INVESTIGATING AND UNDERSTANDING CROSS-NATIONAL DIFFERENCES IN BULLYING

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PLAN OF THE TALK

School bullying as an international issue
Cross-national comparisons
  small-scale; larger surveys
Measurement issues [within a survey]
  equivalence; bias
Issues in comparing different surveys
Explanations of cross-national differences
SCHOOL BULLYING AS AN INTERNATIONAL ISSUE

*bullying* in English-speaking countries: *intent to harm repeated, imbalance of power*

*mobbing/mobbning* in Scandinavian countries

*pesten* in Netherlands

*schikanieren* in Germany

*gemein sein* in Austria

*ijime* in Japan

*wang-ta* in South Korea

*qifu* in China (Mandarin)
SCHOOL BULLYING AS AN INTERNATIONAL ISSUE

**Absolutist** (etic) approach – the same everywhere

**Universalist** approach – some similarities, some differences

**Relativist** approach – unique to each culture
SIMILARITIES and DIFFERENCES

SIMILARITIES
- Concept criteria [intent to harm, repetition, imbalance of power]
- Main types [physical, verbal, exclusion, relational, cyber]
- Age changes
- Gender differences
- Negative outcomes of being a victim

DIFFERENCES
- Who bullies whom (e.g. same age or older to younger]
- Where bullying happens [classroom or playground]
- Weighting of types [e.g. social exclusion more important in Japan, South Korea]
- Ratio of bullies to victims
JAPAN cf ENGLAND: Who does the bullying – year group

By the same years

- Japan-1: 95.2%
- England-1: 36.4%

By the higher years

- Japan-1: 4.8%
- England-1: 63.6%
The rest of the team won’t let Millie take part in a competition, even though she is one of the best players, because she is from a lower year group.

Lowest for *ijime*;
highest for western terms

<table>
<thead>
<tr>
<th>Ijime</th>
<th>Wang-ta</th>
<th>Bully</th>
<th>Einelti</th>
<th>Qifu</th>
<th>Hayan</th>
<th>Ghunda pan</th>
<th>Zorbalik</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>49</td>
<td>81/69</td>
<td>64</td>
<td>46</td>
<td>62</td>
<td>77</td>
<td>46</td>
</tr>
</tbody>
</table>
JAPAN cf ENGLAND: Where does the bullying happen?

- Classroom: Japan 42.6%, England 20.0%
- Playground: Japan 68.9%, England 1.6%
- Toilets: Japan 19.7%, England 1.7%
- Outside school: Japan 20.0%, England 1.6%
No one wants to be with Julia for a paired activity.

Highest for *wang-ta* and *ijime*

<table>
<thead>
<tr>
<th>Ijime</th>
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<th>Ghunda pan</th>
<th>Zorbalik</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>85</td>
<td>56 / 36</td>
<td>56</td>
<td>32</td>
<td>14</td>
<td>56</td>
<td>31</td>
</tr>
</tbody>
</table>
CROSS-NATIONAL COMPARISONS  
- SMALL-SCALE [EXAMPLES]

[n’s = 107, 100; one school in each country]

[n’s 148, 192; one college in each country]

[n’s 293, 722; US and Japan - institution(s) not stated]
CROSS-NATIONAL COMPARISONS
- LARGER SURVEYS

Four sources of large-scale survey data on victim and sometimes bully rates, cross nationally, all using pupil self-report.

