Table S1: Psychological Constructs and Confirmatory Factor Analysis

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Psychological Factors and Constructs | Mean | SD | Alpha | Loading | p-value | RMSEA | CFI | SRMR |
| **Perceived Susceptibility** |  |  | **0.83** |  |  | **.041** | **.998** | **.015** |
| Households in this area often have arsenic-contaminated well water | 4.40 | 1.63 |  | .786 | <.001 |  |  |  |
| Our household is at risk of drinking arsenic-contaminated well water | 3.51 | 1.86 |  | .639 | <.001 |  |  |  |
| Household members are exposed to arsenic from our well water if left untreated | 4.49 | 1.72 |  | .943 | <.001 |  |  |  |
| The number of years we drink our untreated well water increases our risks | 4.63 | 1.58 |  | .755 | <.001 |  |  |  |
| I know someone with a well arsenic problem | 3.28 | 2.02 |  | .468 | <.001 |  |  |  |
| **Perceived Severity** |  |  | **0.81** |  |  | **.036** | **.996** | **.023** |
| Arsenic-related health effects from our well water are likely to be serious | 4.34 | 1.64 |  | .855 | <.001 |  |  |  |
| The health risks from arsenic are overblown (reversed) | 4.39 | 1.42 |  | .452 | <.001 |  |  |  |
| I feel concerned about our well arsenic level | 3.84 | 1.77 |  | .624 | <.001 |  |  |  |
| I feel worried about my well arsenic level | 3.43 | 1.71 |  | .482 | <.001 |  |  |  |
| I am not concerned about my well water because I have been drinking it a long time with no problem (reversed) | 4.32 | 1.68 |  | .501 | <.001 |  |  |  |
| My untreated well water is perfectly safe to drink (reversed) | 3.73 | 1.93 |  | .787 | <.001 |  |  |  |
| ~~Children and pregnant women are especially vulnerable to arsenic-related health effects~~ | 5.05 | 1.32 |  | .347 | <.001 |  |  |  |
| ~~Drinking water quality is not a priority to me (reversed)~~ | 5.23 | 1.37 |  | .284 | <.001 |  |  |  |
| **Perceived Benefits** |  |  | **0.72** |  |  | **.086** | **.993** | **.021** |
| Reducing arsenic in our drinking water would increase our home value | 4.53 | 1.48 |  | .538 | <.001 |  |  |  |
| Drinking less of our untreated water is better for our health | 4.35 | 1.72 |  | .586 | <.001 |  |  |  |
| Treating my water is good for my health | 5.18 | 1.14 |  | .789 | <.001 |  |  |  |
| Treating my well water reduces my risk for disease | 4.93 | 1.26 |  | .795 | <.001 |  |  |  |
| **Perceived Barriers** |  |  | **0.71** |  |  | **N/A** | **N/A** | **N/A** |
| Treating my water is too expensive | 3.56 | 1.80 |  | .820 | <.001 |  |  |  |
| Treating my water is too much hassle | 2.90 | 1.64 |  | .884 | <.001 |  |  |  |
| It is hard to compare the pros and cons of arsenic treatment methods | 3.60 | 1.53 |  | .400 | <.001 |  |  |  |
| **Self-Efficacy** |  |  | **0.83** |  |  | **N/A** | **N/A** | **N/A** |
| I know how to find a company to install a water treatment system for arsenic | 4.75 | 1.61 |  | .547 | <.001 |  |  |  |
| I am confident I can choose an appropriate water treatment system | 4.78 | 1.42 |  | .714 | <.001 |  |  |  |
| I am confident I can maintain a water treatment system, even if there are additional costs | 4.82 | 1.33 |  | .938 | <.001 |  |  |  |
| **Commitment** |  |  | **0.70** |  |  | **N/A** | **N/A** | **N/A** |
| I am committed to decreasing our arsenic exposure | 4.91 | 1.31 |  | .859 | <.001 |  |  |  |
| I feel a personal obligation to make sure our well water is safe to drink | 5.25 | 1.09 |  | .658 | <.001 |  |  |  |
| **Cue to Action** |  |  | **N/A** |  |  | **N/A** | **N/A** | **N/A** |
| Local authorities have advised me to not drink my well water untreated | 2.27 | 1.69 |  | N/A | N/A |  |  |  |
| **Overall Model** |  |  | **N/A** |  |  | .051 | .95 | .061 |

