



# A Critical Policy Analysis of Psychosocial Support for Children in Earthquake-Exposed Areas in Groningen

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## **Abstract**

The province of Groningen in the Netherlands has faced recurring earthquakes for decades due to gas extraction, leading to widespread physical, economic and psychosocial consequences. This thesis critically examines the policies and programs aimed at supporting the psychosocial well-being of children affected by these disasters. Using a policy audit and qualitative interviews with professionals, the research reveals a fragmented landscape of support where child-specific needs are often overlooked. Although some initiatives acknowledge the mental health impact of earthquakes, many remain short-term, are inconsistently implemented, or rely on temporary funding. These findings highlight the need for structural, long-term mental health strategies that center the voices and experiences of children. Applying Bacchi's "What's the Problem Represented to be?" (WPR) approach as a guiding method, this study analyses both policy texts and interview data to explore how children's psychosocial needs are framed and addressed within existing support systems. It concludes that current support systems fall short in addressing the long-term psychosocial needs of children and that policy change is necessary to ensure more sustainable, inclusive and responsive care structures for children growing up in earthquake-affected areas.

*Keywords:* Groningen earthquakes, child mental health, gas extraction, policy analysis, psychosocial support

## **A Critical Policy Analysis of Psychosocial Support for Children in Earthquake-Exposed Areas in Groningen**

The province of Groningen provides a uniquely complex setting for disaster policy analysis, as it faces prolonged, human-induced earthquakes resulting from decades of gas extraction. These earthquakes are an example of human-induced seismic activity, triggered by the extraction of natural gas from the Groningen gas field. Since the 1960s, this gas field, one of the largest in Europe, has been a significant contributor to the Dutch economy, generating billions of euros in revenue for the government and energy companies (Van Der Voort & Vanclay, 2015). However, as gas extraction continued, it led to subsidence and increased seismic activity. The first officially recognized earthquake occurred in 1986 near Assen. Over the decades, the frequency and intensity of these earthquakes have increased. The 2012 Huizinge earthquake, which registered a widely reported magnitude of 3.6, resulted in substantial damage to residential structures and public infrastructure (KNMI, n.d.). This case is particularly distinctive due to the rare combination of ongoing seismic risk, fragmented governmental response and persistent neglect of long-term psychosocial consequences. Children's mental health needs are often the most overlooked in this context. As a result, current policies fall short in addressing their long-term risks.

The consequences of these earthquakes have been severe. Numerous buildings have sustained damage and many residents have been forced to navigate lengthy bureaucratic procedures to obtain compensation and repairs (Vlietstra, 2019). Some homes have become uninhabitable, leading to displacement and financial insecurity for affected families. Additionally, constant uncertainty about future earthquakes has fostered a climate of fear and stress, significantly affecting residents' mental well-being (Van Der Voort & Vanclay, 2015). Despite government efforts to address structural damages through financial compensation and reinforcement programs, these measures have done little to mitigate the chronic

psychological toll of ongoing seismic activity. Residents report frustration over bureaucratic delays and a lack of adequate psychosocial interventions, exacerbating anxiety and distrust toward policymakers (Vlietstra, 2019).

In response, the Dutch government has implemented several financial compensation and structural reinforcement programs. The National Coordinator Groningen (NCG) is responsible for coordinating the reinforcement of buildings in the earthquake-affected region, working with municipalities and other partners to ensure safe and future-proof housing (Ministerie van Economische Zaken en Klimaat, 2024). However, these policies have been widely criticized for being slow, bureaucratic and insufficient in addressing the full scope of the crisis (Zijlstra et al., 2022). In addition to physical damage, the government has also acknowledged the mental health impact of the earthquakes. These lead to initiatives such as the Livability and Sustainability Program, which includes provisions for psychological support. Despite these measures, many residents feel unsupported and mental health interventions remain fragmented and inconsistent (Vlietstra, 2019).

The challenge of addressing psychosocial needs following environmental disasters is not unique to Groningen, but reflects a broader global struggle to prioritize mental health in disaster response policies. For example, after the 2010 Eyjafjallajökull volcano eruption in Iceland, families experienced social isolation, anxiety and physical strain due to persistent volcanic ash. While strong community ties helped residents cope initially, formal support from authorities was inconsistently available and quickly withdrawn. In the study by Ómarsdóttir et al. (2022), many participants felt they were left to “manage on their own” in the aftermath and expressed concerns about unequal access to support and unclear communication from officials. The study highlights that although temporary service centers and initial outreach existed, long-term psychosocial support, especially for vulnerable groups

like children, was not sustained, creating emotional strain and perceptions of abandonment (Ómarsdóttir et al., 2022).

