**Electronic Supplementary Material**

**Title: Impact of Disease Characteristics and Knowledge on Public Risk Perception of Zoonoses**

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**This file includes:**

Extended Methods

Extended Analyses

Supplementary Figures S1-S3

Supplementary Data Tables S1 – S18.

**Extended Methods**

**Participants**

A volunteer sample was recruited using the crowdsourcing website Prolific. An invitation to take part in the survey was hosted on the website alongside relevant study details including level of compensation. Only individuals born in the UK received invitations to participate; firstly because risk perceptions likely vary according to whether particular zoonoses are considered locally endemic [1,2], while language [3], geographic location [4], and culture [5] are also known to influence risk perceptions and survey responses. And secondly, as a preliminary investigation into public risk perceptions of zoonoses rather than a cross-national survey, a specified, delineated population was considered necessary for robust analyses given the expected sample size. Survey responses were recorded from January to February 2021. All submissions with either i) > 5% of data missing (equivalent to 6 out of 132 scale items), ii) > 2 scale items missing for any single disease, or iii) a failed attention check question (‘To what extent are you capable of surviving an hour without oxygen?’ c.f. [6]) were excluded as part of the screening process. After exclusions, the final sample comprised 727 participants (444 women, 274 men, 9 other, modal age group: 25-34 years). See Table S1 for full sample characteristics.

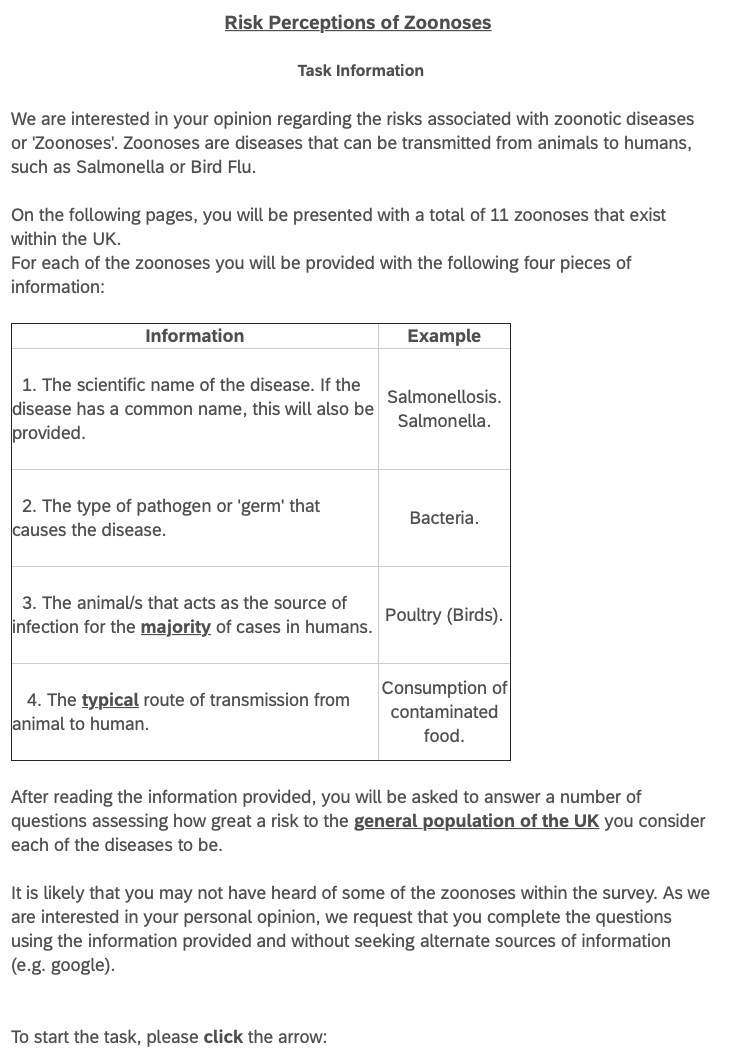
**Table S1. Sample Characteristics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Demographic | | National (%) | Sample (%) | n |
| Gender | Male  Female  Other | 49.4  50.6  - | 37.7  61.1  1.2 | 274  444  9 |
| Age | 18 – 24  25 – 34  35 – 44  45 – 54  55+  PNTS | 10.7  17.1  16.0  17.2  39.0  - | 24.3  30.7  19.9  13.6  11.3  0.1 | 177  223  145  99  82  1 |
| Ethnicity | White  Black  Asian  Mixed  Other  PNTS | 87.1  3.0  7.0  2.0  0.9  - | 87.5  2.1  5.6  2.9  0.9  1.2 | 636  15  21  41  5  9 |

Data for National percentage retrieved from the Office of National Statistics data for 2019 (ons.gov.uk). PNTS = ‘Prefer Not To Say”

**Procedure**

Following recruitment, participants were provided with a weblink to complete the questionnaire using an online survey hosting site (Qualtrics.com).After providing informed consent, participants were presented with a ‘Task Information’ page (see Figure S1). Having read the ‘Task Information’ page, participants progressed to rating the eleven zoonoses alongside a disease information section (see Figures S2-S3 for examples). No information on associated level of risk (e.g., the severity of illness/ or prevalence in population) was provided. Participants were asked to complete the questionnaire without seeking external sources of information.

