**Appendix for online publication at authors host institution.**

**Paper:** Legitimate child protection interventions and the dimension of confidence: A comparative analysis of the populous views in six countries

**Part I**

Table A. Overview of attitudes towards Child Protection Systems. N (percent)

| Values | Norway | England | Finland | Poland | Romania | Czechia | Total |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Competency |  |  |  |  |  |  |  |
| Very much disagree | 92  (9.15 %) | 30  (2.97 %) | 34  (3.39 %) | 31  (3.06 %) | 74  (7.39 %) | 23  (2.28 %) | 284  (4.70 %) |
|  |  |  |  |  |  |  |  |
| Disagree | 190  (18.89 %) | 159  (15.74 %) | 120  (11.95 %) | 144  (14.20 %) | 277  (27.67 %) | 121  (12.00 %) | 1011  (16.73 %) |
|  |  |  |  |  |  |  |  |
| Agree | 389  (38.67 %) | 477  (47.23 %) | 558  (55.58 %) | 578  (57.00 %) | 428  (42.76 %) | 566  (56.15 %) | 2996  (49.58 %) |
|  |  |  |  |  |  |  |  |
| Very much agree | 144  (14.31 %) | 162  (16.04 %) | 156  (15.54 %) | 121  (11.93 %) | 103  (10.29 %) | 88  (8.73 %) | 774  (12.81 %) |
|  |  |  |  |  |  |  |  |
| Do not know | 191  (18.99 %) | 182  (18.02 %) | 136  (13.55 %) | 140  (13.81 %) | 119  (11.89 %) | 210  (20.83 %) | 978  (16.18 %) |
|  |  |  |  |  |  |  |  |
| Fair |  |  |  |  |  |  |  |
| Very much disagree | 92  (9.15 %) | 34  (3.37 %) | 43  (4.28 %) | 34  (3.35 %) | 70  (6.99 %) | 46  (4.56 %) | 319  (5.28 %) |
|  |  |  |  |  |  |  |  |
| Disagree | 217  (21.57 %) | 152  (15.05 %) | 213  (21.22 %) | 269  (26.53 %) | 317  (31.67 %) | 223  (22.12 %) | 1391  (23.02 %) |
|  |  |  |  |  |  |  |  |
| Agree | 375  (37.28 %) | 438  (43.37 %) | 478  (47.61 %) | 445  (43.89 %) | 396  (39.56 %) | 446  (44.25 %) | 2578  (42.66 %) |
|  |  |  |  |  |  |  |  |
| Very much agree | 112  (11.13 %) | 150  (14.85 %) | 88  (8.76 %) | 70  (6.90 %) | 80  (7.99 %) | 62  (6.15 %) | 562  (9.30 %) |
|  |  |  |  |  |  |  |  |
| Do not know | 210  (20.87 %) | 236  (23.37 %) | 182  (18.13 %) | 196  (19.33 %) | 138  (13.79 %) | 231  (22.92 %) | 1193  (19.74 %) |
|  |  |  |  |  |  |  |  |
| Respectful |  |  |  |  |  |  |  |
| Very much disagree | 102  (10.14 %) | 29  (2.87 %) | 42  (4.18 %) | 34  (3.35 %) | 70  (6.99 %) | 38  (3.77 %) | 315  (5.21 %) |
|  |  |  |  |  |  |  |  |