- **EU KIDS ONLINE** given in 25 European countries in 2010
- **GLOBAL SCHOOL HEALTH SURVEY (GSHS)** given on irregular basis in about 79 countries (varies by country: data between 2005 to 2012)
- **TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY (TIMSS)** given every 4 years in about 63 countries
- **HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN (HBSC)** given every 4 years in about 42 countries
EU KIDS ONLINE
(VERSION FOR 11-16 YEARS OLD)

SECTION B

EVERYONE ANSWER THESE QUESTIONS

PLEASE READ: Sometimes children or teenagers say or do hurtful or nasty things to someone and this can often be quite a few times on different days over a period of time, for example. This can include:
- teasing someone in a way this person does not like
- hitting, kicking or pushing someone around
- leaving someone out of things

When people are hurtful or nasty to someone in this way, it can happen:
- face to face (in person)
- by mobile phones (texts, calls, video clips)
- on the internet (e-mail, instant messaging, social networking, chatrooms)

112. Has someone acted in this kind of hurtful or nasty way to you in the PAST 12 MONTHS?

PLEASE TICK ONE BOX ONLY

A. Yes ☐
B. No ☐
C. Don’t know ☐
D. Prefer not to say ☐

Answer question on next page

Go straight to section C

113. How often has someone acted in this kind of way towards you in the PAST 12 MONTHS?

PLEASE TICK ONE BOX ONLY

A. Every day or almost every day ☐
B. Once or twice a week ☐
C. Once or twice a month ☐
D. Less often ☐
E. Don’t know ☐

115. At any time during the last 12 months has this happen on the internet?

PLEASE TICK ONE BOX ONLY

A. Yes ☐
B. No ☐
C. Don’t know ☐

Answer questions on next page

Go straight to section C

Examples of surveys questions
Examples of surveys questions

GSHS

The next 2 questions ask about bullying. Bullying occurs when a student or group of students say or do bad and unpleasant things to another student. It is also bullying when a student is teased a lot in an unpleasant way or when a student is left out of things on purpose. It is not bullying when two students of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.

20. During the past 30 days, on how many days were you bullied?

   A. 0 days
   B. 1 or 2 days
   C. 3 to 5 days
   D. 6 to 9 days
   E. 10 to 19 days
   F. 20 to 29 days
   G. All 30 days

21. During the past 30 days, how were you bullied most often?

   A. I was not bullied during the past 30 days
   B. I was hit, kicked, pushed, shoved around, or locked indoors
   C. I was made fun of because of my race or color
   D. I was made fun of because of my religion
   E. I was made fun of with sexual jokes, comments, or gestures
   F. I was left out of activities on purpose or completely ignored
   G. I was made fun of because of how my body or face looks
   H. I was bullied in some other way
Examples of surveys questions

TIMSS
(version for 8th grade)

15

During this year, how often have any of the following things happened to you at school?

Fill in one oval for each line.

- At least once a week
- Once or twice a month
- A few times a year
- Never

a) I was made fun of or called names by other students
   - [ ] [ ] [ ] [ ]

b) I was left out of games or activities
   - [ ] [ ] [ ] [ ]

c) Someone spread lies about me
   - [ ] [ ] [ ] [ ]

d) Something was stolen from me
   - [ ] [ ] [ ] [ ]

e) I was hit or hurt by other student(s)
   (e.g., shoving, hitting, kicking)
   - [ ] [ ] [ ] [ ]

f) I was made to do things I didn’t want to do by other students
   - [ ] [ ] [ ] [ ]
Item box 3

**MQ41** How often have you been bullied at school in the past couple of months?

- [ ] I have not been bullied at school in the past couple of months
- [ ] It has only happened once or twice
- [ ] 2 or 3 times a month
- [ ] About once a week
- [ ] Several times a week

Source: HBSC surveys 1993/94, 1997/98. Revised in 2001/02 to conform with Cluesov.29
STUDIES ON CROSS-NATIONAL DIFFERENCES USING ONE SURVEY SOURCE

Various studies have focused on these cross-national differences, in relation to characteristics and correlates such as school achievement, family life, country GDP and income inequality ...for example using HBSC:


STUDIES ON CROSS-NATIONAL DIFFERENCES USING ONE SURVEY SOURCE

Using **GSHS**


Using **TIMMS**

STUDIES ON CROSS-NATIONAL DIFFERENCES USING TWO SURVEY SOURCES

Using **HBSC** and **GSHS**


Combined HBSC data (36 countries, Europe + USA + Canada) and 43 GSHS countries (Africa, America, Southeast Asia).