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**Figure S1. Task Explanation Page**

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**Figure S2. Example Disease Information Section and Attribute Scales – Leptospirosis.**

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**Figure S3. Example Disease Information Section and Attribute Scales – Variant Creutzfeldt-Jakob Disease**

**Extended Analyses**

**Principal Component Analysis**

A correlation matrix using aggregated data (collapsed across zoonoses, [7]) was generated for the eleven risk attributes to be included in the principal component analysis (PCA). All attributes except ‘voluntary’ had at least one correlation within the resulting matrix above 0.3, resulting in its exclusion from further analysis, as recommended by Field [8]. No attributes showed evidence of multicollinearity (*r* ≥ .9 = 0, determinant = .136) [8]. The overall Kaiser-Meyer-Olkin (KMO) measure was .705 with individual KMO measures all above the .5 minimum criteria (range .595 - .805) [9]. Bartlett’s test of sphericity was significant (p < .0001), indicating the data was likely factorizable. PCA on the remaining ten attributes revealed three components with eigenvalues >1, explaining 23.6%, 18.4%, and 16.2% of the total variance respectively. Visual inspection of the scree plot and parallel analysis (in line with sample size, number of scale items, and a minimum of 100 replications [10]) indicated all three components should be retained. The three-component solution explained 58.2% of the total variance. A Varimax-orthogonal rotation was used to aid interpretability. As recommended by Stevens [11], only loadings greater than .4 were interpreted.

On the basis that i) the origin of SARS-CoV-2 is unconfirmed, ii) transmission is primarily human-human, and iii) current salience might generate excessive influence, we repeated the PCA excluding SARS-CoV-2 data (see Table S2). The results indicated no change to the 3-component structure. Due to the predominance of female participants, analyses were also re-run according to sex which again did not change the 3-component structure.

**Principal Component Analysis Vs. Exploratory Factor Analysis**

Due to our intention to replicate previous methods of analysis in risk perception research alongside employment of a non-probability sample, with resulting limitations on extrapolation of results [8], we selected Principal Components Analysis to investigate the data. However, acknowledging the ongoing debate surrounding the correct use of factor analysis [12], Exploratory Factor Analysis (EFA) using Principal Axis Factoring was also carried out on the risk attributes, revealing three factors with eigenvalues >1, explaining 25%, 21%, and 12% of variance respectively. A Varimax-orthogonal rotation was used to aid interpretability. Results revealed the same three factors produced via PCA (see Table S5). Finally, the EFA was rerun using an Oblimin rotation. The factor correlation matrix revealed negligible correlations (*r*’s < .3), resulting in the orthogonal rotation being retained [13].

**Table S2. PCA Loadings of Risk Attributes - SARS-CoV-2 Data Excluded**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Component | | |
| Attribute | 1 Societal  Knowledge | 2 Dread | 3 Personal  Knowledge |
|
|
| Newness | **.838** |  |  |
| Known - Science | **.836** |  |  |
| Naturalness | **.595** |  |  |
| Response Efficacy | **.563** |  |  |
| Institutional Trust | **.476** |  |  |
| Likelihood Harm |  | **.826** |  |
| Regulation |  | **.739** |  |
| Fear |  | **.644** | -.442 |
| Known - Exposed |  |  | **.858** |
| Familiarity |  |  | **.670** |

**Table S3. PCA Loadings of Risk Attributes - Female**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Component | | |
| Attribute | 1 Societal  Knowledge | 2 Dread | 3 Personal  Knowledge |
|
|
| Newness | **.831** |  |  |
| Known - Science | **.810** |  |  |
| Naturalness | **.598** |  |  |
| Response Efficacy | **.570** |  |  |
| Institutional Trust | **.430** |  |  |
| Likelihood Harm |  | **.825** |  |
| Regulation |  | **.763** |  |
| Fear |  | **.716** |  |
| Known - Exposed |  |  | **.872** |
| Familiarity |  |  | **.721** |
|  |  |  |  |

