Factors associated with bullying behaviour: a study based on ICCS data

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Bullying is a **common** social phenomenon at school (Cerezo & Alto, 2005).

Bullying is usually defined as negative/aggressive behaviour conducted by a group or an individual against **one who is not able to defend** himself or herself (Olweus, 1999; Roland, 1989).
Since there had been no studies at the national level in Italy investigating this problem, in 2009 we decided to include a measure of the phenomenon as part of the ICCS national option.
Bullying in Italy

Roland and Galloway (2004) reported that in Norway, slightly more than 5% of the pupils in schools say that they are bullied weekly or more often.

National option’s first results showed that about 8% of 8th grade pupils in Italy reported having been bullied at least once a week at school.
Research questions

• Are student’s characteristics such as gender, SES, migration background, related to being bullied? (STUDENT LEVEL QUESTION)

• Are school’s levels of civic knowledge related to the amount of victimization at the school level? (SCHOOL LEVEL QUESTION)
The present study is based on a representative sample of 3,366 Italian pupils grouped into 172 schools participating in ICCS 2009. Data was weighted at student and school level. Sample weights (schools weights and student weights) were computed following the procedures for multilevel studies, as indicated by Rutkowski and colleagues (2010).
Measure of being bullied

A four item scale was used to assess victimisation. The scale, developed by Roland and Idsøe (2001), was adapted to the Italian context.

This school year how often have you been:

a) Bullied/hassled at school?
b) Bullied/hassled at school by being teased?
c) Bullied/hassled at school by being isolated/shut out from others?
d) Bullied/hassled at school by being hit, kicked, or shoved?

There were four alternatives: never, now and then, weekly, and daily.
Measurement issues in considering victimization a school level construct

• Interpretation of the school level construct
• Measurement error at the school level
• Sampling error from student level answers to school level phenomenon
Construct validity of the measure of being bullied

• A multilevel confirmatory factor analysis was performed in order to test the validity of the adopted measure of victimization at the student level and at the school level, while taking account of measurement and sampling error from student level to school level.
The measurement model

Victimization

*Class*

Victimization

*Student*

Between

Within
The measurement model: results

This model showed excellent goodness-of-fit indices:

CFI=.98, RMSA=.02, WSRMR=.02, BSRMR=.02.
Latent school level measures

In order to take into account unreliability due to the use of school level variables based on individual responses, we treated these variables (i.e. SES, school achievement, civic knowledge) as latent covariates.

Various studies (Muthén 1989, 1990, 1994; Lüdtke et Al., 2008) have shown that this approach is more reliable than the use of aggregated measures such as school means for estimating group level effects and associated standard errors.
Background model

• First a multilevel structural equation model with background variables at the student level (gender, immigrational background, socio-economic status) and at the school level (school socio-economic status) was tested. The only variable related significantly with victimization was the socio-economic status at the school level, and as expected, it was a negative relationship.

• Student’s characteristics such as gender and migration background are not related to being bullied in examined sample.
“School” model

• Finally a multilevel structural equation model - with civic knowledge and student achievement as predictors at the school level - was tested, also taking into account resources in the local community and school size.
Predictor variables in the “school” model

• The Rasch-scaled score for overall Civic Knowledge (school level measure - latent covariate)

• Students’ achievement measured by grades assigned by teachers (school level measure - latent covariate)

• Control variables: SES (school level measure - latent covariate), school size, resources in the local community
“School” model

Between

Within

Achievement

Socio-economic background

School size

Civic Knowledge

Resources in local community

Victimization Class

Victimization Student
Results (standardized estimates)

-0.3 (p<.01)

Fit indices
CFI=.97; RMSEA=.03;
WSRMR=.05; BSRMR=.13
Results

• Some evidence regarding the validity of a measure of bullying at the school level was provided.

• This study confirms that school surroundings and school size have very little relevance (Roland and Galloway, 2004) to the amount of bullying.

• Almost the same number of girls are bullied as the number of boys. Also immigration background seems not to be a relevant factor in predicting student’s victimization.

• At the school level civic knowledge is negatively and significantly related to the frequency of victimization.
Limitations and future studies

• Civic knowledge has very little effect on the phenomenon and our conclusions were limited by the cross-sectional nature of the data.

• The relationship between school bullying, civic attitudes, parents’ support, civic moral disengagement, classroom practices remains to be examined.
Thank you for listening!