In contrast, California's response to the wildfires embedded mental health interventions within school systems and emergency response frameworks from the outset. The National Child Traumatic Stress Network (NCTSN) provided an extensive suite of wildfire-specific resources for caregivers, educators and mental health professionals. Which includes psychological first aid, trauma-informed school strategies and long-term recovery guidelines aimed at supporting children's emotional well-being (Peterson, 2023). These cases shed light on how varying policy priorities shape children's recovery. While Iceland reflects a reactive and short-lived support model, California illustrates how early, structured interventions are intended to support children's mental health more effectively. Together, these insights offer valuable lessons for Groningen. They highlight the importance of sustained, child-focused psychosocial care in long-term disaster recovery.

### **Why mental health?**

The psychosocial impact of the earthquakes in Groningen extends beyond physical damage, affecting the mental well-being of residents in several ways. Many individuals face chronic stress, anxiety and emotional strain due to persistent uncertainties, financial struggles and feelings of governmental neglect (Van Der Voort & Vanclay, 2015). Reports from the 'Bijzondere Situaties' Committee (2019) highlight that many residents remain in a prolonged state of 'fight mode', which contributes to exhaustion and diminished resilience.

Understanding the long-term psychosocial effects of environmental hazards such as the Groningen earthquakes is crucial. Research shows that chronic exposure to unpredictable disasters can lead to persistent stress, PTSD, depression and anxiety (Norris et al., 2002). A meta-analysis of disaster victims found that repeated exposure to environmental hazards can result in cumulative psychological distress, increasing vulnerability to mental health disorders

(Norris et al., 2002). While Bonanno et al. (2010) highlight that some disaster survivors develop resilience, chronic exposure to recurring hazards, such as those in Groningen, has been shown to progressively diminish coping capacity. This perspective is essential for understanding how different social support systems and interventions influence mental health outcomes.

Psychological interventions have often been short-term or reactive, focusing on crisis management rather than long-term mental health resilience (Vlietstra, 2019). This highlights the need for a more integrated policy approach that prioritizes sustained psychosocial support, rather than focusing solely on rebuilding homes and financial compensation.

### **Why focus on children?**

The psychological consequences of the Groningen earthquakes are not limited to adults, children represent a particularly vulnerable group. Studies indicate that children living in disaster-prone regions often experience heightened fear, anxiety and emotional distress due to the unpredictability of their environment (Masten & Narayan, 2012). Research specific to Groningen suggests that children in the region express ongoing concerns about safety, future stability and the impact of earthquakes on their families. Which can result in prolonged distress and uncertainty (Zijlstra et al., 2022).

Support within the family can contribute to resilience in young people and children, but it is still unclear to what extent this helps in the long term. While parental and community support play a role in buffering the negative effects of trauma, they do not replace structured psychosocial interventions tailored to children's developmental needs. Without sufficient support, including professional interventions, children exposed to chronic disaster-related stress may face long-term cognitive and emotional consequences, particularly in academic and social development (Masten & Narayan, 2012).

Despite the increasing recognition of mental health issues among Groningen residents, children's psychosocial needs remain underexplored in policy discussions, leaving a significant gap in existing support structures. Addressing these concerns requires a comprehensive policy approach that goes beyond structural repairs to incorporate long-term psychosocial support mechanisms for affected communities, especially for children.

### **Research aim & approach**

Given these challenges, it is important to understand the long-term effects of the Groningen earthquakes on the mental well-being of people in this region. This insight is important in order to critically evaluate the support systems and interventions already provided by the government. Meanwhile alternative strategies should be considered to improve psychosocial well-being and mitigate adverse effects. By analyzing different interventions alongside one another, it becomes easier to identify policy gaps and determine how these gaps can be addressed.

To achieve this, the study employs Carol Bacchi's "What's the Problem Represented?" (WPR) approach. Rather than merely evaluating policy effectiveness, the WPR approach is particularly relevant as it reveals the underlying assumptions shaping policy decisions and identifies gaps in how children's mental health needs are conceptualized and addressed. This approach ensures a critical evaluation of both explicit interventions and implicit policy silences, helping to uncover what is missing in the current policy.

