



CHILDREN'S WORLDS 2020

Launch webinar of the 3rd wave's findings



Safety and perceptions of good treatment in 10-years-old children

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Introduction

- In this data analysis we are going to relate 10 items on children's self evaluation of safety, respect, care and support to a Subjective Well-Being indicator (the multi-item context-free Children's Worlds Subjective Well-Being Scale - CW-SWBS - 5-items versions), using a Multi-group Structural Equation Model (SEM), in order to check how much each of these items has an influence on children's SWB in different countries.
- N = 40,455 of the 10yo group children, from 29 countries.



Why to use multi-item psychometric scales?

- Up to now most cross-cultural studies on child well-being have used **single-item scales** (e.g.: Cantril's ladder).
- It has been pointed-out that using only one single item scale for comparative purpose is a too weak solution.
- **Multiple-item scales** are much more robust measures.
- In this presentation we are using the CW-SWBS5, because a Confirmatory Factor Analysis (CFA) has demonstrated cross-cultural metric invariance with our 10yo international sample, meaning **we can cross-country compare correlations and regressions when using this psychometric scale.**



Why to use Confirmatory Factor Analysis (CFA) with Structural Equation Modelling (SEM)?

- CFA is used to assess the **construct validity** of a measurement model (i.e.: a psychometric scale).
- SEM is a **multivariate technique** that seeks to explain the relationship between multiple variables (even unobservable or "latent"), including the measurement errors in the model. It takes advantage of psychometric and econometric knowledge, and its foundation lies in factor analysis and multiple regression analysis.



Why to use Multi-group CFA?

- When using the same model with different groups (i.e.: samples from different countries) we need to examine the degree to which the **models are equivalent across groups** (i.e.: its comparability).
- In order to meaningfully compare statistics across groups (i.e.: the mean of a latent variable) **measurement invariance** is required. Three steps are required to check for measurement invariance: (a) *configural invariance* (unconstrained variables); (b) *metric invariance* (constrained factor loadings); (c) *scalar invariance* (constrained loadings and intercepts).
- Metric invariance allows meaningful **comparison of correlations and regressions**.
- Scalar invariance allows meaningful **comparison of the latent means**. Analysis shows that means of item 2 (*My life is just right*) of the CW-SWBS are not cross-country strictly comparable.



Why to use Multi-group SEM?

- In order to analyse the effects of 10 items on children's SWB we have designed a SEM Model.
- A Multi-group model will allow us to calculate the contribution (the **regression weights**) for each of the 10 items related to **safety, respect, care and support for each country separately** on a latent variable that we are using as the indicator of children's SWB (the CW-SWBS5).
- 29 countries are included in this analysis. Not included:
 - Bangladesh: None of these items were included in the questionnaire
 - India and Greece: several items were not included
 - Malaysia: "I feel safe when I walk in the area I live in" was not included.
 - France: "My friends are usually nice to me" was not included.
 - England dataset was not yet included in the overall database when these calculations were made.



Items included in this analysis

I feel safe at home

I feel safe at school

I feel safe when I walk in the area I live in

My parents/carers listen to me and take what I say into account

My friends are usually nice to me

My teachers listen to me and take what I say into account

There are people in my family who care about me

My teachers care about me

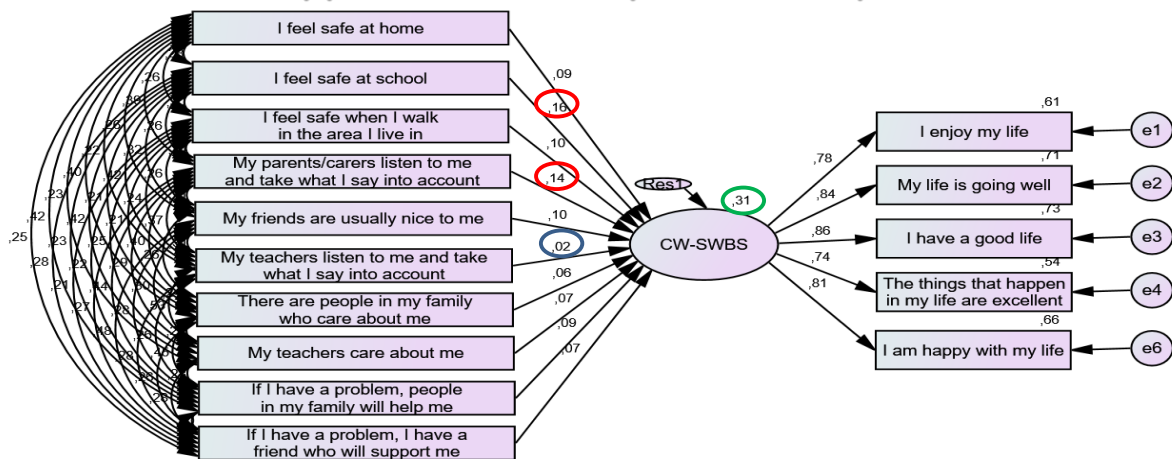
If I have a problem, people in my family will help me

