

Accuracy of risk perception of zoonoses due to intensive animal farming and people's willingness to change their animal product consumption

Supplementary Materials

1. Sample descriptives

Table S1

Distribution of gender in the population and in the sample

| Gender | % in population (CBS 18+, 2021) | % in sample |
|---------|------------------------------------|-------------|
| Male | 49.4% | 50.0% |
| Female | 50.5% | 49.0% |
| Neutral | - | 1.0% |

Table S2

Distribution of age categories in the population and in the sample

| Age | % in population (CBS 18+, 2021) | % in sample |
|-------------|------------------------------------|-------------|
| 18-24 years | 10.5% | 8.3% |
| 25-34 years | 14.7% | 15.4% |
| 35-44 years | 24.4% | 22.9% |
| 45-54 years | 14.0% | 15.6% |
| 55-64 years | 12.0% | 11.9% |
| 65+ years | 23.9% | 26.0% |

Table S3

Distribution of province in the population and in the sample

| Province | % in population (CBS 18+, 2021) | % in sample |
|---|------------------------------------|-------------|
| Groningen | 3.4% | 4.2% |
| Friesland | 3.7% | 4.0% |
| Drenthe | 2.8% | 3.1% |
| Overijssel | 6.6% | 7.8% |
| Flevoland | 2.3% | 2.9% |
| Gelderland | 12.0% | 11.6% |
| Utrecht | 7.6% | 6.7% |
| Noord-Holland | 16.6% | 14.0% |
| Zuid-Holland | 21.2% | 20.7% |
| Zeeland | 2.2% | 2.5% |
| Noord-Brabant | 14.8% | 14.0% |
| Limburg | 6.6% | 8.6% |
| At the moment I live outside of the Netherlands | | 0.0% |
| Rather not share | | 0.0% |

2. Additional analyses

To explore whether gender and age affected our main results, we conducted additional analyses for our main dependent variables. As we did not formulate a priori hypotheses of

differences based on gender and age, all reported p-values are two-sided. Note that for the analyses including gender, participants who indicated 'other' ($N = 10$) were not included. So, gender comparisons regarded male versus female only. A dummy variable for gender was created with male (0) and female (1). For age, participants' reported birthyear was subtracted from the year in which the study was conducted (2021). This was done as the created continuous age scale provides richer information than the variable based on age categories.

1.1. Risk perception

Intensive farming. A binary logistic regression analysis with the dummy variable gender, the centered variable age, and the interaction between gender and age on risk perception of intensive farming (true vs false/do not know) showed no main or interaction effects, $Bs < .14$, $Wald < 2.13$, $ps > .14$.

Treating animals. A linear regression analysis with the dummy variable gender, the centered variable age, and the interaction between gender and age on the continuous variable treating animals showed no main or interaction effects, $Bs < .09$, $Betas < .09$, $ts < 1.024$, $ps > .19$.

1.2. Intention to change behavior

A linear regression analysis with the dummy variable gender, the centered variable age, and the interaction between gender and age on intention to change behavior was conducted. For intention to change behavior we used the 4 point scale (more, equal, fewer, not at all) on willingness to change behavior. In this analysis, we excluded participants who indicated to already not consume animal products so that the variable is continuous. The analysis showed a main effect for gender, $B = .28$, $Beta = .21$, $t = 6.18$, $p < .01$, indicating that women intended to change their behavior toward reducing animal consumption more than men. Also, a main effect for age, $B = .004$, $Beta = .12$, $t = 2.63$, $p < .01$, indicated that the higher the age, the more participants reported to intend to change their behavior towards reducing animal consumption. The interaction effect was not significant, $B = .002$, $Beta = .03$, $t = 0.76$, $p = .45$.

Importantly, the main conclusion that the majority of participants intend to change their behavior towards consuming fewer animal products holds for both men (55.6%) and women (71.9%). This was also the case for each age category (18-24 years: 54.8%; 25-34 years: 67.7%; 35-44 years: 65%; 45-54 years: 59.2%; 55-65 years: 60.8%; and 65+: 67.2%).

1.3. Prevention of zoonosis

Banning wild markets. A linear regression analysis with the dummy variable gender, the centered variable age, and the interaction between gender and age on the continuous variable banning wild markets was conducted. A main effect for gender, $B = .55$, $Beta = .19$, $t = 5.71$, $p < .01$, indicated that women more strongly wanted governments to ban wild markets than men. Also, a main effect for age, $B = .013$, $Beta = .16$, $t = 3.59$, $p < .01$, indicated the higher the age, the more strongly participants wanted governments to ban wild markets. The interaction effect was not significant, $B = -.006$, $Beta = -.05$, $t = -1.06$, $p = .29$.

The main conclusion that the majority of participants want governments to ban wild markets holds for both men (70.9%) and women (80.4%) and for each age category (18-24 years: 66.7%; 25-34 years: 73.6%; 35-44 years: 73.6%; 45-54 years: 75.7%; 55-65 years: 75.8%; and 65+ years: 80.5%).

Banning intensive farming. A linear regression analysis with the dummy variable gender, the centered variable age, and the interaction between gender and age on the continuous variable banning intensive farming showed a main effect of gender only, $B = .49$, $Beta = .16$, $t = 4.79$, $p < .01$. This indicated that women more strongly wanted governments to

ban intensive farming than men. There was no main effect for age, $B = .03$, $Beta = .04$, $t = 0.82$, $p = .41$, nor an interaction effect between gender and age, $B < .001$, $Beta = .001$, $t = 0.04$, $p = .97$.

So the conclusion that the biggest group of participants want governments to ban intensive farming holds for both men (48%) and women (58.2%). 24.8% of men do not agree, nor disagree, 27.2% of men do not want to ban intensive farming. For women these percentages are respectively 24.8% and 17.0%.

1.4. Risky consumption

A linear regression analysis with the dummy variable gender, the centered variable age, and the interaction between gender and age on continuous variable percentage of meat showed no main or interaction effects, $Bs < .1.64$, $Betas < .05$, $ts < 1.06$, $ps > .29$.