SD = standard deviation. Indication of acceptable scale reliability: Cronbach’s α≥0.7. Indication of acceptable CFA model fit: RMSEA<.08, CFI>.93, SRMR<.08

Table S2: Odds ratios and 95% confidence intervals for logistic regression models predicting monitoring (have tested treated water ever), among treating (n=308)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Univariate** | **Model 1** | **Model 2** | **Model 3** |
| **Explanatory Variables** |  |  |  |  |
| System Age | 1.07  (0.99-1.16) |  |  |  |
| Seller Installed | 0.88  (0.53-1.46) |  |  |  |
| Difficulty Understanding Report | 0.73\*  (0.57-0.94) | 0.73\*  (0.58-1.04) |  | 0.82  (0.62-1.08) |
| Discussed Arsenic with Somebody | 3.33\*\*\*  (1.79-6.21) | 3.11\*\*  (1.60-76.02) |  | 2.96\*\*  (1.50-5.84) |
| Service Agreement | 1.85  (0.99-3.48) |  |  |  |
| **Arsenic Value** | 1.01  (0.99-1.03) |  |  |  |
| **Behavioral Factors** |  |  |  |  |
| Self-Efficacy | 1.52\*\*  (1.21-1.90) |  | 1.41\*\*  (1.10-1.82) | 1.38\*  (1.07-1.78) |
| Commitment | 1.46\*\*  (1.09-1.95) |  | 1.22  (0.88-1.68) |  |
| *AUC* |  | .6403 | .6479 | .6757 |

\*p<.05, \*\*p<.01, \*\*\*p<.001

Table S3: Comparison of all (n=486) to late responders (n=105) on key variables

|  |  |  |
| --- | --- | --- |
| **Variable** | **All** | **Late** |
| **Recall Test at Sale Occurred** | 85.6% | 79.8% |
| Not tested at sale, but tested since | 6.8% | 9.5% |
| **Report Test Showed Arsenic Problem** | 59.9% | 47.6%\* |
| **Recall Arsenic Results** |  |  |
| Not able to answer | 58.2% | 68.5%\* |
| Reported level range correctly | 21.0% | 13.3% |
| Reported higher range | 3.3% | 21.9% |
| Reported lower range | 17.9% | 16.2% |
| **Understand Test Results** |  |  |
| Very easy | 30.7% | 33.0% |
| Easy | 30.5% | 23.9% |
| Neither easy nor difficult | 30.5% | 35.2% |
| Difficult | 5.9% | 5.7% |
| Very difficult | 2.4% | 2.3% |
| **Discussed Arsenic with Somebody** | 60.5% | 53.3% |
| **Mitigating** | 71.6% | 63.8% |
| **Arsenic Treatment Installed** | 63.4% | 57.1% |
| By me / my family | 30.7% | 29.5% |
| By previous owner or landlord | 32.7% | 27.6% |
| **Treated Water Has Ever Been Tested** | 73.7% | 66.7% |
| Withinthe past year | 30.8% | 30.0% |
| **Maintenance Performed as Recommended** | 57.3% | 61.7% |

\*p<.05 significantly different from the full sample

Table S4: Mean scores and 95% confidence intervals for psychological constructs (scale of 1 to 6) by level of mitigation action

|  |  |  |  |
| --- | --- | --- | --- |
| **Psychological Construct** | **Non-Actors (n=138)** | **Average Actors (n=274)** | **Super Actors (n=74)** |
| **Perceived Susceptibility** | 2.89 (2.68,3.11) | 4.39 (4.24,4.54) | 4.71 (4.45,4.96) |
| **Perceived Severity** | 3.31 (3.12,3.49) | 4.15 (4.01,4.28) | 4.71 (4.43,4.99) |
| **Perceived Benefits** | 4.17 (3.96,4.37) | 4.93 (4.82,5.03) | 5.16 (4.92,5.41) |
| **Perceived Barriers** | 3.62 (3.41,3.83) | 3.36 (3.19,3.52) | 2.88 (2.55,3.21) |
| **Self-Efficacy** | 4.29 (4.06,4.53) | 4.80 (4.65,4.95) | 5.58 (5.39,5.77) |
| **Commitment** | 4.54 (4.35,4.73) | 5.18 (5.06,5.31) | 5.69 (5.52,5.86) |
| **Cue to Action** | 1.56 (1.38,1.74) | 2.57 (2.35,2.80) | 2.38 (1.95,2.80) |