This study will apply WPR to analyze:

1. How the issue of children's psychosocial well-being is represented in policies.
2. What assumptions underlie these representations.
3. What gaps, limitations and policy silences exist.

In addition to policy analysis, the research will include expert interviews with policymakers, mental health professionals and community workers to provide practical

insights into the real-world effectiveness of policies and interventions. Through this critical policy analysis, the study seeks to identify gaps in psychosocial support for children and propose recommendations for more comprehensive and effective policies in earthquake-exposed regions. The aim of this study is to examine existing policies on psychosocial support for children in Groningen's earthquake-affected areas and to identify areas for improvement.

## **Theoretical Framework**

### **The What's the Problem Represented? (WPR) Approach**

The WPR approach, developed by Carol Bacchi, forms the core of this study's analysis. Bacchi's WPR approach is designed to critically evaluate policies by examining how social problems are constructed in policy discourse. Rather than assuming that policies naturally respond to pre-existing problems, the WPR approach highlights how policies themselves construct and define social issues.

Bacchi's approach is built on six key questions, each aimed at unpacking the underlying assumptions, gaps and consequences of policy decisions:

1. What is the problem represented in the policy?
2. What presuppositions or assumptions underlie this representation of the problem?
3. How did this representation of the problem come about?
4. What is left unproblematic in this problem representation?
5. What effects are produced by this representation of the problem?
6. What is not discussed or addressed in the policy?

By using this analysis this can be a way to understand the potential impact of earthquakes on children more, which will be essential for early intervention. Preventative measures are preferable to reactive ones. There has been limited research into how earthquakes affect children, so this study specifically examines existing psychosocial support



and identifies gaps in these services. Additionally, analysing the policies and stakeholder involvement in these interventions will provide insights into potential gaps and policy silences, offering a comprehensive view of the current support systems and their effectiveness. By assessing these representations, this analysis aims to determine which aspects of children's mental health are emphasised, what remains unaddressed and how these gaps may impact effective intervention strategies. This study focuses on Bacchi's first, fourth and fifth questions to explore:

1. How is the problem of psychosocial support for children in earthquake-exposed areas framed in existing policies?
2. What are the gaps and silences in the current approaches to addressing this problem?
3. What are the consequences of how the problem has been represented for the children's mental well-being?

These specific questions were selected because they allow for a critical evaluation of both what is made visible and what remains hidden in current policy responses. Question 1 provides insight into how children's mental health needs are framed; Question 4 highlights omissions and silences; and Question 5 helps assess the real-world effects of these representations. The other WPR questions, such as how the representation came about or what assumptions underlie it, were considered less central to this study. The focus here is on evaluating the current framing and impact of existing policies, rather than examining their underlying assumptions or historical background.

By applying these questions to both the policy documents and the interview data, the study aims to reveal how the psychosocial impacts of the earthquakes on children are problematised and addressed in Groningen. The analysis highlights the ways in which current policies may overlook or misrepresent the psychosocial needs of children and identifies potential areas for improvement in future interventions.

## **Psychological Theories on Disaster and Child Well-being**

Disasters, particularly those that are recurring and unpredictable, can have profound psychological effects on individuals. Children are especially vulnerable due to their developmental stage, limited coping mechanisms and dependency on caregivers (Masten & Narayan, 2012). Research has shown that children exposed to disasters often exhibit elevated stress responses. When prolonged, these stress responses can contribute to the development of post-traumatic stress disorder (PTSD), anxiety and depression (Pfefferbaum et al., 2014). These outcomes align with broader findings by Norris et al. (2002), who demonstrated that repeated exposure to disasters increases vulnerability to long-term psychological distress across affected populations. However, responses to disasters vary. While some children develop long-term distress, others demonstrate resilience, which is influenced by family support (Masten & Narayan, 2012), community resources and access to psychosocial interventions (Bonanno et al., 2010).

One key framework for understanding children's disaster responses highlights the importance of secure relationships with caregivers, which can buffer stress and trauma during times of crisis (Masten & Narayan, 2012). However, when caregivers are overwhelmed by their own stress, their ability to provide this protective support may diminish, leaving children more vulnerable. Similarly, cognitive-developmental theories suggest that chronic stress can impair children's cognitive functioning, potentially leading to academic struggles and behavioral issues (Masten & Narayan, 2012).