If I have a problem, I have a friend who will support me

Other items on safety, respect, care and support were included in our questionnaires for the 10yo age group. However, they have too many missing values and more in-depth analysis and treatment will be needed for its inclusion in future analysis



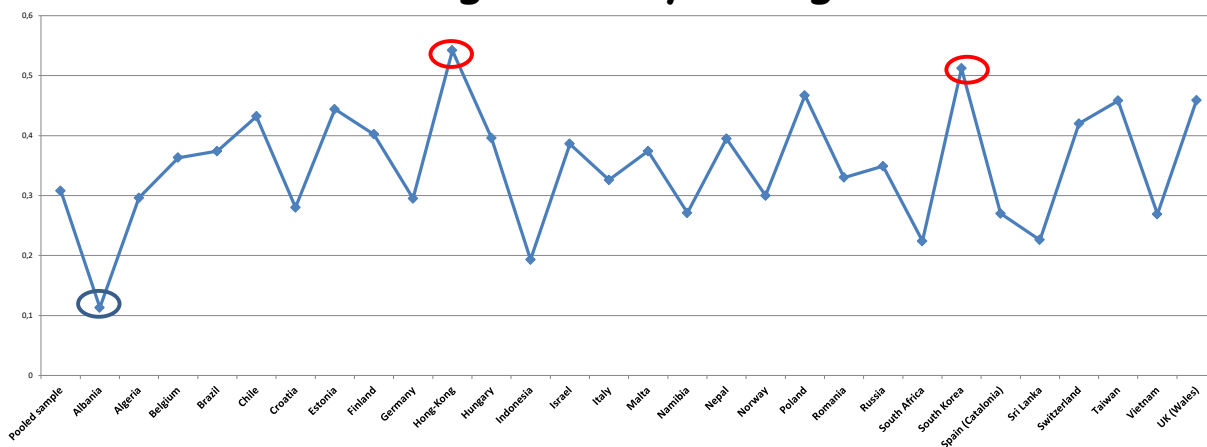
SEM Model: contribution of safety, respect, care and support to SWB (pooled sample)



CHI=831,999;CFI=,997;RMSEA=,020;SRMR=,009



How much of the SWB variance is explained by these 10 items?
SMC show big diversity among countries!

