|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | α | **Confidence** | **Constraints** | **Complacency** | **Calculation** |
|  |  | α = .88 | α = .77 | α = .67 | α = .75 |
| Vaccine acceptance1 | n.a. | .375\*\* | -.252\*\* | -.154\*\* | -.141\*\* |
| Intention to get vaccinated1 | n.a. | .840\*\* | -.121\*\* | -.220\*\* | -.334\*\* |
| Attitude towards vaccination1,2 | .94 | **.822\*\*** | -.214\*\* | -.386\*\* | -.248\*\* |
| Knowledge about vaccination1 | n.a. | **.814\*\*** | -.147\*\* | -.406\*\* | -.280\*\* |
| Beliefs about medicine - benefits2 | .61 | **.325\*\*** | -.026 | -.147\*\* | -.006 |
| Beliefs about medicine - harms2 | .60 | **-.353\*\*** | .121\* | .360\*\* | .097\* |
| Conspiracy mentality2 | .75 | **-.229\*\*** | .027 | .206\*\* | .018 |
| Empowerment – others’ experience1 | *r* =.501 | -.276\*\* | **.150\*\*** | .318\*\* | .219\*\* |
| Empowerment – personal experience1 | *r* =.484 | -.149\*\* | **.043** | .319\*\* | .120\*\* |
| Perceived behavioral control2 | *r* = .78 | -.032 | **-.208\*\*** | -.155\*\* | .003 |
| Self efficacy2 | .80 | .008 | **-.127\*\*** | -.171\*\* | .156\*\* |
| Perceived risk of diseases1 | n.a. | .559\*\* | -.148\*\* | **-.253\*\*** | **-.208\*\*** |
| Attitude towards risk (risk seeking)2 | .63 | -.07 | .143\*\* | **.149\*\*** | **-.189\*\*** |
| Consideration of future consequences2 | .82 | .099\* | -.118\* | **-.187\*\*** | .182\*\* |
| Normative beliefs2 | .87 | .504\*\* | -.201\*\* | **-.321\*\*** | -.161\*\* |
| Perceived descriptive norm2 | n.a. | .443\*\* | -.314\*\* | **-.358\*\*** | -.101\* |
| Perceived risk of vaccination1 | n.a. | -.855\*\* | .106\*\* | .326\*\* | **.336\*\*** |
| Numeracy2 | n.a. | .087 | -.032 | -.097 | -.015 |
| SocDes – emphasize positive qualities | 0.44 | .099\* | -.091 | -.017 | .138\*\* |
| SocDes – downplay negative qualities | 0.45 | .015 | .126\* | .125\* | -.07 |
| Extraversion2 | *r* = .67 | -.008 | -.134\*\* | -.110\* | .008 |
| Agreeableness †2 | n.a. | .025 | -.006 | .042 | -.031 |
| Neuroticism2 | *r* = .32 | -.018 | .142\*\* | .187\*\* | .002 |
| Openness for experience2 | *r* = .46 | -.098\* | .01 | .012 | .150\*\* |
| Conscientiousness2 | *r* = .32 | .026 | -.09 | -.133\*\* | .208\*\* |

**S5 Table**

*Note:* α = Cronbach’s alpha; bold correlations were expected. \*\* p < .01; *r* = Spearman-Brown correlation to examine reliability of two item measures; † the two agreeableness items correlated at .07. Therefore, only the item “I trust others easily and believe in the good in man” was selected. 1 assessed in sample A (*n* = 1033), 2 assessed in sample B (*n* = 412). SocDes = social desirability.

**Supplementary Table S6. Convergent and discriminant validity and comparison to existing measures (Study 2)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Parental Attitudes about Childhood Vaccinations (PACV) | PACV short scale [38] | Vaccination Confidence Scale (VCS) | VCS short scale (4 items sub-scale benefit,  [39]) |
|  | α = .88  *n* = 253 | α = .77  *n* = 253 | α = .86  *n* = 1003 | α = .86  *n* = 1003 |
| Confidence | -.508 | -.500 | .766 | .766 |
| Constraints | .333 | .378 | -.346 | -.270 |
| Complacency | .601 | .647 | -.588 | -.531 |
| Calculation | .282 | .313 | -.154 | -.104 |
| Coll. Resp. | -.369 | -.379 | .398 | .352 |

*Note*: all *p*s < .001.

**Supplementary Figure S1. Means of existing hesitancy and confidence scales (Study 3).** For the means, each variable was transformed into POMP values [0,100] to allow for direct comparison of the mean values: percent of maximum possible [((observed - minimum)/(maximum - minimum)) x 100]. The PACV and the VAS were recoded for more convenient comparison. Higher values express more acceptance/positive attitudes/confidence.

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