Given these risks, early intervention is essential. Resilience theory highlights that structured psychosocial support, such as trauma-informed care, school-based mental health programs and strong family and community systems, can promote adaptive coping and protect against long-term psychological harm (Masten & Narayan, 2012). Despite the known psychological effects of disasters, mental health care is often not treated as

a central component of recovery. This is especially true for children, whose long-term psychosocial needs are frequently overlooked, leaving gaps in long-term support (Norris et al., 2002).

## **Method**

### **Document collection**

This study uses a critical policy analysis approach, supplemented by interviews and document analysis, to investigate the psychosocial support provided to children in earthquake-exposed areas in Groningen. The research focuses on evaluating existing policies, identifying gaps and understanding the consequences of these policies for the mental well-being of children. Carol Bacchi's WPR approach guides the analysis, offering a structured way to examine how policies frame psychosocial support, the assumptions underlying these policies and the gaps or silences in their implementation.

### **Critical policy analysis with WPR approach**

To conduct a comprehensive policy audit, relevant documents were collected and analysed. These included policy documents, governmental reports and publicly available information related to the psychosocial support for children in Groningen's earthquake-affected areas. Sources were retrieved from Dutch government platforms, including municipal websites and public health services, focusing on the keywords: "earthquakes", "mental health", "psychosocial support", "children" and "Groningen". In addition, reports from local committees, such as the 'Bijzondere Situaties' committee (2019), which document the impacts of earthquakes on residents' mental health, were reviewed to provide background information on the existing policy interventions.

The document analysis involved a close review of policy-related documents from local government and healthcare institutions to identify existing support services and interventions aimed at children. Specific attention was paid to how these policies represent

the problem of psychosocial impacts on children and what interventions have been introduced to address these issues.

### *Semi-structured interviews*

In collaboration with two other students, four semi-structured interviews were conducted with healthcare professionals who are directly involved in providing psychosocial support to earthquake-affected children.

Participants included:

- A director of social and societal consequences of gas extraction and earthquakes at a municipality in Groningen
- A resident support worker at a municipality in Groningen
- A mental health practice nurse (PoH-GGZ)
- An earthquake coach and a neighbourhood worker from a municipality of Groningen

These professionals were selected due to their direct involvement with families in the Groningen region. The first interview, conducted with the municipal director, provided further connections to additional relevant professionals. Interviews were conducted both online and in person, depending on availability. Despite efforts to expand the interview pool through additional outreach, a limited response from potential participants led to a greater emphasis on document analysis. This small sample size limits the generalizability of the interview findings and means that some local perspectives may not be fully captured. However, this limitation is partially mitigated by the breadth and depth of the policy document analysis, which offers a comprehensive view of institutional responses and policy framing.

The interviews data were transcribed and analysed to complement the policy analysis. The themes that emerged from the interviews provided insights into the practical challenges

and successes of implementing psychosocial support policies, as well as the firsthand perspectives of professionals involved in the delivery of these services. All interviews were conducted in line with ethical research guidelines. Participants were informed about the purpose of the research and provided informed consent prior to participation. To protect confidentiality and ensure anonymity, identifying details were excluded and all data was securely stored.

## Results

### Policy audit

To assess the psychosocial support provided to children in the earthquake-affected areas of Groningen, a policy audit was conducted. This involved reviewing official documents, reports, ministerial communications and local initiatives from 2017 to 2023. In the table below is a selection of policies and programs that have been assessed for this research.

<b>Policy/program</b>	<b>Year</b>	<b>Child-Specific</b>	<b>Focus</b>	<b>Implementation</b>
Instituut Mijnbouwschade Groningen (IMG)	2020	Indirect	Immaterial damage compensation	Indirect via families
€22 Billion Compensation package	2023	Indirect	Broad recovery (economic/social/physical)	Broad scope
‘Nij Begun’	2023	Indirect	Trust and well-being restoration	Community level
Ministerial Brief on Mental Health and Children in Groningen	2022	Partially	Mental health interventions for children	Mixed; pilot interventions

GGD Folder and	202	Direct	Call for child-focused	Advocacy/ reporting
Webpage - Aardbevingen en Kinderen	1		policies	
ARQ Report - Psychosocial Impact	201 7	Indirect	Review of psychological studies	National research synthesis
Kinderombudsman - Vaste Grond Gezocht	201 7	Direct	Call for child-focused policies	Advocacy/ reporting
RUG Report - Een Veilig Huis, Een Veilig Thuis	201 9	Direct	Qualitative youth stress study	Local research insights

Several key themes are shown in this overview. In terms of how the problem is represented (WPR Q1), the Dutch government has acknowledged the need for large-scale damage repair and financial compensation. It has allocated substantial funding through institutions such as the NCG and Instituut Mijnbouwschade Groningen (IMG) and long-term recovery programs (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2025). In 2023, the Dutch government announced a €22 billion compensation package to address the damage caused by sixty years of gas extraction in Groningen which was aimed at supporting physical, economic and social recovery (RTL Nieuws, 2023). While these policies primarily address physical and material consequences, they have increasingly begun to include provisions for mental health, including compensation for immaterial damage.

