## ESM 3: Results of the Validation Study

ESM 3.1 Description of Subsamples and the Corresponding Sets of Questionnaires

| Subsample | QARCA-C combined with |  |  |  |  | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SDQ | KIDSCREEN | ERQ | s-EMBU | SSKJ |  |
| 1 | X |  | X |  | X | 577 |
| 2 | X | X |  |  |  | 742 |
| 3 |  |  |  | X |  | 497* |
| 4 |  | X |  |  | X | 188 |
| 5 |  |  | X |  |  | 539 |
| 6 | X |  |  |  |  | 173 |

Note. $n=$ size of the subsample. QARCA-C = Questionnaire to Assess Resources for Children and Adolescents - Chinese. SDQ = Strength and Difficulties Questionnaire. KIDSCREEN = Quality of Life Questionnaire for Children and Adolescents. s-EMBU = Egna Minnen Barndoms Uppfostran. $E R Q=$ Emotion Regulation Questionnaire. SSKJ $=$ German Stress and Coping Questionnaire for Children and Adolescents. *: 393 parents filled in parent reports.

ESM 3.2 Gender-Specific Mean Comparisons Using t-Tests

| Boys |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $(n=1,350)$ |  |  |  |  |  | Girls |  |
|  | $M=1,250)$ |  |  |  |  |  |  |  |
|  | 2.98 | 0.60 | 3.02 | 0.59 | -1.67 |  |  |  |
| EPT | 2.80 | 0.53 | 2.78 | 0.54 | 0.92 |  |  |  |
| SEFF | 2.62 | 0.66 | 2.60 | 0.68 | 0.75 |  |  |  |
| SEST | 3.01 | 0.55 | 2.99 | 0.56 | 0.92 |  |  |  |
| SOC | 3.10 | 0.57 | 3.04 | 0.62 | $2.59^{* *}$ |  |  |  |
| OPT | 2.92 | 0.56 | 2.93 | 0.56 | -0.29 |  |  |  |
| SCON | 2.97 | 0.68 | 2.95 | 0.73 | -0.04 |  |  |  |
| PSUP | 2.93 | 0.68 | 2.86 | 0.72 | -0.04 |  |  |  |
| AUP | 3.21 | 0.64 | 3.20 | 0.66 | 0.54 |  |  |  |
| IPG | 3.25 | 0.66 | 3.23 | 0.70 | 0.01 |  |  |  |
| EDUI | 3.25 | -0.03 | -0.11 |  |  |  |  |  |
| Total | 2.99 | 0.45 | 2.97 | 0.47 | 1.11 |  |  |  |
| Score |  |  |  | -0.02 |  |  |  |  |

Note. $M=$ mean. $S D=$ standard deviation. ${ }^{*} p<.05 .{ }^{* *} p<.01 .{ }^{* * *} p<.001$. EPT $=$ empathy and perspective-taking. $\mathrm{SEFF}=$ self-efficacy. $\mathrm{SEST}=$ self-esteem. $\mathrm{SOC}=$ sense of coherence. $\mathrm{OPT}=$ optimism. SCON $=$ self-control. PSUP $=$ parental social and emotional support. AUP $=$ authoritative parenting. $\mathrm{IPG}=$ integration into peer groups. $\mathrm{EDUI}=$ educational integration.

ESM 3.3 The 15 residual correlations that were allowed
EPT: Item 6 with Item 32

- Item 6: I try hard to understand others.
- Item 32: I know how other people feel.

SEFF: Item 3 with Item 5, Item 15 with Item 21

- Item 3: I can reach what I really want to achieve.
- Item 5: When I set a goal, I also achieve it.
- Item 15: I can reach a lot with my ability.
- Item 21: With my abilities, I can achieve everything.

SEST: Item 25 with Item 29, Item 31 with Item 34

- Item 25: I like myself.
- Item 29: I can be proud of myself.
- Item 31: I feel comfortable thinking about myself.
- Item 34: I have many good feelings when I think about myself.