**Table S4. PCA Loadings of Risk Attributes - Male**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Component | | |
| Attribute | 1 Societal  Knowledge | 2 Dread | 3 Personal  Knowledge |
|
|
| Known - Science | **.826** |  |  |
| Newness | **.785** |  |  |
| Naturalness | **.563** |  |  |
| Response Efficacy | **.558** |  |  |
| Institutional Trust | **.542** |  | .467 |
| Likelihood Harm |  | **.799** |  |
| Regulation |  | **.755** |  |
| Fear |  | **.615** | -.471 |
| Known - Exposed |  |  | **.866** |
| Familiarity\* |  |  |  |
|  |  |  |  |
| \*Note: For the male sample, the attribute ‘familiarity’ did not produce a correlation above .3 within the correlation matrix and was therefore excluded from the analysis (highest correlation = .296). However, the PCA was run both with and without the familiarity attribute to determine its impact. If included, familiarity forms part of the Personal Knowledge component as in the female sample. | | | |

**Table S5. EFA Loadings of Risk Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Factor | | |
| Attribute | 1 Societal  Knowledge | 2 Dread | 3 Personal  Knowledge |
|
|
| Known - Science | **.803** |  |  |
| Newness | **.731** |  |  |
| Response Efficacy | **.458** |  |  |
| Naturalness | **.442** |  |  |
| Institutional Trust | **.420** |  |  |
| Likelihood Harm |  | **.753** |  |
| Fear |  | **.582** |  |
| Regulation |  | **.557** |  |
| Known - Exposed |  |  | **.814** |
| Familiarity |  |  | **.432** |

**Risk Ratings**

On the basis that the data did not show homogeneity of variance, mean ‘overall risk’ ratings of the zoonoses were analysed using Welch’s F test. However, given the debate on treating ordinal variables as continuous, analyses were run using both parametric and non-parametric statistics (Kruskal-Wallis). No differences were found in the results of the analyses using non-parametric statistics with the single exception that, for the pairwise comparisons, Dermatophytosis was not significantly different to Pasteurellosis following Bonferroni correction. Given the conservative nature of Bonferroni [14], the decision was made to leave the original result in the manuscript.

Aggregated ratings were used when analysing the ‘overall risk’ ratings of pathogen types in instances where more than one example of a pathogen type was included in the questionnaire. For example, Leptospirosis, Pasteurellosis, Psittacosis, and Borreliosis were all listed as caused by bacteria, resulting in a mean rating being calculated from the four individual ratings.

Multiple regression predicting each zoonoses ‘overall risk’ from the ten attribute ratings indicated that ‘likelihood of harm’, ‘fear’, and ‘regulation’ were significant predictors across all zoonoses (*p’s* < .01, with the exception that ‘regulation’ was a significant predictor for Borreliosis and Pasteurellosis at p < .05).

