Enhancing Disaster Resilience and Support for Vulnerable Puerto Rican Students









Project Overview



Previous Award

Previously we explored the link between disasters' disruptions and their impact on academic outcomes, focusing on vulnerable students.

Findings:

- The duration and severity of interruptions correlated with adverse academic effects.
- Qualitative analysis identified as vulnerabilities: socioeconomic status, disabilities, living in high-risk areas, or being cared for by grandparents.
- Findings highlighted a decline in the emotional health of school community members and emphasized the crucial support role of neighboring communities, NGOs, and municipal governments.



Continuation Award Purpose

 The current study aims to determine whether schools adequately address current needs and provide insights into effective emergency response measures.

Research Questions

What practices or programs have principals, teachers, and social workers employed to help students bridge gaps in academic achievement and socio-emotional development caused by school disruptions?

1. How do school staff and students assess the effectiveness of these strategies?

What programs or services have been developed to address the specific needs of vulnerable students (e.g., living in poverty, having a disability, residing in high-risk areas, living with grandparents)?

- How do these students perceive these programs?
- Are these programs flexible enough to cater to the specific needs of the student population?

What measures have principals, teachers, and social workers taken to enhance schools' capacity to deliver services during emergencies?

 What in-school support services and post-disaster action plans have schools formulated?

Methods

- We conducted focus groups and interviews at two schools.
- Using a two-stage sampling process, we selected two schools from a pool of 34 schools originally selected based on location. Due to the small sample size, we will not provide detailed information about our school selection criteria to maintain confidentiality.

2 students focus groups2 interviews with school principals

2 interviews with teachers

2 interviews with social workers

1 interview with a school psychologist.

Preliminary Findings: Staff Perceptions

Strategies and Programs for Academic Recovery:

Academic performance declined following cascading events, with the COVID-19 pandemic having the most significant impact.

Participants emphasized the effectiveness of individualized teaching for all students.

 They stressed the importance of maintaining small class sizes and noted the benefits of increased hiring of substitute teachers to support these efforts.

Limitations

- The inadequacy of infrastructure (both physical and technological) emerged as a recurring theme in interviews.
- Start perceived deficiencies in parental support and students motivation

Preliminary Findings: Staff Perceptions

Strategies and Programs for Socio-Emotional Recovery

On a socio-emotional level, personnel perceived most students as exhibiting some form of diagnosable issue. (decreased interest in academics, increased substance use, cell phone addiction, heightened sense of impunity, immaturity and posttraumatic stress).

Hiring school psychologists and fostering collaboration among support staff has proven crucial in addressing socio-emotional needs.

However, current resources are not enough to tackle the severity of the problem.

Limitations

- Lack of access to mental health services.
- Lack of resources for group interventions
- The use of half-day schedules constrains student socialization and time for group activities.
- Schools do not have resources to attend to staff's emotional and mental health.

Preliminary Findings: Students Perceptions

"The psychologist listens, he gives us advice and calls our parents if we need a little more."

Focus group participant

"To me, it's humiliating what we're going through because if the school had been given proper maintenance, its demolition could have been prevented."

Focus group participant

- Students expressed a lack of awareness regarding the strategies devised to mitigate the academic setbacks, only recognizing "tutoring" as an educational intervention offered.
- They identify their peers as a significant source of support.
- At the school, the students recognized the school psychologist as the primary figure to help them process the negative impact of these events. Other strategies include talking to their teachers and using external services, such as the Puerto Rico Administration for Mental Health and Substance Abuse Services.
- The COVID-19 pandemic was the most impactful event for them. They expressed that isolation affected their mood and socio-emotional development.
- Students also said that they felt humiliated by attending schools in suboptimal conditions due to a lack of adequate maintenance and attention to the infrastructure.
- Students also expressed a lack of enthusiasm, feeling unheard and underserved by the school system.

Students are unaware that their schools have developed strategies to help them address learning gaps

Schools staff are not adequately communicating with students and parents about these strategies or including them in designing services for their recovery process.

As a result, students perceive the absence of government attention to their needs, which generates hopelessness

- ❖ The lack of attention to school facilities generates instability because students feel insecure in the face of potential natural hazard events.
- ❖ Infrastructure inadequacy emerged as a recurring theme in interviews, with the implementation of interlocking schedules exacerbating teaching disruptions and limiting socialization opportunities.
 - ❖ This further diminishes students' sense of belonging on campus, contributing to feelings of resignation and hopelessness.
 - Although school staff acknowledge the infrastructure issues, their narrative does not seem to recognize the emotional and demoralizing effects on students.

Tailored Support for Vulnerable Students: Assessing Program Effectiveness and Flexibility



Participants identified vulnerabilities such as disabilities, poverty, and non-traditional family structures, including grandparents as primary caregivers.



The special education program has been reconceptualized, further evaluation is needed.



Activities integrating students from special education programs with regular curriculum students aid in social and emotional development and civic awareness.



Social workers advocated for the establishment of comprehensive special education service centers to cater to the diverse needs of these students and their families.



Overall, focusing on individual attention allows some flexibility to adapt responses to individual student needs. However, this approach also requires more time and resource investment.

Strengthening School Resilience: Emergency Preparedness and Response Strategies by Educational Stakeholders

- The general perception is that school staff have acquired knowledge and experience therefore schools may be slightly better prepared than before.
- Nevertheless, physical and technological infrastructure limitations curtail schools' ability to address future emergencies.
- Lack of continuous investment in technology, deteriorating physical infrastructure from hazard events, inadequate maintenance, and evident construction flaws further hinder schools' capacity.
- Students' overall emotional health is weakened, reducing their ability to cope with future emergencies.

Public Health Implications



- In Puerto Rico, the adolescent mental health crisis is exacerbated by successive natural disasters and economic downturn, leading to heightened concern among school staff due to highly stressed, frustrated, and unmotivated students with lower maturity levels compared to past cohorts.
- The pressing need to allocate resources to schools for prioritizing students' socio-emotional health, through programs like group therapy and socialization activities, is highlighted by the prevalence of emotional distress, emphasizing schools' ideal position to facilitate essential mental health services for children and adolescents.
- Addressing the issues of motivation and low expectations for the future also necessitates the development of support networks involving schools, families, and the broader community. Once again, schools can play a pivotal role as community liaisons.



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"They were confined, and we can see the students' needs. Because we are social beings, and they have the need to interact with their peers... in that sense, if we compare it to Hurricane Maria, the social need was greater during the pandemic... I believe that their greatest need is to share, fraternize, get to know each other. And that is evident in the sense that sometimes their interaction skills are not the best and bullying still occurs in schools."

Interview participant

Public Health Disaster Research Award Webinar: Call 4 and Continuation Call 2 August 1, 2024