Less bullying in wealthier countries. No main effect of income inequality ... 
“unexpected ... may be attributed to the low criterion used in the analysis to identify any level of bullying victimization. Although this threshold allowed us to merge data sets ... it also produced a noisy picture of country differences that was difficult to explain.”
MEASUREMENT ISSUES
[WITHIN A SURVEY]: EQUIVALENCE

Construct equivalence – does the phenomenon exist in other cultures?
[does bullying happen in other cultures?]

Structural equivalence – is the pattern of factor loadings similar?
[is bullying represented by the same types of behaviours in different cultures, e.g. physical, verbal, exclusion, cyber ...]

Measurement equivalence – are the factor loadings of equal strength?
[do types of bullying vary in importance in different cultures?]
MEASUREMENT ISSUES [WITHIN A SURVEY]: BIAS

Differences in perception/response rather than in the phenomenon itself:

**Administration bias** – e.g. physical setting; on- or off-line testing; experimenter effects

**Response styles** – socially desirable responding; extreme responding

**Translation issues**, idioms, familiarity with items

**Reference group effects** – compare yourself to norms of the culture you are in.
COMPARISON OF LARGER SURVEYS –
they should all be measuring the same construct of victim rates

Smith, Robinson & Marchi (in press)

Cross-national data On victim rates: What is really being measured?

We established evidence for *internal validity* of cross-national differences within *each survey* (in terms of consistency across age, gender, frequency cut-off) – these were all very high.

We then compared EU Kids Online, HBSC, GSGS and TIMSS surveys across 49 countries where there is overlap, as a test of *validity*.
These four surveys sample different sets of countries, but there is considerable measure of overlap. The following countries are in more than one survey, but each analysis is based on the countries that overlap in the surveys concerned.

Armenia
Austria
Belgium Flemish
Belgium French
Botswana
Bulgaria
Canada
Chile
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Indonesia
Ireland
Italy
Jordan
Kuwait
Lebanon
Lithuania
Macedonia
Malaysia
Malta
Morocco
Netherlands
Norway
Oman
Philippines
Poland
Portugal
Qatar
Romania
Russia
Slovak Republic
Slovenia
Spain
Sweden
Thailand
Tunisia
Turkey
Ukraine
United Arab Emirates
UK/England
USA
Yemen
HOW INTERNALLY VALID ARE THESE SURVEYS?

To assess internal validity of the surveys, we examined across-country correlations for measures that were readily available:

- Across strict/l lenient criteria for frequency
- Across types of bullying (online and offline)
- Across ages
- Across genders
### CORRELATIONS ACROSS FREQUENCY CRITERIA: TIMSS

<table>
<thead>
<tr>
<th></th>
<th>T4SST</th>
<th>T4SSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>T4SLN</td>
<td>0.94**</td>
<td>0.99**</td>
</tr>
<tr>
<td>T4SST</td>
<td></td>
<td>0.95**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>T8SST</th>
<th>T8SSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>T8SLN</td>
<td>0.96**</td>
<td>0.98**</td>
</tr>
<tr>
<td>T8SST</td>
<td></td>
<td>0.93**</td>
</tr>
</tbody>
</table>

** ** p < .01

4th grade represents about 10 years old; 8th grade about 14 years old

LN= Bullied **about monthly or weekly, in the last year** (LN)
ST= Bullied **about weekly, in the last year** (ST)
SS= Composite frequency score, **in the last year** (SS) [reversed for consistency]
CORRELATIONS ACROSS FREQUENCY CRITERIA: GSHS

<table>
<thead>
<tr>
<th></th>
<th>GSHS ST</th>
<th>GHS SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSHS LN</td>
<td>0.93**</td>
<td>0.92**</td>
</tr>
<tr>
<td>GSHS ST</td>
<td></td>
<td>0.90**</td>
</tr>
</tbody>
</table>