SOC: Item 13 with Item 24

- Item 13: I can influence my life.
- Item 24: I can control what happens in my life.

OPT: Item 4 with Item 8, Item 11 with Item 26

- Item 4: Even though I have problems, I see the positive side.
- Item 8: If I don't feel so good, I know that I will feel better soon.
- Item 11: I believe that somehow everything will turn out for the best.
- Item 26: I look to my future with confidence.

AUP: Item 42 with Item 47, Item 45 with Item

- Item 42: There are rules at home that I have to follow.
- Item 47: My parents explain the rules that apply in our home.
- Item 45: We have rules here, but I have a say in it.

IPG: Item 52 with Item 53, Item 53 with Item 54

- Item 52: My friends like me for who I am
- Item 53: I think others of my age like me.
- Item 54: I have a lot of contact with people of my age.

EDUI: Item 55 with Item 60, Item 56 with Item 59, and Item 57 with Item 60

- Item 55: I feel comfortable at school.
- Item 60: I feel comfortable in my class.
- Item 56: I come along well with my classmates.
- Item 59: My classmates are nice to me.
- Item 57: The climate in my school is really good.

Authors' Note: We ad hoc translated these items from German into English. There is no validated English version.

ESM 3.4 Goodness-of-Fit of the Unidimensional Confirmatory Factor Analyses for the
Subscales without Residual Correlations (WLSMV-estimates)

|  |  |  |  | $90 \%$ C.I. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\chi^{2}$ | $d f$ | $p$ | $R M S E A$ | lower | upper | $C F I$ |
| EPT | 375.39 | 9 | $<.001$ | .13 | .11 | .14 | .97 |
| SEFF | 456.54 | 9 | $<.001$ | .14 | .13 | .15 | .92 |
| SEST | 461.10 | 5 | $<.001$ | .19 | .17 | .20 | .96 |
| SOC | 277.99 | 9 | $<.001$ | .11 | .10 | .12 | .94 |
| OPT | 198.23 | 9 | $<.001$ | .09 | .08 | .10 | .98 |
| AUP | 769.91 | 9 | $<.001$ | .18 | .17 | .19 | .93 |
| IPG | 609.07 | 9 | $<.001$ | .16 | .15 | .17 | .96 |
| EDUI | 803.04 | 9 | $<.001$ | .18 | .17 | .20 | .97 |
| total | 10850.261 | 1607 | $<.001$ | .047 | .046 | .048 | .912 |

Note: $N=2,600$. EPT $=$ empathy and perspective-taking. SEFF $=$ self-efficacy. SEST $=$ self-esteem. SOC $=$ sense of coherence. $\mathrm{OPT}=$ optimism. $\mathrm{SCON}=$ self-control. PSUP $=$ parental social and emotional support. AUP $=$ authoritative parenting. $\mathrm{IPG}=$ integration into peer groups. $\mathrm{EDUI}=$ educational integration.

ESM 3. 5 Estimating Measurement Invariance across Gender Using Multi-Group CFAs in
Mplus (WLSMV-Estimates)


Note: $N=2600 . * p<.05 .{ }^{* * *} p<.001$. Model $1=$ configural invariance; $2=$ full metric invariance: factor loadings were set the same across gender. Model 3 = full scalar invariance: factor loadings and thresholds of the manifest variables were set the same across gender. Model 4 = partial scalar invariance by setting free one to several thresholds.

ESM 3.6 Equivalence Testing between the Chinese Scale and the Original German Scale with Mplus using Multi-Group CFAs (WLSMV-Estimates)

90\% C.I.

