

CONTEXT MATTERS:

Understanding adverse childhood experiences, long-term mental health outcomes, and the role of social protection interventions in Mpumalanga, South Africa



What we know

Adverse Childhood Experiences (ACEs) are stressful and potentially traumatic experiences children may face whilst growing up like abuse, neglect, bullying or domestic violence. These experiences can overwhelm children's ability to cope, affecting how they think, feel, relate to others, and even how their brains develop.¹⁻² Even when common in certain communities, ACEs can disrupt healthy development and have been linked to poor mental health across the life course.³⁻⁶

In South Africa and other low- and middle-income countries (LMICs), children often face additional adversities not captured by the traditional ACE lists from high-income countries (HICs), like AIDS-related stigma, food insecurity, and community violence⁷⁻⁹. Recognizing these "expanded" ACEs is crucial for designing interventions that reflect children's lived realities.

With high rates of ACEs and a large mental health treatment gap in South Africa¹⁰⁻¹², the need for scalable solutions is urgent. It is important to assess whether existing, widely implemented programs- such as cash transfers- can also protect long-term mental health in high-ACE settings.



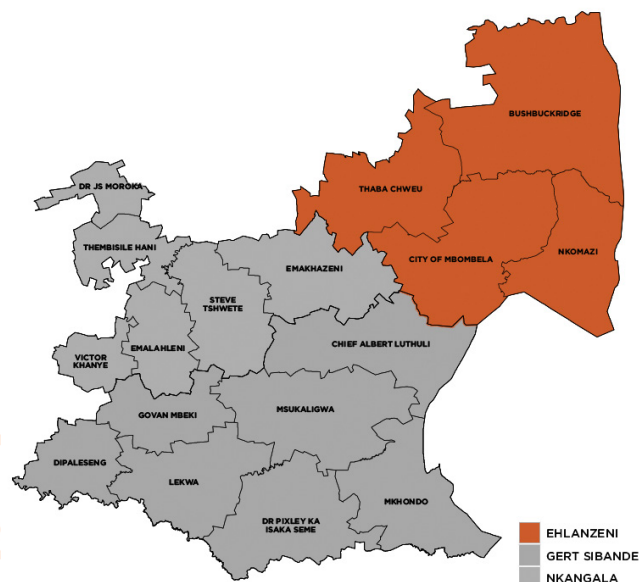
What did we want to learn?

1. How do South African adolescents experience childhood adversity in a low resource, high deprivation community setting?
2. How do different patterns of ACEs affect their long-term mental health?
3. Can household-level government cash transfers in childhood improve long-term adult mental health outcomes in a high-ACE context?



How did we do it?

In 2010-2011, 1664 adolescents aged 10- 17 (mean age = 13.44, 54.87% assigned female at birth) were randomly sampled from households in Ehlanzeni district, Mpumalanga province, and invited to participate in interviews





How did we do it?

about their health and wellbeing, including ACEs and mental health. The same adolescents were also followed up in 2011-2012 (n = 1648, mean age = 14.48, 54.92% female sex). In 2022-2024, those adolescents, now young adults aged 20-33 (n = 1305, mean age = 25.32, 55.69% female sex), were re-interviewed about their health and wellbeing.

We used a method called latent class analysis (LCA) to group participants based on patterns of 14 different ACEs, revealing distinct ACE groups. We then assessed how

adult mental health differed across these patterns of ACEs.

We also used propensity score matching to compare similar people who did and did not receive household government cash transfers in childhood, to see whether they improved long-term adult mental health.

