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The University of Iceland School of Education Reykjavík (Iceland)



Collaboration within the RG Thematic areas and methodological experience of the members

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# **POST-DISASTER CONTEXT AND ADOLESCENTS' PERCEIVED HEALTH: SCHOOL WELLBEING AS MEDIATING FACTOR.**



BACKGROUND. Post-disaster context is associated with post-trauma stress disorders (PTSDs) in children and adolescents and other consequences on physical health, behaviours and social development

- Observational studies on mental health and related-factors, pro-social behaviours at school and at home, somatic symptoms, obesity
- Experimental/field studies, targeted on children mental health and resilience abilities

[Lieber, PlosOne, 2017; Usami et al, PlosOne. 2014; Moriyama et al, Pediatr Int, 2018; Zhang et al, PlosOne, 2015; Zheng et al, Int J Obes, 2017; Peacok-Chambers et al, 2017, Vaccarelli et al, 2016]



L'Aquila (Italy), after the seismic event of 6<sup>th</sup> April 2009

AIMS. To evaluate the influence of school wellbeing on health status as perceived by students in a post-disaster context.

# **METHODS**

In 2015, a cross-sectional survey was carried out on a sample of 722 students (50.0% males, 13.6 years average age) from two towns Rieti and L'Aquila (Central Italy)

L'Aquila was hit by a big earthquake in 2009, that destroyed the most of the buildings, with 309 victims and had great consequences on community life



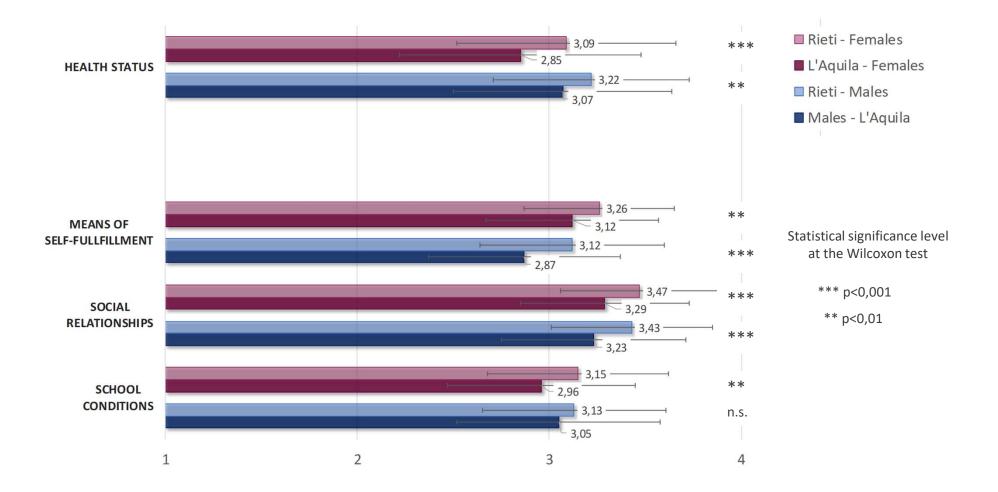
- The adolescents filled in the Konu & Rimpela's School Well-Being Scale, validated in Italian in a previous study. Four Likert's scales assessed
  - Health Status (9 items, outcome variable)
  - School Conditions (14 items)
  - Social Relationships (8 items)
  - Means of Self-Fulfillment (11 items).

[Konu A & Rimpelä M, 2002]



#### Perceived Health Status and School Wellbeing constructs in the adolescents of Rieti and L'Aquila

(mean and standard deviation values on an interval scale from 1 to 4)

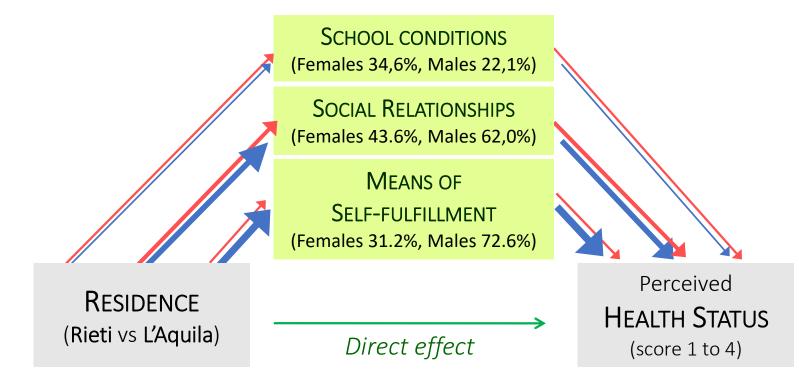


# **RESULTS - 2**

#### **MEDIATION ANALYSIS**

Are the three constructs on school wellbeing *mediators* in the relationship between residence in the post-disaster town and adolescents' Health Status?