|  | Model | $\chi^{2}$ | $d f$ | $p$ | RMSEA | lower | upper | CFI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EPT | 1 | 499.81 | 13 | $<.001$ | . 12 | . 11 | . 13 | . 96 |
|  | 2 | 887.84 | 31 | <. 001 | . 10 | . 10 | . 11 | . 93 |
|  | 3 | 101.05 | 11 | <. 001 | . 06 | . 05 | . 07 | . $99^{2}$ |
| SEFF | 1 | 209.85 | 12 | <. 001 | . 08 | . 07 | . 09 | . 96 |
|  | 2 | 2513.21 | 30 | <. 001 | . 18 | . 17 | . 18 | . 53 |
|  | 4 | 252.81 | 14 | <. 001 | . 08 | . 07 | . 09 | $.96{ }^{16}$ |
| SEST | 1 | 67.17 | 7 | <. 001 | . 06 | . 05 | . 07 | . 99 |
|  | 2 | 5480.11 | 22 | <. 001 | . 31 | . 30 | . 32 | . 49 |
|  | 4 | 170.41 | 11 | <. 001 | . 08 | . 07 | . 09 | $.99^{11}$ |
|  | 1 | 322.75 | 13 | <. 001 | . 09 | . 09 | . 11 | . 94 |
| SOC | 2 | 1288.14 | 31 | <. 001 | . 13 | . 12 | . 13 | . 74 |
|  | 3 | 135.96 | 11 | <. 001 | . 07 | . 06 | . 08 | . $97^{2}$ |
| OPT | 1 | 184.38 | 12 | $<.001$ | . 07 | . 07 | . 08 | . 98 |
|  | 2 | 2126.65 | 30 | <. 001 | . 16 | . 16 | . 17 | . 72 |
|  | 4 | 366.36 | 19 | <. 001 | . 08 | . 08 | . 09 | $.95{ }^{11}$ |
|  | 1 | 332.56 | 14 | <. 001 | . 09 | . 09 | . 10 | . 92 |
| SCON | 2 | 959.95 | 32 | <. 001 | . 11 | . 10 | . 11 | . 78 |
|  | 3 | 245.29 | 13 | <. 001 | . 08 | . 07 | . 09 | . $94{ }^{1}$ |
|  | 1 | 815.16 | 14 | <. 001 | . 15 | . 14 | . 16 | . 96 |
| PSUP | 2 | 9246.73 | 32 | <. 001 | . 33 | . 33 | . 34 | . 54 |
|  | 3 | 159.50 | 9 | <. 001 | . 08 | . 07 | . 09 | . 99 |
| AUP | 1 | 189.08 | 12 | <. 001 | . 08 | . 07 | . 09 | . 98 |
|  | 2 | 6354.36 | 30 | <. 001 | . 29 | . 28 | . 29 | . 39 |
|  | 4 | 238.82 | 15 | <. 001 | . 08 | . 07 | . 08 | $.98{ }^{15}$ |
|  | 1 | 468.94 | 12 | <. 001 | . 12 | . 11 | . 13 | . 97 |
| IPG | 2 | 2463.80 | 30 | $<.001$ | . 18 | . 17 | . 18 | . 83 |
|  | 3 | 145.47 | 9 | <. 001 | . 08 | . 07 | . 09 | . $99^{3}$ |
|  | 1 | 758.74 | 11 | <. 001 | . 16 | . 15 | . 17 | . 98 |
| EDUI | 2 | 1816.74 | 29 | <. 001 | . 15 | . 15 | . 16 | . 94 |
|  | 3 | 114.82 | 7 | <. 001 | . 08 | . 07 | . 09 | $1.00^{4}$ |
| total |  | 10815.43 | 1640 | <. 001 | . 05 | . 05 | . 05 | . 91 |

Note: $N=2600$. Model $1=$ full metric invariance: the factor loadings in the Chinese study were set the same as in the original study. Model $2=$ scalar invariance: factor loadings and thresholds of the manifest variables in the Chinese study were set the same as in the original study. Model $3=$ partial metric invariance by setting free one to four loadings (superscripts = numbers of the freed loadings). Model 4 = partial scalar invariance by setting free 11 or more thresholds of the manifest variables (superscripts = numbers of freed thresholds; note: each manifest variable has three thresholds).
https://doi.org/10.1027/2698-1866/a000003
ESM 3.7 Correlations between Resources and External Criteria: Emotion Regulation, Stress and Coping, Parenting, Well-Being, and Parent Report