Secondly, a growing number of initiatives aim to support the emotional well-being of residents, including children. For example, the expansion of the *digitaal kinddossier* and training programs like the *Aardbevingsacademie* reflect attempts to integrate psychosocial awareness into local care systems (Ministerie van Economische Zaken en Klimaat, 2022). Tools such as the *Aardbevingswijzer* and GGD materials help parents and schools discuss earthquakes with children and provide tips for emotional support (GGD Groningen, 2021).

However, what remains largely unaddressed in these representations (WPR Q4) is the lack of direct, child-specific intervention strategies. Most programs engage children indirectly, via parental compensation or general community activities, rather than through child-specific mental health interventions.

Academic and policy reports such as *Een Veilig Huis, Een Veilig Thuis* (Zijlstra et al., 2019) and *Vaste Grond Gezocht* (Kinderombudsman, 2017), have played a key role in identifying gaps in support and emphasizing the long-term impact of disaster-related stress on youth. These documents not only provide insights but have also contributed to agenda-setting by calling for stronger child-centered policy frameworks.

Although many of these interventions remain limited in scope or implementation, they indicate a growing recognition that psychosocial consequences are an essential part of disaster response. However, most psychosocial support remains fragmented and long-term child-specific mental health strategies are often lacking. This has concrete effects (WPR Q5): the absence of a coordinated, child-centered approach leads to scattered efforts, short-term programming and policy inconsistencies that fail to meet the lasting emotional needs of affected children.

## **Interviews**

Interviews conducted with professionals in the field confirmed many of these observations and provided additional insight into the day-to-day challenges of supporting children in earthquake-affected areas. Participants described how children often internalize the stress experienced by their parents, particularly when families are embroiled in prolonged damage claims or face the prospect of displacement due to unsafe housing. The emotional climate within families, marked by fatigue, helplessness and mistrust toward institutions, was seen to influence children's behavior and sense of security.

Professionals noted that children frequently express their distress in indirect ways, such as physical complaints, concentration difficulties or social withdrawal. However, these signs are not always recognized early enough, particularly in school settings where psychological concerns may not be prioritized. Although some support systems are in place, such as school social workers or informal activities, many professionals emphasized that there is no structural framework to systematically address these needs.

One recurring theme in the interviews was the sense that the system relies too heavily on the efforts of individual workers rather than providing institutionalised, sustainable care structures. Participants voiced concern about the lack of stable funding and coordination, which makes it difficult to embed successful local initiatives into broader policy. Moreover, many professionals indicated that families often do not know what support they can expect or where to turn, which reinforces their sense of uncertainty and further erodes trust in government institutions.

These lived experiences highlight the effects of current policy framings (WPR Q5). Because children are not explicitly represented in psychosocial policy, support remains inconsistent, informal and highly reliant on individual professionals. This leads to missed opportunities for early intervention and shifts the burden of care onto families and under-resourced schools, which contributes to ongoing emotional strain and institutional mistrust among children.

To illustrate the range of perspectives from the participants, the table below summarizes key insights from each professional according to their role.

<b>Participants (anonymized)</b>	<b><i>Role</i></b>	<b><i>Key insight</i></b>
Participant 1	Municipality director	Families are overwhelmed



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Participant 2	Resident support worker	Children absorb family stress; emotional security is often unspoken and can shape children's behavior
Participant 3	PoH-GGZ (mental health nurse)	Signs of child distress often go unnoticed in schools
Participant 4 & 5	Earthquake coach & community worker	Support relies heavily on individual workers; lack of structural policy backing. Coordination between municipalities have only recently begun

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### **Policy gaps**

Despite growing awareness of the psychosocial consequences of gas extraction in Groningen, the current policy landscape reveals significant gaps in addressing the needs of children affected by recurring earthquakes. Multiple reports and initiatives demonstrate that the government and local actors have taken steps to support affected populations. However, these efforts often lack cohesion, long-term vision and sustained attention to children's mental health.