#### Mediated effects



→ The mediation effect resulted always statistically significant both in females and males

# CONCLUSIONS

- The school wellbeing mediates the decrease in perceived health in adolescents living in a post-disaster context
  - $\,\circ\,$  Major limit is the cross-sectional design

### Main messages

After a disaster, to assure good conditions in schools is a priority for Public Health

Research is needed to define guidelines for Health Promoting Schools in a postdisaster context

# FUTURE RESEARCH PERSPECTIVES

#### Theme

• Health Promoting School & disaster-context

#### Methodological approach

Observational design (semi-quantitative)

 Revision of evidences and field experiences
 Experts' opinion and consensus

#### Level

- Regional and National (Italy)
- European (SHE)?

#### Aim

- To collect good practices
- To draft specific guidelines for HPS

#### Time

• 2 years (presumed)



### ASSUMPTIONS

#### What is a 'disaster'?

- Different terms Different meanings
  - Crisis, emergency, disaster
- Different disaster
  - Natural (earthquakes, tsunami, floods,
  - tornadoes, hurricanes, wildfire, drought, etc.)
  - Human caused (e.g. mass violence)

#### What kind of consequences?

- $\circ$  Domain
  - Physical, mental and social health (QoL)
  - Practical, economic, cultural
  - Educational (school students)
- Time (short/acute, middle, long term)

#### Different issues

- $\circ$  Prevention/mitigation
- Preparedness
- o Response
- $\circ$  Recovery

- Inter-sectorial matter
- $\circ$  School
- Emergency medical services
- $\circ$  Civil protection
- Low enforcement
- $\circ$  Fire safety
- Public Health
- Health professionals (psychologist, paediatricians, nutritionists, etc.)
- Local administrative authorities

#### School role

- Setting with associated risks
  Physical, sanitary, criminal, ets.
- Setting with health opportunity•HPS logical framework
- Crucial role in the community life
  - •In ordinary / extra-ordinary situations

## PHASES

- 1 Literature systematic revision and other sources examination
  - Academic databases, grey literature, reports, policy documents

     Starting from a list of events (kind of disaster, period of time, territory)
- 2 Survey on stakeholders from school setting envolved in a direct experience of disasters
  - Teachers, school staff, mental health professionals, parents, paediatricians
  - Aimed at collecting experience and evaluating good practices

     Policies, services (mental, social, medical), staff training, families involvement,
  - Drafting proposal for phase #3

### 3 Delphi study

- Recruitment of a multisectorial panel of experts
- Object of evaluation
  - 1. good practices criteria
  - 2. reccomendation

- Questionnaires submission
- Rounds (#)
  - 1. Assessing judjement
  - 2. Anonymous reports
  - 3. Reaching consensus or stability
  - 4. Produce the final drafts



### **EXPECTED RESULTS**

### Pubblications

- 1. Evaluation of examined practices / experiences concerning disaster prevention, preparedeness, response, recovery in school setting
  - impact, faisibility, acceptance
  - $\circ~$  good practice criteria
  - adherence to HP strategy models (e.s. community action, empowerment, etc.)
  - o ... what else?
- 2. Delphi study
- Deliverables
  - 1. Best Practices collection
  - 2. GLs

### SHE role

In particular on

- Educational issues
- Mental health
- Adherence to HPS model
- 1. SHE Members involvement in phase #3 **Delphi study** (panel of experts)
- 2. SHE Endorsement of GLs / Good practices database





L'Aquila (Italy), Temporary School Building after the seismic event of 6<sup>th</sup> April 2009

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# Thank you for attention!