**Table S6. Games-Howell Post-hoc Test Results for ‘Overall Risk’ of Zoonoses Following Significant Welch’s F Test**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Zoonoses | | Mean Difference |  |  | 95% CI | |
|  |  | SE | *p* | LL | UL |
| LEP | PAS | .451\* | .067 | < .001 | .235 | .666 |
|  | PSI | .303\* | .066 | < .001 | .090 | .517 |
|  | BOR | -.690\* | .065 | < .001 | -.899 | -.481 |
|  | LYS | -.305\* | .072 | .001 | -.537 | -.073 |
|  | HEP | -.460\* | .065 | < .001 | -.670 | -.250 |
|  | COV | -1.512\* | .063 | < .001 | -1.716 | -1.307 |
|  | CJD | -.842\* | .070 | < .001 | -1.066 | -.617 |
|  | DER | .777\* | .073 | < .001 | .543 | 1.011 |
|  | ECH | 0.182 | .070 | .242 | -.042 | .407 |
|  | TOX | 0.100 | .071 | .950 | -.131 | .330 |
|  |  |  |  |  |  |  |
| PAS | LEP | -.451\* | .067 | < .001 | -.666 | -.235 |
|  | PSI | -0.147 | .067 | .502 | -.363 | .068 |
|  | BOR | -1.141\* | .066 | < .001 | -1.352 | -.929 |
|  | LYS | -.755\* | .073 | < .001 | -.990 | -.521 |
|  | HEP | -.910\* | .066 | < .001 | -1.123 | -.698 |
|  | COV | -1.962\* | .064 | < .001 | -2.169 | -1.756 |
|  | CJD | -1.292\* | .070 | < .001 | -1.518 | -1.066 |
|  | DER | .327\* | .073 | < .001 | .090 | .563 |
|  | ECH | -.268\* | .070 | .007 | -.495 | -.041 |
|  | TOX | -.351\* | .072 | < .001 | -.583 | -.119 |
|  |  |  |  |  |  |  |
| PSI | LEP | -.303\* | .066 | < .001 | -.517 | -.090 |
|  | PAS | .147 | .067 | .502 | -.068 | .363 |
|  | BOR | -.993\* | .065 | < .001 | -1.203 | -.784 |
|  | LYS | -.608\* | .072 | < .001 | -.841 | -.376 |
|  | HEP | -.763\* | .065 | < .001 | -.973 | -.553 |
|  | COV | -1.815\* | .064 | < .001 | -2.020 | -1.610 |
|  | CJD | -1.145\* | .070 | < .001 | -1.369 | -.920 |
|  | DER | .474\* | .073 | < .001 | .240 | .708 |
|  | ECH | -.121 | .070 | .819 | -.346 | .104 |
|  | TOX | -.204 | .072 | .142 | -.434 | .027 |
|  |  |  |  |  |  |  |
| BOR | LEP | .690\* | .065 | < .001 | .481 | .899 |
|  | PAS | 1.141\* | .066 | < .001 | .929 | 1.352 |
|  | PSI | .993\* | .065 | < .001 | .784 | 1.203 |
|  | LYS | .385\* | .071 | < .001 | .156 | .614 |
|  | HEP | .230 | .064 | .015 | .024 | .437 |
|  | COV | -.822\* | .062 | < .001 | -1.022 | -.622 |
|  | CJD | -.152 | .068 | .493 | -.372 | .069 |
|  | DER | 1.467\* | .072 | < .001 | 1.236 | 1.698 |
|  | ECH | .872\* | .069 | < .001 | .651 | 1.093 |
|  | TOX | .790\* | .070 | < .001 | .563 | 1.016 |
|  |  |  |  |  |  |  |
| LYS | LEP | .305\* | .072 | .001 | .073 | .537 |
|  | PAS | .755\* | .073 | < .001 | .521 | .990 |
|  | PSI | .608\* | .072 | < .001 | .376 | .841 |
|  | BOR | -.385\* | .071 | < .001 | -.614 | -.156 |
|  | HEP | -.155 | .071 | .523 | -.385 | .075 |
|  | COV | -1.207\* | .070 | < .001 | -1.432 | -.983 |
|  | CJD | -.537\* | .075 | < .001 | -.779 | -.294 |
|  | DER | 1.082\* | .078 | < .001 | .830 | 1.334 |
|  | ECH | .487\* | .075 | < .001 | .244 | .730 |
|  | TOX | .404\* | .077 | < .001 | .156 | .653 |
|  |  |  |  |  |  |  |
| HEP | LEP | .460\* | .065 | < .001 | .250 | .670 |
|  | PAS | .910\* | .066 | < .001 | .698 | 1.123 |
|  | PSI | .763\* | .065 | < .001 | .553 | .973 |
|  | BOR | -.230 | .064 | .015 | -.437 | -.024 |
|  | LYS | .155 | .071 | .523 | -.075 | .385 |
|  | COV | -1.052\* | .062 | < .001 | -1.254 | -.851 |
|  | CJD | -.382\* | .069 | < .001 | -.603 | -.161 |
|  | DER | 1.237\* | .072 | < .001 | 1.005 | 1.469 |
|  | ECH | .642\* | .069 | < .001 | .420 | .864 |
|  | TOX | .559\* | .071 | < .001 | .332 | .787 |
|  |  |  |  |  |  |  |
| COV | LEP | 1.512\* | .063 | < .001 | 1.307 | 1.716 |
|  | PAS | 1.962\* | .064 | < .001 | 1.756 | 2.169 |
|  | PSI | 1.815\* | .064 | < .001 | 1.610 | 2.020 |
|  | BOR | .822\* | .062 | < .001 | .622 | 1.022 |
|  | LYS | 1.207\* | .070 | < .001 | .983 | 1.432 |
|  | HEP | 1.052\* | .062 | < .001 | .851 | 1.254 |
|  | CJD | .670\* | .067 | < .001 | .454 | .886 |
|  | DER | 2.289\* | .070 | < .001 | 2.063 | 2.516 |
|  | ECH | 1.694\* | .067 | < .001 | 1.478 | 1.911 |
|  | TOX | 1.612\* | .069 | < .001 | 1.389 | 1.834 |
|  |  |  |  |  |  |  |
| CJD | LEP | .842\* | .070 | < .001 | .617 | 1.066 |
|  | PAS | 1.292\* | .070 | < .001 | 1.066 | 1.518 |
|  | PSI | 1.145\* | .070 | < .001 | .920 | 1.369 |
|  | BOR | .152 | .068 | .493 | -.069 | .372 |
|  | LYS | .537\* | .075 | < .001 | .294 | .779 |
|  | HEP | .382\* | .069 | < .001 | .161 | .603 |
|  | COV | -.670\* | .067 | < .001 | -.886 | -.454 |
|  | DER | 1.619\* | .076 | < .001 | 1.374 | 1.863 |
|  | ECH | 1.024\* | .073 | < .001 | .789 | 1.259 |
|  | TOX | .941\* | .075 | < .001 | .701 | 1.182 |
|  |  |  |  |  |  |  |
| DER | LEP | -.777\* | .073 | < .001 | -1.011 | -.543 |
|  | PAS | -.327\* | .073 | < .001 | -.563 | -.090 |
|  | PSI | -.474\* | .073 | < .001 | -.708 | -.240 |
|  | BOR | -1.467\* | .072 | < .001 | -1.698 | -1.236 |
|  | LYS | -1.082\* | .078 | < .001 | -1.334 | -.830 |
|  | HEP | -1.237\* | .072 | < .001 | -1.469 | -1.005 |
|  | COV | -2.289\* | .070 | < .001 | -2.516 | -2.063 |
|  | CJD | -1.619\* | .076 | < .001 | -1.863 | -1.374 |
|  | ECH | -.595\* | .076 | < .001 | -.840 | -.350 |
|  | TOX | -.677\* | .078 | < .001 | -.928 | -.428 |
|  |  |  |  |  |  |  |
| ECH | LEP | -.182 | .070 | .242 | -.407 | .042 |
|  | PAS | .268\* | .070 | .007 | .041 | .495 |
|  | PSI | .121 | .070 | .819 | -.104 | .346 |
|  | BOR | -.872\* | .069 | < .001 | -1.093 | -.651 |
|  | LYS | -.487\* | .075 | < .001 | -.730 | -.244 |
|  | HEP | -.642\* | .069 | < .001 | -.864 | -.420 |
|  | COV | -1.694\* | .067 | < .001 | -1.911 | -1.478 |
|  | CJD | -1.024\* | .073 | < .001 | -1.259 | -.789 |
|  | DER | .595\* | .076 | < .001 | .350 | .840 |
|  | TOX | -.083 | .075 | .991 | -.324 | .159 |
|  |  |  |  |  |  |  |
| TOX | LEP | -.100 | .071 | .950 | -.330 | .131 |
|  | PAS | .351\* | .072 | < .001 | .119 | .583 |
|  | PSI | .204 | .072 | .142 | -.027 | .434 |
|  | BOR | -.790\* | .070 | < .001 | -1.016 | -.563 |
|  | LYS | -.404\* | .077 | < .001 | -.653 | -.156 |
|  | HEP | -.559\* | .071 | < .001 | -.787 | -.332 |
|  | COV | -1.612\* | .069 | < .001 | -1.834 | -1.389 |
|  | CJD | -.941\* | .075 | < .001 | -1.182 | -.701 |
|  | DER | .677\* | .078 | < .001 | .428 | .928 |
|  | ECH | .083 | .075 | .991 | -.159 | .324 |
| SE = Standard error of the difference. CI = Confidence interval. LL = Lower limit. UL = Upper limit. \*Indicates significance at p < .01 level. | | | | | | |