| Disagree | 199  (19.78 %) | 177  (17.52 %) | 204  (20.32 %) | 232  (22.88 %) | 291  (29.07 %) | 198  (19.64 %) | 1301  (21.53 %) |
|  |  |  |  |  |  |  |  |
| Agree | 354  (35.19 %) | 409  (40.50 %) | 441  (43.92 %) | 471  (46.45 %) | 403  (40.26 %) | 436  (43.25 %) | 2514  (41.60 %) |
|  |  |  |  |  |  |  |  |
| Very much agree | 132  (13.12 %) | 135  (13.37 %) | 80  (7.97 %) | 84  (8.28 %) | 81  (8.09 %) | 73  (7.24 %) | 585  (9.68 %) |
|  |  |  |  |  |  |  |  |
| Do not know | 219  (21.77 %) | 260  (25.74 %) | 237  (23.61 %) | 193  (19.03 %) | 156  (15.58 %) | 263  (26.09 %) | 1328  (21.98 %) |
|  |  |  |  |  |  |  |  |
| Discriminate |  |  |  |  |  |  |  |
| Very much disagree | 98  (9.74 %) | 27  (2.67 %) | 41  (4.08 %) | 40  (3.94 %) | 64  (6.39 %) | 27  (2.68 %) | 584  (9.66 %) |
|  |  |  |  |  |  |  |  |
| Disagree | 184  (18.29 %) | 121  (11.98 %) | 177  (17.63 %) | 215  (21.20 %) | 278  (27.77 %) | 115  (15.38 %) | 1581  (26.16 %) |
|  |  |  |  |  |  |  |  |
| Agree | 328  (32.60 %) | 426  (42.18 %) | 441  (43.92 %) | 469  (46.25 %) | 389  (38.86 %) | 407  (40.38 %) | 1671  (27.65 %) |
|  |  |  |  |  |  |  |  |
| Very much agree | 101  (10.04 %) | 191  (18.91 %) | 101  (10.06 %) | 96  (9.47 %) | 86  (8.59 %) | 68  (6.75 %) | 616  (10.19 %) |
|  |  |  |  |  |  |  |  |
| Do not know | 333  (33.10 %) | 277  (27.43 %) | 321  (31.97 %) | 229  (22.58 %) | 160  (15.98 %) | 271  (26.88 %) | 1591  (26.33 %) |
|  |  |  |  |  |  |  |  |
| Moral alignment |  |  |  |  |  |  |  |
| Very much disagree | 125  (12.43 %) | 121  (11.98 %) | 51  (5.08 %) | 108  (10.65 %) | 116  (11.59 %) | 63  (6.25 %) | 297  (4.91 %) |
|  |  |  |  |  |  |  |  |
| Disagree | 215  (21.37 %) | 226  (22.38 %) | 164  (16.33 %) | 333  (32.84 %) | 366  (36.56 %) | 277  (27.48 %) | 1130  (18.70 %) |
|  |  |  |  |  |  |  |  |
| Agree | 215  (21.37 %) | 261  (25.84 %) | 352  (35.06 %) | 276  (27.22 %) | 263  (26.27 %) | 304  (30.16 %) | 2460  (40.71 %) |
|  |  |  |  |  |  |  |  |
| Very much agree | 118  (11.73 %) | 125  (12.38 %) | 116  (11.55 %) | 229  (22.58 %) | 96  (9.59 %) | 93  (9.23 %) | 643  (10.64 %) |
|  |  |  |  |  |  |  |  |
| Do not know | 295  (29.32 %) | 245  (24.26 %) | 244  (24.30 %) | 194  (19.13 %) | 184  (18.38 %) | 351  (34.82 %) | 1513  (25.04 %) |