| QARCA-C | Emotion regulation |  | Stress and coping |  |  |  |  |  |  |  | Rejection |  | Emotional warmth |  | Overprotection |  | Wellbeing | $\begin{gathered} \text { QARC } \\ \text { A-P } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CR | ES | VUL | SOC | PRO | AVO | PAL | ANG | PHY | PSY | Father | Mother | Father | Mother | Father | Mother |  |  |
| EPT | . $38 * * *$ | . $16 * * *$ | -. 04 | . 22 *** | . $46 * * *$ | . 03 | .19*** | $-.21 * * *$ | . 05 | -. 05 | -. 02 | -. 01 | . 22 *** | . 22 *** | . 07 | . 01 | . 28 *** | . 01 |
| SEFF | . $38 * * *$ | . 12 *** | $-.14 * * *$ | . 23 *** | . $37 * * *$ | .14*** | . $31^{* * *}$ | -.09* | -. 03 | -.11 ** | . 00 | -.11* | . $25^{* * *}$ | . $27 * * *$ | . 03 | -. 08 | . $44^{* * *}$ | . 04 |
| SEST | . $34 * * *$ | . 06 | $-.18 * * *$ | .27*** | . $23 * * *$ | . 15 *** | . 32 *** | -. 03 | -.16*** | $-.22 * * *$ | . 01 | -. 01 | . 20 *** | . 20 *** | . 02 | . 01 | . 49 *** | -. 03 |
| SOC | . $36 * * *$ | . $15^{* * *}$ | $-.14 * * *$ | .16*** | . $38 * * *$ | .07* | .27*** | $-.13 * * *$ | -. 03 | $-.14 * * *$ | -. 04 | -. 12 ** | . 29 *** | . 26 *** | -. 01 | -.10* | . $47 * * *$ | . 03 |
| OPT | . $47 * * *$ | . 12 *** | $-.18 * * *$ | .24*** | . $49 * * *$ | .13*** | . $34^{* * *}$ | $-.22 * * *$ | -. 12 ** | -. $24 * * *$ | -. 08 | $-.16 * * *$ | . $38 * * *$ | . 42 *** | . 02 | -. 07 | .61*** | -. 02 |
| SCON | . 40 *** | . 21 *** | $-.09^{* *}$ | .19*** | . $41^{* * *}$ | . 15 *** | . 32 *** | $-.12 * * *$ | . 00 | -.09* | -. 06 | -.11* | . $25^{* * *}$ | . 28 *** | . 00 | -. 02 | . 43 *** | . 03 |
| PSUP | . 29 *** | . 01 | -.08* | . $31{ }^{* * *}$ | . 29 *** | -.09* | .17*** | -.11** | $-.24 * * *$ | -.26*** | -. $29 * * *$ | $-.39^{* * *}$ | . 62 *** | .67*** | -. 04 | -.15** | . $58 * * *$ | -. 04 |
| AUP | . $37 * * *$ | . 10 *** | -.08* | .23*** | . $30 * * *$ | . 04 | . $22^{* * *}$ | -.09* | $-.21 * * *$ | $-.23 * * *$ | $-.23 * * *$ | $-.26 * * *$ | . $59 * * *$ | . $55^{* * *}$ | -. 03 | -. 04 | . $55 * * *$ | . 04 |
| IPG | .28*** | . 04 | -. 07 | . 25 *** | . $36 * * *$ | . 05 | . $22 * * *$ | $-.11^{* * *}$ | $-.12 * * *$ | -.16*** | -. 03 | -. 07 | . $29 * * *$ | .30*** | .10* | . 02 | . $52 * * *$ | . 06 |
| EDUI | . $37 * * *$ | . 04 | -.10** | .20*** | .42** | . 00 | .19*** | $-.22 * * *$ | $-.25 * * *$ | $-.27 * * *$ | $-.12 * *$ | -.13 ** | . 33 *** | .36*** | . 01 | -. 02 | .67*** | . 02 |
| total | . $51 * * *$ | . $14^{* * *}$ | -.15*** | . $33^{* *}$ | . $52 * * *$ | .08* | . $35^{* * *}$ | $-.19 * * *$ | $-.17 * * *$ | -. $25^{* * *}$ | -.14** | $-.21^{* *}$ | . 51 *** | . $53 * * *$ | -. 03 | -. 07 | . $72 * * *$ | . 02 |
| McDonald's Omega | . 82 | . 71 | . 70 | . 88 | . 91 | . 78 | . 84 | . 88 | . 79 | . 91 | . 79 | . 80 | . 86 | . 82 | . 65 | . 65 | . 86 | .69-. 88 |