**Table S7. Games-Howell Post-hoc Test Results for ‘Overall Risk’ of Pathogen Type Following Significant Welch’s F Test**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Mean Difference |  |  | 95% CI | |
|  |  | SE | *p* | LL | UL |
| virus | bacteria | .779\* | .044 | < .001 | .608 | .951 |
|  | parasite | .902\* | .053 | < .001 | .697 | 1.108 |
|  | prion | -.082 | .061 | .657 | -.318 | .154 |
|  | fungi | 1.536\* | .064 | < .001 | 1.286 | 1.787 |
| bacteria | virus | -.779\* | .044 | < .001 | -.951 | -.608 |
|  | parasite | .123 | .052 | .119 | -.078 | .324 |
|  | prion | -.861\* | .060 | < .001 | -1.094 | -.629 |
|  | fungi | .757\* | .063 | < .001 | .511 | 1.004 |
| parasite | virus | -.902\* | .053 | < .001 | -1.108 | -.697 |
|  | bacteria | -.123 | .052 | .119 | -.324 | .078 |
|  | prion | -.985\* | .066 | < .001 | -1.243 | -.727 |
|  | fungi | .634\* | .070 | < .001 | .363 | .905 |
| prion | virus | .082 | .061 | .657 | -.154 | .318 |
|  | bacteria | .861\* | .060 | < .001 | .629 | 1.094 |
|  | parasite | .985\* | .066 | < .001 | .727 | 1.243 |
|  | fungi | 1.619\* | .076 | < .001 | 1.324 | 1.913 |
| fungi | virus | -1.536\* | .064 | < .001 | -1.787 | -1.286 |
|  | bacteria | -.757\* | .063 | < .001 | -1.004 | -.511 |
|  | parasite | -.634\* | .070 | < .001 | -.905 | -.363 |
|  | prion | -1.619\* | .076 | < .001 | -1.913 | -1.324 |
| SE = Standard error of the difference. CI = Confidence interval. LL = Lower limit. UL = Upper limit. \*Indicates significance at p < .01 level. | | | | | | |