One of the most striking gaps is the absence of a comprehensive, child-focused psychosocial policy. Existing programs primarily target the broader population or families as a whole, with children treated implicitly rather than explicitly as a distinct group with specific needs. Although the national government has acknowledged mental health impacts (Ministerie van Economische Zaken en Klimaat, 2022), this recognition has not yet translated into durable, child-specific interventions. Projects such as theater workshops and school-based activities offer value but remain fragmented and temporary.

Another shortcoming is the lack of structural integration between sectors. Interviews revealed that schools, municipalities, and healthcare providers often operate in isolation.

Psychological concerns voiced by children may go unnoticed in educational settings where staff are not adequately trained or where there is insufficient capacity to properly support them. Similarly, local initiatives often rely on temporary funding or the commitment of individual workers, compromising sustainability (GGD Groningen, 2021). Children's perspectives are rarely included in policy design or evaluation, despite growing evidence of their distinct experiences and stress responses (Zijlstra et al., 2019). Reports such as *Vaste Grond Gezocht* have long emphasised the importance of involving children in decision-making and developing youth-specific strategies (Kinderombudsman, 2017), but this continues to be largely absent in practice. As a result, many interventions overlook the lived experience of children or fail to offer developmentally appropriate support.

The monitoring and evaluation of existing programs also appears limited. For instance, the *Aardbevingswijzer*, developed as an educational tool to inform children about earthquakes and safety, has been implemented inconsistently across schools and reportedly sees low usage (GGD Groningen, 2021). Public data on the impact of such tools is scarce, making it difficult to assess whether policies are achieving meaningful results or reaching those most in need.

Finally, policies still fail to account for the chronic, long-term nature of the crisis. Many measures are designed as short-term responses or one-time interventions, while children and families continue to live under prolonged uncertainty and repeated aftershocks (Zijlstra et al., 2019). At the same time, ongoing bureaucratic procedures related to damage claims and housing insecurity add to the emotional burden (Kinderombudsman, 2017). Policies aimed at psychosocial recovery must be adapted to recognize this protracted exposure to stress and provide stable, trauma-informed care across settings, especially within schools and youth services.

In summary, while efforts have been made to address the psychological impact of the Groningen earthquakes, the policy response remains partial, reactive and inconsistently applied. There is an urgent need for structurally embedded, child-centered policy that reflects both the long-term nature of the crisis and the unique vulnerabilities of children growing up in unstable environments.

<b>Theme</b>	<b><i>Policy example</i></b>	<b><i>Interview insight</i></b>
Compensation	IMG (2020)	Indirect compensation overlooks children's emotional stress
Long-term recovery	€22B package (2023)	Professionals note lack of long-term structures
Community trust	'Nij Begun' (2023)	Low institutional trust echoed in families' experiences
Mental health support	Ministerial brief (2022)	No structural framework; funding is unstable
Prevention/education	GGD materials (2021)	Tools like <i>Aardbevingswijzer</i> underused or inconsistently
Child advocacy	Kinderombudsman (2017)	Children rarely involved in shaping support systems

The table above shows an overview of key policy themes and how they were echoed in professional interviews. The visualisation links institutional intentions with practical experiences, emphasizing the need for more integrated and child-focused psychosocial support.

## **Discussion**

By applying the WPR approach, the study can utilise various sources to reach a comprehensive conclusion. Additionally, this approach encourages the use of existing knowledge and promotes critical examination of the different sources used.

The WPR approach also helped connect insights from the document analysis and interviews, showing how policy representations result in practical consequences. For example, the tendency to represent children's psychosocial needs indirectly (WPR Q1) was mirrored in interviews with professionals. They reported the absence of structured frameworks, stable funding and clear referral systems. Additionally, WPR Q4 highlights aspects of the policy discourse that are left unaddressed. Examples are the lack of intersectoral collaboration, inconsistent implementation of tools like the *Aardbevingswijzer* and the exclusion of children's voices. These gaps were reflected in the practical challenges described by professionals. Together, these omissions contribute to the real-world effects identified in WPR Q5, namely inconsistent care, increased reliance on informal or temporary efforts and feelings of invisibility among children and caregivers. Without a strong institutional framework, early intervention is often missed and professionals feel they are working in isolation.