The table shows the distribution of responses to the five variables (x1\_competency, x2\_fair, x3\_respect, x4\_discriminate, x5\_samesense) for each individual country and for the total sample. The table shows the share of respondents (%) and the number of respondents (N) on each of the response alternatives *1=very much disagree, 2 = disagree, 3 = agree, 4 = very much agree,* and *“Do not know”.* Percentages are calculated based on the total N, including NAs. Data: Survey developed by authors and responses collected by Faktum Markedsanalyse. RStudio: *frq*-function from *sjmisc*-package

# Table B. Overview of attitudes towards Child Protection Systems. N (percent)

| Values | Norway | England | Finland | Poland | Romania | Czechia | Total |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Competency |  |  |  |  |  |  |  |
| Disagree | 282  (34.60 %) | 189  (22.83 %) | 154  (17.74 %) | 175  (20.02 %) | 351  (39.80 %) | 144  (18.05 %) | 1295  (25.57 %) |
|  |  |  |  |  |  |  |  |
| Agree | 533  (65.40 %) | 639  (77.17 %) | 714  (82.26 %) | 699  (79.98 %) | 531  (60.20 %) | 654  (81.95 %) | 3770  (74.43 %) |
|  |  |  |  |  |  |  |  |
| Fair |  |  |  |  |  |  |  |
| Disagree | 309  (38.82 %) | 186  (24.03 %) | 256  (31.14 %) | 303  (37.04 %) | 387  (44.84 %) | 269  (34.62 %) | 1710  (35.26 %) |
|  |  |  |  |  |  |  |  |
| Agree | 487  (61.18 %) | 588  (75.97 %) | 566  (68.86 %) | 515  (62.96 %) | 476  (55.16 %) | 508  (65.38 %) | 3140  (64.74 %) |
|  |  |  |  |  |  |  |  |
| Respectful |  |  |  |  |  |  |  |
| Disagree | 301  (38.25 %) | 206  (27.47 %) | 246  (32.07 %) | 266  (32.40 %) | 361  (42.72 %) | 236  (31.68 %) | 1616  (34.27 %) |
|  |  |  |  |  |  |  |  |
| Agree | 486  (61.75 %) | 544  (72.53 %) | 521  (67.93 %) | 555  (67.60 %) | 484  (57.28 %) | 509  (68.32 %) | 3099  (65.73 %) |
|  |  |  |  |  |  |  |  |
| Discriminate |  |  |  |  |  |  |  |
| Disagree | 340  (50.52 %) | 347  (47.34 %) | 215  (31.48 %) | 441  (56.18 %) | 482  (57.31 %) | 340  (46.13 %) | 2165  (48.63 %) |
|  |  |  |  |  |  |  |  |
| Agree | 333  (49.48 %) | 386  (52.66 %) | 468  (68.52 %) | 344  (43.82 %) | 359  (42.69 %) | 397  (53.87 %) | 2287  (51.37 %) |
|  |  |  |  |  |  |  |  |
| Moral alignment |  |  |  |  |  |  |  |
| Disagree | 282  (39.66 %) | 148  (19.35 %) | 218  (28.68 %) | 255  (31.10 %) | 342  (41.86 %) | 182  (27.70 %) | 1427  (31.50 %) |
|  |  |  |  |  |  |  |  |
| Agree | 429  (60.34 %) | 617  (80.65 %) | 542  (71.32 %) | 565  (68.90 %) | 475  (58.14 %) | 475  (72.30 %) | 3103  (68.50 %) |

The table shows the distribution of responses to the five variables (x1\_competency, x2\_fair, x3\_respect, x4\_discriminate, x5\_samesense) for each individual country and for the total sample. The table shows the share of respondents (%) and the number of respondents (n) on each of the combined response alternatives *0=disagree and 1=agree.* We have excluded “Do not know”-responses in the total N. Data: Survey developed by authors and responses collected by Faktum Markedsanalyse. RStudio: *frq*-function from *sjmisc*-package (Lüdecke 2018).

# Table C: Vignette scenario and response alternatives, including three treatments

|  |  |
| --- | --- |
| We randomly assigned respondents to three types of parental behaviours with an experimental vignette that distinguished between parent(s) having: X1, learning disability; X2, mental health problems; and X3, substance abuse problems: |  |
| **Case scenario** | **Response alternatives** |
| Please consider the following situation: Jon (11) and Mira (9) are living with their parents. The school is concerned about the children because both mother and father have a learning disability/mental health problems/substance abuse problem. A psychologist has examined the children and has concluded that Jon and Mira have serious learning problems and lack basic social skills. The psychologist states that this is due to lack of stimuli and help from the parents, and the children need a lot of help and support. The parents do not want any help and cannot teach and show their children how to behave towards friends and other adults. The psychologist concludes that Mira and Jon are at significant risk of developing permanent social and emotional problems.  Based on the condensed information in this case, which option would you recommend the child protection authorities to take? | 1. They should not get involved at all  2. They should monitor/visit the family, but not interfere unless the situation worsens  3. They should provide in-home services for the family, even if the parents do not want it  4. They should prepare for a care order to temporarily place the children with another family  5. They should prepare for a care order to permanently place the children with another family |