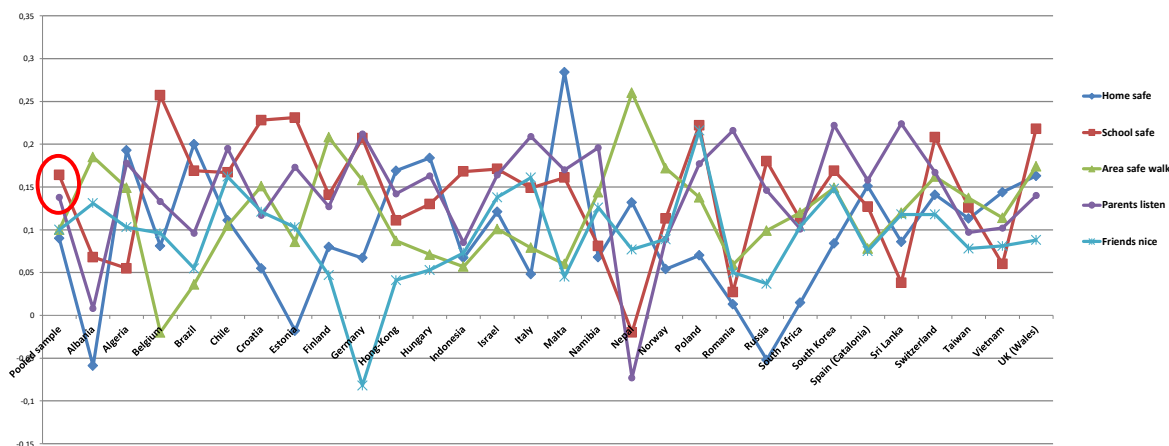


Contribution of single items on CW-SWBS

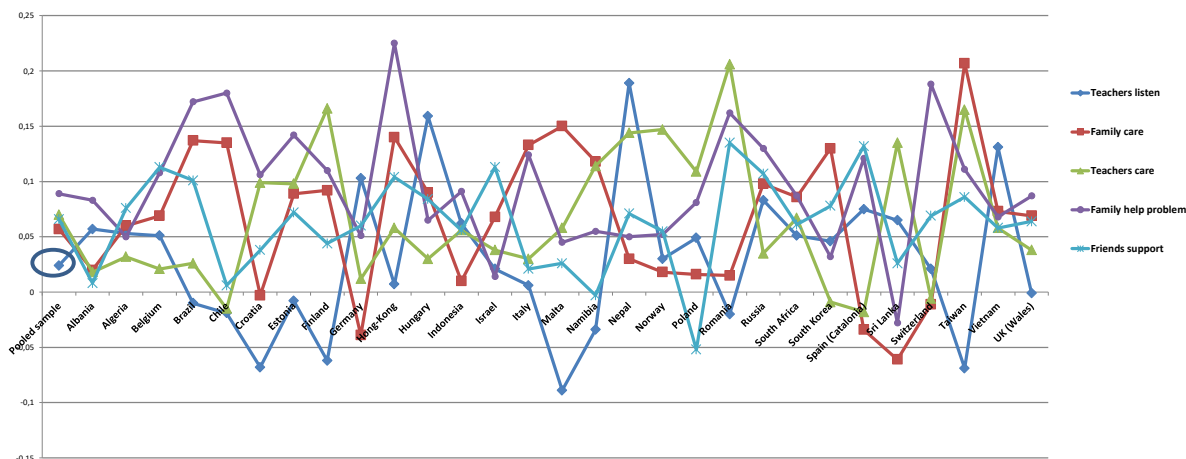
Item	Countries where this item displays the highest contribution on SWB	Countries where this item displays a non-significant contribution on SWB
I feel safe at home	Algeria, Brazil, Malta and Vietnam	Albania, Estonia, Germany, Italy, Norway, Romania, Russia, S Africa
My parents/carers listen to me and take what I say into account	Chile, Germany, Italy, Namibia, Romania, S Korea, Spain and Sri Lanka	Albania
If I have a problem, people in my family will help me	Hong Kong	Algeria, Germany, Israel, Malta, Namibia, Nepal, Norway, S Korea, Sri Lanka, Vietnam
There are people in my family who care about me	Taiwan	Albania, Croatia, Germany, Indonesia, Nepal, Norway, Poland, Romania, Spain, Sri Lanka, Switzerland
My friends are usually nice to me	-	Brazil, Finland, Hong Kong, Hungary, Malta, Romania, Russia
I feel safe at school	Belgium, Croatia, Estonia, Indonesia, Israel, Poland, Russia Switzerland and Wales	Albania, Algeria, Nepal, Romania, Sri Lanka, Vietnam
I feel safe when I walk in the area I live in	Albania, Finland, Nepal, Norway and S Africa	Belgium, Brazil, Malta



Standardized regression weights of each item on the CW-SWBS (5 items) (I)



Standardized regression weights of each item on the CW-SWBS (5 items) (II)



Summarised results (I)

- **All the 10 analysed items display significant effects on children's SWB** when using the pooled sample, despite the effects of "My teachers listen to me and take what I say into account" are very small, suggesting children in most countries do not expect teachers to listen to them.
- Using the pooled sample, one item on **safety** (*I feel safe at school*) and one item on **respect** (*My parents/carers listen to me and take what I say into account*) are the ones displaying the highest effects on children's SWB (.16 and .14, respectively).
- Altogether, these 10 items **explain 31% of the variance** of children's SWB.
- However, ...

Summarised results (II)

- Our data suggests an **impressive diversity of effects** of the analysed items (safety, respect, care and support) on children's SWB (10yo age group) in the countries included in our sample, **depending on the country**. The **explained variance of these 10 items ranges from 11.3% (Albania) to 54.2% (Hong Kong)**.
- A concrete item may display the highest contribution to SWB in one country, but the lowest in another country - without any apparent common characteristics between countries with a similar profile. For example:
 - *I feel safe at home* displays the highest contribution on SWB for Algeria, **Brazil, Malta** and Vietnam, but the lowest for **Albania**, Estonia, Germany, Italy, **Norway**, Romania, Russia, and **S Africa**.
 - *I feel safe when I walk in the area I live in* displays the highest contribution on SWB for **Albania**, Finland, Nepal, **Norway** and **S Africa**, but the lowest for Belgium, **Brazil, and Malta**.



Summarised results (III)

- Such results suggest the concrete geographical, physical, historical, socioeconomic, political, social, relational and cultural environment children live has different influence on the relationship between their perceived safety, respect, care, support, and on its effects on their SWB.
- **Apparently, such environment changes dramatically from one country to another, but probably may change noticeably in different regions of the same country.**
- More detailed analysis on the characteristics of the more immediate, local environments children live, and the daily dynamics inside each of these environments are needed to better understand the different influences on their SWB.





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