**Table S8. Predictors of ‘Overall Risk’ of Leptospirosis.** Predictor variables represent ratings on ten attributes with Leptospirosis as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| LEP | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .465 | .457 | 60.654 |
| Constant | 1.866 | .239 | 1.396 | 2.335 |  | < .001 |  |  |  |
| Known - Exposed | .035 | .025 | -.014 | .084 | .044 | .164 |  |  |  |
| Known - Science | -.031 | .038 | -.104 | .043 | -.028 | .416 |  |  |  |
| Familiarity | -.047 | .022 | -.090 | -.004 | -.069 | .033 |  |  |  |
| Response Efficacy | -.010 | .027 | -.062 | .043 | -.011 | .720 |  |  |  |
| Naturalness | -.040 | .023 | -.085 | .006 | -.051 | .087 |  |  |  |
| Newness | -.077 | .034 | -.145 | -.009 | -.076 | .026 |  |  |  |
| Likelihood Harm | .418 | .031 | .357 | .479 | .427 | < .001 |  |  |  |
| Fear | .190 | .025 | .140 | .239 | .243 | < .001 |  |  |  |
| Institutional Trust | .039 | .025 | -.010 | .088 | .048 | .118 |  |  |  |
| Regulation | .115 | .022 | .073 | .158 | .158 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S9. Predictors of ‘Overall Risk’ of Pasteurellosis.** Predictor variables represent ratings on ten attributes with Pasteurellosis as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| PAS | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .177 | .165 | 14.949 |
| Constant | 2.545 | .298 | 1.960 | 3.130 |  | < .001 |  |  |  |
| Known - Exposed | .010 | .033 | -.054 | .074 | .011 | .767 |  |  |  |
| Known - Science | -.008 | .038 | -.084 | .067 | -.008 | .831 |  |  |  |
| Familiarity | -.027 | .033 | -.092 | .039 | -.030 | .428 |  |  |  |
| Response Efficacy | -.026 | .032 | -.089 | .036 | -.029 | .407 |  |  |  |
| Naturalness | -.042 | .030 | -.101 | .017 | -.052 | .160 |  |  |  |
| Newness | .010 | .040 | -.069 | .089 | .010 | .799 |  |  |  |
| Likelihood Harm | .320 | .040 | .243 | .398 | .308 | < .001 |  |  |  |
| Fear | .119 | .037 | .046 | .192 | .130 | .001 |  |  |  |
| Institutional Trust | .037 | .030 | -.022 | .097 | .046 | .215 |  |  |  |
| Regulation | .071 | .032 | .008 | .134 | .088 | .026 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S10. Predictors of ‘Overall Risk’ of Psittacosis.** Predictor variables represent ratings on ten attributes with Psittacosis as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| PSI | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .318 | .308 | 32.876 |
| Constant | 1.936 | .280 | 1.386 | 2.487 |  | < .001 |  |  |  |
| Known - Exposed | .039 | .028 | -.015 | .094 | .048 | .159 |  |  |  |
| Known - Science | -.094 | .037 | -.167 | -.022 | -.094 | .011 |  |  |  |
| Familiarity | -.043 | .028 | -.098 | .011 | -.052 | .121 |  |  |  |
| Response Efficacy | .006 | .027 | -.047 | .058 | .007 | .837 |  |  |  |
| Naturalness | -.031 | .026 | -.083 | .021 | -.040 | .237 |  |  |  |
| Newness | -.019 | .036 | -.090 | .051 | -.020 | .591 |  |  |  |
| Likelihood Harm | .383 | .035 | .314 | .452 | .376 | < .001 |  |  |  |
| Fear | .176 | .032 | .114 | .237 | .190 | < .001 |  |  |  |
| Institutional Trust | .065 | .026 | .013 | .116 | .082 | .013 |  |  |  |
| Regulation | .133 | .027 | .081 | .185 | .170 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S11. Predictors of ‘Overall Risk’ of Borreliosis.** Predictor variables represent ratings on ten attributes with Borreliosis as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| BOR | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .193 | .182 | 16.746 |
| Constant | 3.466 | .262 | 2.952 | 3.979 |  | < .001 |  |  |  |
| Known - Exposed | -.017 | .030 | -.076 | .042 | -.020 | .571 |  |  |  |
| Known - Science | -.051 | .043 | -.134 | .033 | -.047 | .232 |  |  |  |
| Familiarity | -.021 | .025 | -.071 | .029 | -.031 | .408 |  |  |  |
| Response Efficacy | .036 | .029 | -.021 | .093 | .044 | .218 |  |  |  |
| Naturalness | -.030 | .036 | -.101 | .041 | -.031 | .408 |  |  |  |
| Newness | -.030 | .038 | -.104 | .044 | -.031 | .427 |  |  |  |
| Likelihood Harm | .281 | .036 | .210 | .352 | .312 | < .001 |  |  |  |
| Fear | .111 | .032 | .048 | .175 | .140 | .001 |  |  |  |
| Institutional Trust | .027 | .027 | -.026 | .080 | .037 | .317 |  |  |  |
| Regulation | .029 | .026 | -.023 | .080 | .040 | .274 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S12. Predictors of ‘Overall Risk’ of Lyssavirus.** Predictor variables represent ratings on ten attributes with Lyssavirus as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| LYS | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .421 | .412 | 51.175 |
| Constant | 2.074 | .309 | 1.468 | 2.680 |  | < .001 |  |  |  |
| Known - Exposed | .048 | .030 | -.010 | .106 | .052 | .106 |  |  |  |
| Known - Science | -.029 | .039 | -.107 | .048 | -.025 | .459 |  |  |  |
| Familiarity | -.077 | .028 | -.132 | -.022 | -.091 | .006 |  |  |  |
| Response Efficacy | -.014 | .028 | -.070 | .041 | -.015 | .612 |  |  |  |
| Naturalness | -.011 | .031 | -.071 | .050 | -.011 | .733 |  |  |  |
| Newness | -.040 | .038 | -.115 | .034 | -.036 | .285 |  |  |  |
| Likelihood Harm | .350 | .039 | .272 | .427 | .309 | < .001 |  |  |  |
| Fear | .249 | .029 | .191 | .307 | .306 | < .001 |  |  |  |
| Institutional Trust | .026 | .027 | -.027 | .079 | .029 | .340 |  |  |  |