# Table D. Mean, SD and valid N for each statement by country

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Competency | | | Fair | | | Respect | | | Discriminate | | | Moral alignment | | | Latent | | |
|  | Mean | SD | N | Mean | SD | N | Mean | SD | N | Mean | SD | N | Mean | SD | N | Mean | SD | N |
| NO | 2.72 | 0.88 | 815 | 2.64 | 0.86 | 796 | 2.66 | 0.91 | 787 | 2.48 | 0.99 | 673 | 2.61 | 0.89 | 711 | 2.64 | 0.74 | 523 |
| EN | 2.93 | 0.73 | 828 | 2.91 | 0.75 | 774 | 2.87 | 0.74 | 750 | 2.53 | 0.96 | 733 | 3.02 | 0.74 | 765 | 2.88 | 0.56 | 531 |
| FI | 2.96 | 0.69 | 868 | 2.74 | 0.71 | 822 | 2.73 | 0.72 | 767 | 2.78 | 0.81 | 683 | 2.79 | 0.73 | 760 | 2.81 | 0.58 | 550 |
| PO | 2.90 | 0.66 | 874 | 2.67 | 0.69 | 818 | 2.74 | 0.69 | 821 | 2.39 | 0.83 | 785 | 2.76 | 0.72 | 820 | 2.69 | 0.53 | 634 |
| RO | 2.63 | 0.80 | 882 | 2.56 | 0.77 | 863 | 2.59 | 0.78 | 845 | 2.40 | 0.86 | 841 | 2.61 | 0.78 | 817 | 2.57 | 0.58 | 672 |
| CZ | 2.90 | 0.61 | 789 | 2.67 | 0.71 | 777 | 2.73 | 0.70 | 745 | 2.58 | 0.82 | 737 | 2.79 | 0.68 | 657 | 2.73 | 0.45 | 491 |
| Tot. | 2.84 | 0.74 | 5065 | 2.70 | 0.76 | 4850 | 2.71 | 0.77 | 4715 | 2.52 | 0.89 | 4452 | 2.76 | 0.77 | 4530 | 2.71 | 0.59 | 3401 |