**p < .01

LN = Bullied 1 or 2 days or more during the past 30 days
ST = Bullied 3 to 5 days or more during the past 30 days
SS = I was bullied in at least 1 of 7 different ways during the past 30 days
## Correlations Across Types of Bullying: Online/Offline - EU Kids

<table>
<thead>
<tr>
<th></th>
<th>Online (EUKids)</th>
<th>Offline (EUKids)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online (EUKids)</td>
<td></td>
<td>0.76**</td>
</tr>
<tr>
<td>Total (EUKids)</td>
<td>0.90**</td>
<td>0.97**</td>
</tr>
</tbody>
</table>

** $p < .01$
CORRELATIONS ACROSS AGES - HBSC

<table>
<thead>
<tr>
<th></th>
<th>HBSC13 F/M</th>
<th>HBSC15 F/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBSC11 F/M</td>
<td>0.92**</td>
<td>0.83**</td>
</tr>
<tr>
<td>HBSC13 F/M</td>
<td></td>
<td>0.92**</td>
</tr>
</tbody>
</table>

** $p < .01$
CORRELATIONS ACROSS GENDERS - HBSC

<table>
<thead>
<tr>
<th>Gender 1</th>
<th>Gender 2</th>
<th>Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBSC 11 MALE</td>
<td>HBSC 11 FEMALE</td>
<td>0.92**</td>
<td>** p &lt; .01</td>
</tr>
<tr>
<td>HBSC 11 MALE</td>
<td>HBSC 13 FEMALE</td>
<td>0.89**</td>
<td>** p &lt; .01</td>
</tr>
<tr>
<td>HBSC 15 MALE</td>
<td>HBSC 15 FEMALE</td>
<td>0.86**</td>
<td>** p &lt; .01</td>
</tr>
</tbody>
</table>

** p < .01
CONCLUSIONS ON INTERNAL VALIDITY

All four surveys show high internal consistency, across the types of comparisons we have made.

So they have **internal validity**

- but how about **external validity**?
EXTERNAL VALIDITY - COMPARING SURVEYS

- How much agreement is there between TIMSS, EU Kids Online, HBSC and GSHS, where they overlap in countries?
- We report on four comparisons:
  - TIMSS vs HBSC
  - EU-Kids vs HBSC
  - EU-Kids vs TIMMS
  - TIMMS vs GSHS
- We cannot report on GSHS vs EU-Kids or GSHS vs HBSC due to insufficient country overlap.
LEVELS OF AGREEMENT
TIMSS vs HBSC

The highest correlations are between TIMSS and HBSC.

<table>
<thead>
<tr>
<th>TIMSS 4th GRADE SS</th>
<th>HBSC 11 years old</th>
<th>HBSC 13 years old</th>
<th>HBSC 15 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIMSS 8th GRADE SS</td>
<td>0.48</td>
<td>0.57*</td>
<td>0.44</td>
</tr>
<tr>
<td>TIMSS 4th GRADE SS</td>
<td>0.39</td>
<td>0.36</td>
<td>0.32</td>
</tr>
</tbody>
</table>

* $p < .05$;

4$^{\text{th}}$ grade represents approx 10 years old; 8$^{\text{th}}$ grade represents approx 14 years old
TIMSS SS Composite frequency score, in the last year

Sample size (number of countries in both surveys) = 25 for 4$^{\text{th}}$ grade, 15 for 8$^{\text{th}}$ grade
### LEVELS OF AGREEMENT

**EU KIDS vs HBSC**

<table>
<thead>
<tr>
<th></th>
<th>HBSC 11 years</th>
<th>HBSC 13 years</th>
<th>HBSC 15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online (EU KIDS)</td>
<td>0.25</td>
<td>0.25</td>
<td>0.13</td>
</tr>
<tr>
<td>Offline (EU KIDS)</td>
<td>0.40</td>
<td>0.42*</td>
<td>0.30</td>
</tr>
<tr>
<td>Total (EU KIDS)</td>
<td>0.37</td>
<td>0.38</td>
<td>0.25</td>
</tr>
</tbody>
</table>