Note: *p<.05. ${ }^{* *} p<.01 .{ }^{* * *} p<.001$. EPT = empathy and perspective-taking. SEFF $=$ self-efficacy. SEST $=$ self-esteem. SOC $=$ sense of coherence. OPT $=$ optimism. $\mathrm{SCON}=$ self-control. $\mathrm{PSUP}=$ parental social and emotional support. $\mathrm{AUP}=$ authoritative parenting. $\mathrm{IPG}=$ integration into peer groups. EDUI $=$ educational integration. $\mathrm{CR}=$ cognitive reappraisal. $\mathrm{ES}=$ expressive suppression. $\mathrm{VUL}=$ vulnerability. $\mathrm{SOC}=$ seeking social support. $\mathrm{PRO}=$ problem solving. $\mathrm{AVO}=$ avoidant coping. $\mathrm{PAL}=$ palliative emotion regulation. $\mathrm{ANG}=$ anger-related emotion regulation. $\mathrm{PHY}=$ physical symptoms. $\mathrm{PSY}=$ psychological symptoms. $\mathrm{QARCA}-\mathrm{P}=\mathrm{QARCA}$ parent report.

ESM 3.8 Correlations Between Resources and Strengths and Difficulties

| QARCA-C | SDQ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Emotional problems | Conduct problems | hyperactivity | Peer relationship problems | Prosocial behavior | Total difficulties score |
| EPT | -. 02 | . 00 | -.18*** | -.17*** | .44*** | -. 02 |
| SEFF | -. 09 | . 03 | -.25*** | -.17*** | .40*** | -.09** |
| SEST | -.16 *** | . 05 | -.16*** | -.19*** | . 31 *** | -. $16^{* * *}$ |
| SOC | -.15*** | -.07* | -.23*** | -.25*** | . $42^{* * *}$ | -.15*** |
| OPT | -.25*** | -.09*** | -.29*** | -.28*** | .47*** | -.25*** |
| SCON | -.06* | . 01 | -.22*** | -.16* | .46*** | -.06* |
| PSUP | -.19*** | -.08** | -.20*** | $-.23 * * *$ | . $37^{* * *}$ | -.19*** |
| AUP | -.14*** | -. 03 | -.20*** | -.19** | .40*** | -.14*** |
| IPG | -.14*** | -. 03 | -.17*** | -.49*** | .49*** | -.14*** |
| EDUI | $-.27 * * *$ | $-.11 * * *$ | $-.24 * *$ | -.47*** | . 51 *** | -.27*** |
| total | -.20*** | -. 05 | -.29*** | -.36*** | .58*** | -.20*** |
| McDonald's Omega | . 81 | . 70 | . 64 | . 53 | . 79 | . 86 |

Note: *p<.05. ${ }^{* *} p<.01 . * * * p<.001$. EPT $=$ empathy and perspective-taking. SEFF $=$ self-efficacy. SEST $=$ self-esteem. SOC $=$ sense of coherence. $\mathrm{OPT}=$ optimism. $\mathrm{SCON}=$ self-control. $\mathrm{PSUP}=$ parental social and emotional support. $\mathrm{AUP}=$ authoritative parenting. $\mathrm{IPG}=$ integration into peer groups. EDUI = educational integration.