The cash transfers we studied were:

- Child Support Grant
- Old Age Pension
- Foster Care Grant
- Child Dependency Grant
- Disability Grant



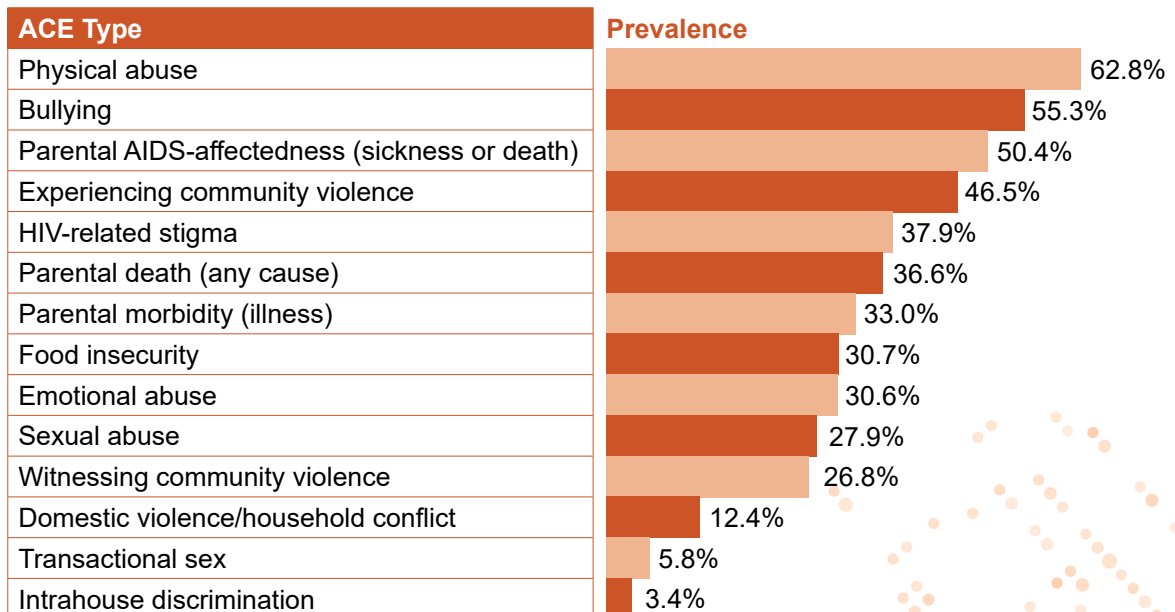
What did we find

Adverse childhood experiences were nearly universal:

- 97.6% of participants experienced at least one adversity
- 65.5% experienced four or more ACEs
- Some of the most common forms of childhood adversity were contextually sensitive or expanded ACEs; those not typically recognized by high-income country ACE frameworks such as HIV-related stigma, parental AIDS-affectedness, and experiencing community violence.

Context note:

These findings reflect childhood experiences during 2010-2012, when antiretroviral treatment (ART) access was not yet universal and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) played an important role in ART rollout. With PEPFAR now under threat and persistent gaps in ART coverage, similar patterns of HIV-and AIDS-related adversities could re-emerge unless the South African government strengthens its response efforts or U.S. Congress renews funding commitments.



Not all ACEs are the same:

- We found four unique patterns of ACEs in our sample:
 1. A group facing high parental AIDS-affectedness and parental sickness with moderate violence exposure (10.9%)
 2. A group exposed to the highest levels of multiple ACE types, including violence, abuse and HIV-related stigma (22.1%)
 3. A group primarily affected by parental AIDS-related death and moderate bullying and community violence (22.1%)
 4. A lower adversity group with the lowest likelihood of exposure across most ACEs (44.8%)

Differences in Background, Age, Gender, and Poverty Across ACE Patterns:

- The adversity class with the highest levels of multiple ACE types had significantly more children who were older, girls, living in higher levels of poverty, and those from the urban location (vs. rural).

Different patterns of adversity in childhood = different mental health outcomes over a decade later:

- Mental health outcomes significantly varied between the four patterns of ACEs and some combinations of ACEs were more harmful for mental health than others.
- The groups with the worst adult mental health symptoms (depression, PTSD, anxiety, suicidality, and psychosis), were those mainly characterized by expanded ACEs.
- This may highlight the unique burden of expanded ACEs on poor mental health in this context.