| Regulation | .127 | .030 | .069 | .185 | .148 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S13. Predictors of ‘Overall Risk’ of Hepatitis E.** Predictor variables represent ratings on ten attributes with Hepatitis E as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| HEP | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .360 | .351 | 39.539 |
| Constant | 2.078 | .279 | 1.529 | 2.627 |  | < .001 |  |  |  |
| Known - Exposed | .015 | .026 | -.036 | .067 | .020 | .554 |  |  |  |
| Known - Science | -.083 | .035 | -.152 | -.013 | -.080 | .019 |  |  |  |
| Familiarity | -.060 | .025 | -.108 | -.011 | -.080 | .017 |  |  |  |
| Response Efficacy | .038 | .027 | -.015 | .091 | .044 | .160 |  |  |  |
| Naturalness | .032 | .021 | -.010 | .073 | .047 | .137 |  |  |  |
| Newness | -.003 | .031 | -.064 | .059 | -.003 | .936 |  |  |  |
| Likelihood Harm | .396 | .034 | .328 | .463 | .386 | < .001 |  |  |  |
| Fear | .179 | .026 | .127 | .230 | .235 | < .001 |  |  |  |
| Institutional Trust | .008 | .027 | -.045 | .061 | .010 | .762 |  |  |  |
| Regulation | .111 | .025 | .061 | .161 | .141 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S14. Predictors of ‘Overall Risk’ of SARS-CoV-19.** Predictor variables represent ratings on ten attributes with SARS-CoV-19 as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| COV | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .490 | .483 | 68.021 |
| Constant | 1.195 | .281 | .643 | 1.748 |  | < .001 |  |  |  |
| Known - Exposed | .026 | .025 | -.023 | .075 | .033 | .292 |  |  |  |
| Known - Science | .003 | .025 | -.045 | .051 | .004 | .906 |  |  |  |
| Familiarity | -.017 | .025 | -.066 | .032 | -.020 | .499 |  |  |  |
| Response Efficacy | .033 | .026 | -.017 | .084 | .038 | .192 |  |  |  |
| Naturalness | -.028 | .018 | -.064 | .008 | -.042 | .123 |  |  |  |
| Newness | .033 | .024 | -.014 | .080 | .041 | .172 |  |  |  |
| Likelihood Harm | .339 | .025 | .290 | .389 | .413 | < .001 |  |  |  |
| Fear | .174 | .032 | .111 | .236 | .165 | < .001 |  |  |  |
| Institutional Trust | -.011 | .021 | -.052 | .029 | -.015 | .588 |  |  |  |
| Regulation | .308 | .032 | .245 | .370 | .309 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S15. Predictors of ‘Overall Risk’ of variant CJD.** Predictor variables represent ratings on ten attributes with variant CJD as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| CJD | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .406 | .398 | 48.210 |
| Constant | 2.085 | .328 | 1.441 | 2.729 |  | < .001 |  |  |  |
| Known - Exposed | .006 | .028 | -.049 | .062 | .007 | .824 |  |  |  |
| Known - Science | -.053 | .039 | -.129 | .023 | -.045 | .175 |  |  |  |
| Familiarity | -.022 | .026 | -.073 | .029 | -.032 | .396 |  |  |  |
| Response Efficacy | -.033 | .027 | -.086 | .019 | -.037 | .217 |  |  |  |
| Naturalness | -.036 | .023 | -.080 | .009 | -.050 | .116 |  |  |  |
| Newness | .009 | .029 | -.049 | .066 | .009 | .770 |  |  |  |
| Likelihood Harm | .263 | .035 | .194 | .333 | .272 | < .001 |  |  |  |
| Fear | .228 | .028 | .173 | .284 | .290 | < .001 |  |  |  |
| Institutional Trust | .042 | .027 | -.010 | .094 | .049 | .113 |  |  |  |
| Regulation | .207 | .031 | .146 | .268 | .221 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S16. Predictors of ‘Overall Risk’ of Dermatophytosis.** Predictor variables represent ratings on ten attributes with Dermatophytosis as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| DER | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .367 | .358 | 40.289 |
| Constant | 1.445 | .183 | 1.084 | 1.805 |  | < .001 |  |  |  |
| Known - Exposed | .016 | .033 | -.050 | .081 | .016 | .639 |  |  |  |
| Known - Science | .049 | .052 | -.053 | .150 | .035 | .349 |  |  |  |
| Familiarity | -.008 | .030 | -.066 | .050 | -.009 | .786 |  |  |  |
| Response Efficacy | .070 | .034 | .004 | .136 | .067 | .038 |  |  |  |
| Naturalness | -.016 | .033 | -.081 | .049 | -.016 | .625 |  |  |  |
| Newness | -.095 | .045 | -.183 | -.007 | -.076 | .034 |  |  |  |
| Likelihood Harm | .340 | .038 | .265 | .416 | .346 | < .001 |  |  |  |
| Fear | .144 | .040 | .066 | .221 | .137 | < .001 |  |  |  |
| Institutional Trust | -.084 | .033 | -.148 | -.019 | -.087 | .011 |  |  |  |
| Regulation | .295 | .031 | .235 | .355 | .322 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S17. Predictors of ‘Overall Risk’ of Echinococcus.** Predictor variables represent ratings on ten attributes with Echinococcus as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| ECH | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .209 | .197 | 18.126 |
| Constant | 2.296 | .276 | 1.755 | 2.838 |  | < .001 |  |  |  |
| Known - Exposed | -.017 | .034 | -.084 | .051 | -.018 | .630 |  |  |  |
| Known - Science | -.108 | .047 | -.201 | -.016 | -.091 | .022 |  |  |  |
| Familiarity | .013 | .031 | -.048 | .073 | .016 | .686 |  |  |  |
| Response Efficacy | .045 | .039 | -.031 | .121 | .042 | .243 |  |  |  |
| Naturalness | .007 | .028 | -.048 | .062 | .009 | .800 |  |  |  |
| Newness | -.019 | .043 | -.103 | .065 | -.018 | .660 |  |  |  |
| Likelihood Harm | .237 | .036 | .166 | .309 | .236 | < .001 |  |  |  |
| Fear | .164 | .034 | .097 | .231 | .183 | < .001 |  |  |  |
| Institutional Trust | .124 | .031 | .064 | .184 | .145 | < .001 |  |  |  |
| Regulation | .120 | .031 | .060 | .180 | .142 | < .001 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