# Table E. Coding of background variables

| Variable name | Description of recoding |
| --- | --- |
| Gender | Woman = 0  Man = 1 |
|  |  |
| Age | Age |
|  |  |
| Age group | 1 = 18-22  2 = 23-35  3 = 36-55  4 = 56-80 |
|  |  |
| Region | 11 regions in Norway and UK, 14 regions in Czechia, 5 regions in Finland, 6 regions in Poland, 8 regions in Romania |
|  |  |
| Income | 6-point scale: 1 = lowest income level, 6 = highest income level  *Original coding: 6-point scale in Norway, England, and Finland, 10-point scale in Czechia, 13-point scale in Poland and 17-point scale in Romania. For polish respondents, the alternative values indicated monthly income level, whilst the remaining five countries had alternatives denoting annual income levels. Because the values across countries are incomparable, and all the countries’ income alternatives were recoded to a 6-point scale, the inconsistency in monthly and annual income is not of much trouble. Additionally, the countries with more than 6 values were recoded into a 6-point scale in order to have a consistent scale across all six countries.* |
|  |  |
| Size city | 1 = Rural area/village with less than 5000 inhabitants  2 = Rural area/village with 5000-49.999 inhabitants  3 = City with 5000-49.999 inhabitants  4 = City with 50.000 inhabitants or more  5 = Capital city area |
|  |  |
| Employment | 0 = Not working (including respondents who are student/apprentice, unemployed (looking for job), unemployed (receiving disability benefits), and retired)  1 = Working (including respondents who are permanently employed fulltime, permanently employed parttime, on temporary contracts and freelancers)  *Original coding: Permanently employed, fulltime = 1, Permanently employed, parttime = 2, Temporary contract = 3, Freelancer = 4, Student/apprentice = 5, Unemployed, looking for job = 6, Unemployed, receiving disability benefits = 7, Retired = 8* |
|  |  |
| Political orientation | 0-3 = Left  4-6 = Centre  7-10 = Right  *Original coding: 11-point scale: 0 = Left, 5 = Centre, 10 = Right* |
|  |  |
| Marital status | 0 = Not married (including respondents who responded not married, divorced, separated and widowed)  1 = Married/partnership (including respondents who are legally married or in a legal partnership/civil union)  *Original coding: Not married = 1, In a legal partnership/civil union = 2, Legally married = 3, Divorced = 4, Separated = 5, Widowed = 6* |
|  |  |
| Children in household | 0 = No children  1 = Children  *Original coding: No children = 1, 1 child = 2, 2 children = 3, 3 children = 4, 4 children = 5, 5 or more children = 6* |
|  |  |
| Education | 1 = Low (including whose who have not completed any education, primary education, secondary education and occupational/vocational education)  2 = Medium (including those with higher education 1-3 years)  3 = High (including those with higher education 4 years or more)  *Original coding: I have not completed any education = 1, Primary education = 2, Secondary education = 3, Occupational/vocational education = 4, Higher education, 1-3 years = 5, Higher education, 4 years or more = 6* |

Table F. Overall Confidence (latent) in the Child Protection System by Socio-Demographic Characteristics (Mean, SD, t/F-test, 95 %)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mean | SD | t/F = Pr(t/F) |
| Gender |  |  |  |
| Female | 2.71 | 0.60 | t(-0.58904)= 0.555 |
| Male | 2.72 | 0.58 |  |
|  |  |  |  |
| Age |  |  |  |
| 18-22 | 2.70 | 0.51 | F(0.555)= 0.456 |
| 23-35 | 2.72 | 0.56 |  |
| 36-55 | 2.69 | 0.62 |  |
| 56-80 | 2.74 | 0.59 |  |
|  |  |  |  |
| Education |  |  |  |
| Low | 2.70 | 0.58 | F(2.05)= 0.152 |
| Medium | 2.72 | 0.60 |  |
| High | 2.77 | 0.58 |  |
|  |  |  |  |
| Marital status |  |  |  |
| Not married | 2.70 | 0.60 | t(-1.1305)= 0.258 |
| Married/partnership | 2.72 | 0.58 |  |
|  |  |  |  |
| Employment |  |  |  |
| Not working | 2.66 | 0.62 | t(-3.7604) =0.00\*\*\* |
| Working | 2.74 | 0.57 |  |
|  |  |  |  |
| Children |  |  |  |
| No children | 2.69 | 0.60 | t(-2.0758) =0.037\*\* |
| Children | 2.75 | 0.58 |  |
|  |  |  |  |
| Size of home area |  |  |  |
| Rural < 5000 | 2.73 | 0.55 | F(0.494) =0.482 |
| Rural 5000-49.999 | 2.70 | 0.60 |  |
| City 5000-49.999 | 2.73 | 0.59 |  |
| City > 50.000 | 2.71 | 0.61 |  |
| Capital area | 2.69 | 0.58 |  |
|  |  |  |  |
| Political orientation |  |  |  |
| Left | 2.71 | 0.61 | F(0.41) =0.522 |
| Centre | 2.71 | 0.58 |  |
| Right | 2.73 | 0.59 |  |