Due to the small pool of potential interviewees, it was challenging to find participants. During an interview with the municipality, it was mentioned that residents were already overwhelmed and too much was being asked of them. As a result, the focus shifted to interviewing healthcare professionals. However, the response to email invitations remained limited, leading to a small number of interviews being conducted.

One straightforward way to build on this research is by replicating the study with a larger number of interviews. This would allow for more perspectives to be brought forward and enable an examination of the differences between municipalities. It was mentioned in the interviews that there is now more focus on discussions between municipalities a few times a

year, but this only started recently. This is noteworthy given that the earthquakes have been an ongoing problem for several decades. Focusing on this aspect could reveal what is still missing and whether there are significant differences between the various municipalities.

Another research could be a longitudinal study since it could be highly beneficial in this context, especially given the focus on children. By conducting longitudinal research, it would be possible to examine the long-term effects over an extended period, rather than being limited by present-moment bias. This is particularly relevant in understanding the impact of the earthquakes on children over a longer timeframe and into the future.

From a policy perspective, the findings point to a need for more child-centered, structurally embedded mental health strategies. Concrete steps include embedding trauma-informed care within schools, securing stable funding for youth mental health services, and strengthening collaboration between municipalities, schools, and healthcare providers to ensure children receive consistent support. Policymakers should also consider involving children in the design and evaluation of support programs. As suggested in both policy documents and interviews, their voices are often missing from the development process, despite being directly affected by the crisis.

Equally important is the need to operationalise child participation in policy-making. This could include the introduction of youth advisory councils at the municipal level, incorporating feedback loops in school programs and involving children in the evaluation of psychosocial initiatives. These practices would not only improve the relevance of policy measures but also foster greater trust among children in the institutions responsible for their support.

A comparative perspective further clarifies the effects of different problem representations. In Iceland, the 2010 volcanic eruption resulted in widespread psychosocial distress, particularly from prolonged ash exposure. Although community support was strong,

formal support systems were inconsistent and short-lived. Families reported difficulty accessing clear information, mental health services, and long-term assistance, and many felt abandoned once immediate danger had passed (Ómarsdóttir et al., 2022). This reflects a shared issue with Groningen: in both cases, the disaster was primarily defined as a logistical or environmental problem, while children's emotional needs and broader psychosocial recovery were sidelined.

Conversely, in California, child-centered support was proactively built into the disaster response system following the wildfires. The example from California shows that trauma-informed care and school-based interventions were implemented early and sustained, suggesting a more proactive and structured approach to supporting children (Peterson, 2023). Even without specific statistics, the approach offers valuable lessons for how children's mental health can be addressed in disaster response. These contrasts demonstrate how different problem framings can lead to varied approaches in practice, each with distinct implications for how children's psychosocial needs are addressed. Iceland and Groningen show how short-term, decentralized responses can leave affected populations vulnerable, while California illustrates the potential benefits of integrated, long-term care that recognizes psychosocial recovery as a central policy goal. Together, these insights highlight the importance of reframing disaster policy in Groningen to prioritize long-term, coordinated and child-centered psychosocial support as an essential component of recovery.

### **Conclusion**

This thesis explored how the psychosocial impact of the Groningen earthquakes on children is represented in policy, using Carol Bacchi's WPR approach. While the psychological consequences of the earthquakes are increasingly recognized, particularly through reports and small-scale initiatives, the findings suggest that children's needs remain insufficiently addressed in both policy and practice.

The policy analysis revealed that support for children is often included indirectly, within broader programs aimed at families or communities, rather than through targeted, structured interventions. Many initiatives are temporary, reactive, or locally driven, lacking the consistency and coordination needed to address long-term mental health effects. Furthermore, the absence of child participation in policy design limits the relevance and effectiveness of the support offered.

The interviews with professionals echoed these concerns, emphasising the emotional toll on children, the limitations of existing support systems and the lack of integration between municipalities, schools and mental health services. Although efforts to improve collaboration have recently begun, structural and sustainable change is still needed.

Comparative insights from Iceland and California reinforce these conclusions, illustrating how different representations of psychosocial needs shape the degree to which children's recovery is prioritized in disaster response.

Overall, this study highlights the need for a shift toward a child-centered, preventive approach to psychosocial care in disaster contexts. Long-term policy transformation must combine structural coordination, stable investment and meaningful participation of children in shaping the systems intended to support them.

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