Cash transfers alone might not be enough:

- Despite South Africa's widespread provision of social protection interventions, we found no clear evidence in our sample that childhood household grant receipt improved long-term adult mental health outcomes in a high-ACE, low resource setting.
- Even receiving multiple cash transfers did not appear to offer cumulative protection.
- This suggests that whilst helpful and effective for poverty relief, cash transfers may not address the complex determinants of poor mental health, including the underlying emotional and psychological impacts of ACEs.



Why do ACE frameworks matter for policy and programming?

ACE frameworks can improve policies by:

- Offering a structured way to identify children at increased risk of poor mental health - not just by how many ACEs they have faced, but by the type and combination of those adversities.
- Highlighting "hidden" ACEs like HIV-related stigma and community violence that are not captured by traditional frameworks.
- Assessing whether current interventions- like cash transfers- are targeting the right populations and problems.

Our findings highlight that it is not just the number of ACEs that matters, but the specific types and combinations that shape long-term mental health. Using latent class analysis, we identified four distinct ACE patterns, suggesting that childhood adversity is patterned, not random. For policymakers, this means interventions should move beyond treating ACEs as a simple checklist and in-



Why do ACE frameworks matter for policy and programming? (cont.)

stead prioritize children facing multiple, overlapping ACEs, such as violence, HIV-related adversity, and food insecurity. Strategic targeting based on ACE patterns can make interventions more effective and efficient.

Conventional ACE frameworks fall short in LMICs:

- The traditional “10-item” ACE list from HICs miss key contextual ACEs like HIV stigma, food insecurity, and community violence in the South African context.
- In South Africa, these expanded ACEs were important in shaping the four unique patterns of adversity that had differing levels of mental health symptom severity in adulthood.
- LMICs need context-sensitive tools and interventions, not direct imports from HIC research.



What should we do?

1. Redefine ACE frameworks for South Africa and other LMICs:

- Expand and update national definitions and screening tools to reflect context-specific adversities (e.g., HIV and AIDS-related adversities, hunger, community violence).

2. Invest in trauma-informed, gender-sensitive mental health care:

- Tailor support for urban youth- especially girls- exposed to multi-type adversity.
- Embed support in schools, community centers, and clinics.

3. Integrate cash transfers with psychosocial support:

- Pair cash transfers with mental health care, parenting programs, and violence prevention.
- Explore increasing the value and duration of grant receipt .
- Strengthen the stability and reach of social protection programs to support children over time.

4. Use longitudinal research in LMICs to guide policy:

- Evidence from this longitudinal South African cohort suggests the need for early, sustained, multi-sectoral interventions.
- Move beyond importing models from HICs to develop locally relevant, evidence-based solutions.



Key Questions for Action

1. *“How can we adapt existing mental health and social protection interventions to better address context-specific adversities like HIV-related stigma and community violence?”*
2. *“In what ways can we better identify and support children exposed to multiple overlapping adversities early in life?”*
3. *“How can longitudinal, locally driven research be better used to inform child protection policies in South Africa and other LMICs?”*



Glossary:

Adverse Childhood Experiences (ACEs): Stressful and potentially traumatic experiences during childhood, such as abuse, neglect, and exposure to domestic violence, that can negatively impact health and wellbeing across the life course.

Expanded ACEs: Context-specific adversities not typically included in traditional ACE frameworks, such as HIV-related stigma, food insecurity, or community violence.

Latent Class Analysis: A statistical method that identifies hidden subgroups within a population based on patterns of shared characteristics – in this study, patterns of ACEs.

Propensity Score Matching: A statistical technique used to compare groups that are similar on key characteristics, helping to estimate the effect of interventions like cash transfers.

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Final thoughts:

Context matters. Children's experiences are shaped by the environments they grow up in, and so must our policies and programs. Scalable, trauma-informed and context-sensitive interventions are urgently needed to build healthier, more resilient futures¹³⁻¹⁵.