**Table S18. Predictors of ‘Overall Risk’ of Toxoplasmosis.** Predictor variables represent ratings on ten attributes with Toxoplasmosis as the target zoonosis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 95% CI | |  |  |  |  |  |
| TOX | B | SE B | LL | UL | β | *p* | R2 | ΔR2 | F |
| Model |  |  |  |  |  | < .001 | .458 | .450 | 59.497 |
| Constant | 1.761 | .242 | 1.285 | 2.237 |  | < .001 |  |  |  |
| Known - Exposed | -.006 | .029 | -.064 | .051 | -.007 | .827 |  |  |  |
| Known - Science | -.146 | .042 | -.227 | -.064 | -.116 | .000 |  |  |  |
| Familiarity | -.053 | .025 | -.101 | -.005 | -.072 | .031 |  |  |  |
| Response Efficacy | .023 | .034 | -.043 | .090 | .021 | .487 |  |  |  |
| Naturalness | -.010 | .023 | -.055 | .035 | -.013 | .660 |  |  |  |
| Newness | .000 | .038 | -.074 | .075 | .000 | .994 |  |  |  |
| Likelihood Harm | .414 | .032 | .350 | .477 | .392 | < .001 |  |  |  |
| Fear | .303 | .031 | .242 | .363 | .325 | < .001 |  |  |  |
| Institutional Trust | .069 | .026 | .018 | .120 | .077 | .009 |  |  |  |
| Regulation | .083 | .027 | .029 | .136 | .092 | .002 |  |  |  |
| B = Unstandardized coefficient. SE B = Standard error of coefficient. B = Standardized coefficient. CI = Confidence interval. LL = Lower limit. UL = Upper limit. R2 = Coefficient of determination. ΔR2 = Adjusted R2. F = F ratio. Variables entered simultaneously into model. | | | | | | | | | |

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