* p < .05

EU Kinds online are for an average of ages 9-16

**Sample size (number of countries in both surveys) = 23**
LEVELS OF AGREEMENT
EU KIDS vs TIMSS

There were no significant correlations between the two surveys:

<table>
<thead>
<tr>
<th></th>
<th>TIMSS 4th grade SS</th>
<th>TIMSS 8th grade SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online (EU KIDS)</td>
<td>-0.28</td>
<td>-0.07</td>
</tr>
<tr>
<td>Offline (EU KIDS)</td>
<td>-0.25</td>
<td>0.06</td>
</tr>
<tr>
<td>Total (EU KIDS)</td>
<td>-0.28</td>
<td>0.01</td>
</tr>
</tbody>
</table>

TIMSS 4TH grade represents approx 10 years old; TIMSS 8TH grade represents approx 14 years old
TIMSS SS Composite frequency score, in the last year

EU Kinds online are for an average of ages 9-16

Sample size (number of countries in both surveys) = 20 for 4th grade, 10 for 8th grade
**LEVELS OF AGREEMENT**

**TIMSS vs GSHS**

<table>
<thead>
<tr>
<th>TIMSS 4th GRADE SS</th>
<th>GSHS SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIMSS 4th GRADE SS</td>
<td>0.03</td>
</tr>
<tr>
<td>TIMSS 8th GRADE SS</td>
<td>0.53</td>
</tr>
</tbody>
</table>

TIMSS 4TH grade represents approx 10 years old; TIMSS 8TH grade represents approx 14 years old

SS Composite frequency score, in the last year

GSHS SS (Scale Score) = I was bullied in at least 1 of 7 different ways during the past 30 days
Age range 11 to 18 years (mainly 13-17)

**Sample size (number of countries in both surveys) = 9 for 4th grade, 12 for 8th grade**
SUMMARY OF COMPARISONS ACROSS SURVEYS
(correlations across country differences)

Four comparisons:

TIMSS vs HBSC  .32 to .57  moderate
EU-Kids vs HBSC  .13 to .42  low
EU-Kids vs TIMSS  .06 to -.28  negative!
TIMSS vs GSHS  (.03) .53  moderate
ISSUES IN COMPARING DIFFERENT SURVEYS – how can we explain the discrepancies?

Definition of bullying
Types of bullying assessed
Different versions by age
Frequency criteria and time reference period
Single item or scale
Year of survey
Group survey or face-to-face

*Sample characteristics – age, gender, national representation, use of internet*

*Non-response rates*

*Linguistic issues – translation of ‘bullying’*
IMPLICATIONS

- Be cautious about judging how countries appear in terms of high or low prevalence rates - especially if only one survey is relied on; claims would be more convincing if two or even three surveys agreed on a country’s relative position.
- More research is needed into why there is a lack of high agreement amongst the surveys.
- In future surveys, TIMSS, GSHS and HBSC may need to revise their definitions and examples to include:
  - online or cyberbullying [HBSC have done so partially for 2013/14];
  - rumour-spreading.
- Provide more details of non-response rates (only easily available for GSHS).
- Say how the term ‘bullying’ is translated into different languages (for GSHS and HBSC).
EXPLANATIONS OF CROSS-NATIONAL DIFFERENCES

EU Kids Online model:

- **CULTURAL VALUES** [Hofstede, Gelfand etc]
- **EDUCATION SYSTEM** [levels by age, grade retention, class groupings, school & class size, structure of school day, break times and supervision]
- **TECHNOLOGICAL INFRASTRUCTURE** [penetration of mobile phones, smart phones and internet]
- **REGULATORY FRAMEWORK** [school policies, legal aspects, anti-bullying initiatives]
- **SOCIO-ECONOMIC STRATIFICATION** [GDP, socioeconomic inequality]
FIGURE 1
The EU Kids Online model (source: Livingstone et al., 2012a)