, 2, 1–13. https://doi.org/10.1017/gmh.2015.12
- Sacco, A. M., Souza, A. P. L., & Koller, S. H. (2015). Child and adolescent rights in Brazil. The International Journal of Children's Rights, 23, 818–843. https://doi.org/10.1163/ 157181811X611063

- Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-Positive Parenting Program: A systematic review and meta-analysis of a multi-level system of parenting support. Clinical Psychology Review, 34(4), 337–357. https://doi.org/ 10.1016/j.cpr.2014.04.003
- Silva, J. (2007). Parents Raising Safe Kids: ACT 8-week program for parents. Washington, DC: American Psychological Association.
- Silva, J. (2011). ACT Raising Safe Kids Program Evaluation Guide. Washington, DC: American Psychological Association.
- Spielberger, C. D. (1999). State-Trait Anger Expression Inventory-2. Lutz, Florida: Psychological Assessment Resources.
- Sumargi, A., Sofronoff, K., & Morawska, A. (2015). A randomized-controlled trial of the Triple P-Positive Parenting Program Seminar Series with Indonesian parents. *Child Psychiatry & Human Development*, 46, 749-761. https://doi.org/10.1007/s10578-024-05178-024-0
- Tamis-LeMonda, C. S., Briggs, R. D., McClowry, S. G., & Snow, D. L. (2009). Maternal control and sensitivity, child gender, and maternal education in relation to children's behavioral outcomes in African American families. *Journal of Applied Developmental Psychology*, 30(3), 321–331. https://doi.org/10.1016/j.appdev.2008.12.018
- Till-Tentschert, U. (2017). The relation between violence experienced in childhood and women's exposure to violence in later life: Evidence from Europe. *Journal of Interpersonal Violence*, 32(12), 1874–1894. https://doi.org/10.1177/ 0886260517698952
- United Nations [UN]. (2015). Sustainable Development Goals. sustainabledevelopment/sustainable-development-goals/.
- United Nations Children's Fund [UNICEF]. (2018). Pobreza na infância e adolescência. https://www.unicef.org/brazil/relatorios/pobreza-na-infancia-e-na-adolescencia.
- United Nations Children's Fund [UNICEF]. (2020). Violent discipline. https://data.unicef. org/topic/child-protection/violence/violent-discipline/.
- Vallotton, C. D., Mastergeorge, A., Foster, T., Decker, K. B., & Ayoub, C. (2016). Parenting supports for early vocabulary development: Specific effects of sensitivity and stimulation through infancy. *Infancy*, 22(1), 78–107. https://doi.org/10.1111/infa.12147
- Van der Put, C. E., Lanctôt, N., de Ruiter, C., & van Vugt, E. (2015). Child maltreatment among boy and girl probationers: Does type of maltreatment make a difference in offending behavior and psychosocial problems? *Child Abuse and Neglect*, 46, 142–151. https://doi.org/10.1016/j.chiabu.2015.05.012
- Vignola, R. C., & Tucci, A. M. (2014). Adaptation and validation of the Depression, Anxiety and Stress Scale (DASS) to Brazilian Portuguese. *Journal of Affective Disorders*, 155, 104–109. https://doi.org/10.1016/j.jad.2013.10.031
- Viola, T. W., Salum, G. A., Kluwe-Schiavon, B., Sanvicente-Vieira, B., Levandowski, M. L., & Grassi-Oliveira, R. (2016). The influence of geographical and economic factors in estimates of childhood abuse and neglect using the Childhood Trauma Questionnaire: A worldwide meta-regression analysis. *Child Abuse & Neglect*, 51, 1–11. https://doi.org/10.1016/j.chiabu.2015.11.019
- Ward, C. L., Wessels, I. M., Lachman, J. M., Hutchings, J., Cluver, L. D., Kassanjee, R., ... Gardner, F. (2020). Parenting for Lifelong Health for Youth Children: A randomized controlled trial of a parenting program in South Africa to prevent harsh parenting and child conduct problems. *Journal of Child Psychology and Psychiatry*, 61(4), 503–512. https://doi.org/10.1111/jcpp.13129Wessels, I., Mikton, C., Ward, C. L., Kilbane, T., Alves, R., Campello, G., Dubowitz, H.,
- Wessels, I., Mikton, C., Ward, C. L., Kilbane, I., Alves, R., Campello, G., Dubowitz, H., Hutchings, J., Jones, L., Lynch, M., & Madrid, B. (2013). Preventing violence: Evaluating outcomes of parenting programmes. https://www.who.int/publications/ i/item/preventing-violence-evaluating-outcomes-of-parenting-programmes.
- Weymouth, L. A., & Howe, T. (2011). A multi-site evaluation of Parents Raising Safe Kids Violence Prevention Program. Children and Youth Services Review, 33, 1960–1967. https://doi.org/10.1016/j.childyouth.2011.05.022
- World Bank. (2020). Country and lending groups. https://web.archive.org/web/ 20110410002450/http://data.worldbank.org/about/country-classifications/ country-and-lending-groups.
- World Health Organization [WHO]. (2006). *Preventing child maltreatment:* A guide to taking action and generating evidence. https://www.who.int/violence_injury_prevention/publications/violence/child maltreatment/en/.
- World Health Organization. (2009). Violence prevention the evidence. https://www.who.int/violence_injury_prevention/violence/the-evidence/en/.
- World Health Organization [WHO]. (2020). Global status report on preventing violence against children 2020. https://www.who.int/teams/social-determinants-of-health/violence-prevention/global-status-report-on-violence-against-children-202.