**A sub-section on the latent variable**

Figure 1 below illustrate the strength and direction of the correlations between each of the five statement variables. As we can see, four out of the five items (x1, x2, x3, and x5) are relatively highly correlated (well over 0.5 for all correlations), whilst the fourth item (x4) has lower correlation coefficients than the others (ranging from 0.1321 to 0.1843). We believe that these correlation coefficients, and the Cronbach’s alpha test are sufficient to justify the creation of a latent variable of level of confidence. The latent variable is an operationalisation of an underlying concept, confidence, that may be difficult to measure due to its highly abstract and unobservable nature (Fariss et al., 2020). We thus construct a latent trait variable taking the mean value of each respondent’s response to the five statements. The latent variable is a numeric variable that goes from 1 to 4 by 0.2, as seen in table 1 below.

Figure 1 Correlation table

Chart, treemap chart

Description automatically generated

Many problems in the social sciences involve making inferences about quantities that are not directly observable. Here I refer to these quantities as latent states or latent variables. In each instance, the available data are manifestations (or indicators) of the latent quantity and the inferential problem can be stated as follows: Conditional on observable data y, what should we believe about latent quantities x? (Jackman, 2008, pp. 1-2).

A latent trait refers to a set of observable variables are manifestations of an underlying conceptual process that is not perfectly observable or knowable (Fariss et al., 2020, p. 1). There are no hard rules for deciding when a scale measure z is reliable on the basis of Cronbach’s alpha, however, reliabilities less than .5 are often considered less than acceptable in many settings. In some disciplines, such as psychology and educational testing, higher reliability coefficients are normally applied (e.g., see Jackman (2008); Ping and Xitao (2003); Viswesvaran and Ones (2000)). When disaggregating the results to country level, we do find some variations in the Cronbach’s alpha, see table 2 in the article. The country with the highest score here is Norway (0.86), followed by Finland (0.81) and Romania (0.77). At the bottom we find Czechia with 0.65. The Cronbach’s alpha test for Czechia also show that the x4\_discriminate variable is negatively correlated with two other items (x5\_same\_sense\_right\_wrong and x2\_fair), even after it has been inverted to align with the direction of the scales in the other variables.

Tabell 1 Descriptive statistics of Confidence variable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Value | N | Raw % | Valid % | Cum. % |
| 1.00 | 37 | 0.61 | 1.09 | 1.09 |
| 1.20 | 40 | 0.66 | 1.18 | 2.26 |
| 1.40 | 33 | 0.55 | 0.97 | 3.23 |
| 1.60 | 97 | 1.61 | 2.85 | 6.09 |
| 1.80 | 107 | 1.77 | 3.15 | 9.23 |
| 2.00 | 224 | 3.71 | 6.59 | 15.82 |
| 2.20 | 276 | 4.57 | 8.12 | 23.93 |
| 2.40 | 262 | 4.34 | 7.70 | 31.64 |
| 2.60 | 280 | 4.63 | 8.23 | 39.87 |
| 2.80 | 618 | 10.23 | 18.17 | 58.04 |
| 3.00 | 667 | 11.04 | 19.61 | 77.65 |
| 3.20 | 328 | 5.43 | 9.64 | 87.30 |
| 3.40 | 213 | 3.52 | 6.26 | 93.56 |
| 3.60 | 87 | 1.44 | 2.56 | 96.12 |
| 3.80 | 64 | 1.06 | 1.88 | 98.00 |
| 4.00 | 68 | 1.13 | 2.00 | 100.00 |
| NA | 2642 | 43.72 | NA | NA |

**Figure 2. Latent variable, average score per country and standard deviation**

Chart, bar chart, box and whisker chart

Description automatically generated

Fariss, C. J., Reuning, K., & Kenwick, M. R. (2020). Measurement Models. In L. Curini & R. J. Franzese (Eds.), *SAGE Handbook of Research Methods is Political Science & International Relations* (pp. 353-370). SAGE Press.

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