

Supplementary Material B

Summary of the results of the demographic and descriptive analysis

| Demographics | | | | | | | | |
|-----------------------|--|--------|--|--------|--|--------|----------------|--------|
| | < 30 | | 30-40 | | 40-50 | | > 50 years old | |
| Q1. Age | 29 | 0,1620 | 50 | 0,2793 | 41 | 0,2291 | 59 | 0,3296 |
| | <i>Female</i> | | <i>Male</i> | | <i>Other</i> | | | |
| Q2. Gender | 93 | 0,5196 | 86 | 0,4805 | | | | |
| | <i>Bachelor's</i> | | <i>Master's</i> | | <i>PhD</i> | | | |
| Q3. Academic degree | 32 | 0,1788 | 75 | 0,4190 | 72 | 0,4022 | | |
| | <i>Geology</i> | | <i>Biology and Geology; Environmental Sciences; Env. Education</i> | | <i>Geological Engineering/Mine Engineering</i> | | <i>Biology</i> | |
| Q4. Degree area | 125 | 0,6983 | 28 | 0,1564 | 8 | 0,0447 | 8 | 0,0447 |
| | <i>Higher education professor / Researcher</i> | | <i>Elementary and secondary education teacher</i> | | <i>Post graduation student</i> | | <i>Other</i> | |
| Q7. Professional role | 50 | 0,2793 | 36 | 0,2011 | 30 | 0,1676 | 33 | 0,1844 |
| | <i>Technician</i> | | <i>Researcher</i> | | <i>Science communicator</i> | | <i>Other</i> | |
| | | | | | | | | |
| | | | | | | | | |

Descriptive analysis

Training

| | <i>Yes</i> | <i>No</i> | |
|--|-------------------------------------|---|---|
| Q10. Did you receive any training in communication? | 38 0,2123 | 141 0,7877 | |
| Q31. How willing would you be to attend training on communication with journalists and the public? | <i>Very willing</i> 95 0,5307 | <i>Moderately willing</i> 73 0,4078 | <i>Not willing at all</i> 11 0,0615 |

Communication practices - type of activities

| <i>What kind of science communication activities do you usually promote?</i> | <i>Never</i> | <i>Rarely</i> | <i>Often/Very often</i> |
|--|--------------|---------------|-------------------------|
| Q11.1 Field trips | 18 0,1006 | 45 0,2514 | 116 0,6480 |
| Q11.2 Visits to museums | 45 0,2514 | 71 0,3966 | 63 0,3520 |
| Q11.3 Visits to science centres | 46 0,2570 | 75 0,4190 | 58 0,3240 |
| Q11.4 Visits to research institutions | 46 0,2570 | 70 0,3911 | 63 0,3520 |
| Q11.5 Workshops | 19 0,1061 | 59 0,3296 | 101 0,5642 |
| Q11.6 Exhibitions | 35 0,1955 | 73 0,4078 | 71 0,3966 |
| Q11.7 Public lectures | 20 0,1117 | 60 0,3352 | 99 0,5531 |
| Q11.8 Public debates / clarification Sessions | 40 0,2235 | 81 0,4525 | 58 0,3240 |
| Q11.9 Science showcases (exhibitions, fairs, ...) | 29 0,1620 | 69 0,3855 | 81 0,4525 |
| Q11.10 Books | 88 0,4916 | 65 0,3631 | 26 0,1453 |
| Q11.11 Scientific papers | 26 0,1453 | 42 0,2346 | 111 0,6201 |
| Q11.12 Popular science news articles (= <i>dissemination articles</i>) | 43 0,2402 | 65 0,3631 | 71 0,3966 |
| Q11.13 Opinion articles | 89 0,4972 | 59 0,3296 | 31 0,1732 |

Audiences

| <i>What audience do you usually communicate with?</i> | <i>Never</i> | <i>Rarely</i> | <i>Often/Very often</i> |
|---|--------------|---------------|-------------------------|
| Q13.1 Journalist | 87 0,4860 | 71 0,3966 | 21 0,1173 |
| Q13.2 Science journalists | 87 0,4860 | 82 0,4581 | 10 0,0559 |
| Q13.3 Students | 8 0,0447 | 22 0,1229 | 149 0,8324 |
| Q13.4 Geosciences teachers | 12 0,0670 | 26 0,1453 | 141 0,7877 |
| Q13.5 Teachers (other fields) | 23 0,1285 | 46 0,2570 | 110 0,6145 |
| Q13.6 Geoscience technical professionals | 18 0,1006 | 54 0,3017 | 107 0,5978 |

| | | | | | | |
|--|----|--------|----|--------|-----|--------|
| Q13.7 Technical professionals (other fields) | 26 | 0,1453 | 78 | 0,4358 | 75 | 0,4190 |
| Q13.8 Enterprises | 42 | 0,2346 | 74 | 0,4134 | 63 | 0,3520 |
| Q13.9 Researchers in Geosciences | 13 | 0,0726 | 36 | 0,2011 | 130 | 0,7263 |
| Q13.10 Researchers (other fields) | 23 | 0,1285 | 80 | 0,4469 | 76 | 0,4246 |
| Q13.11 Families | 31 | 0,1732 | 59 | 0,3296 | 89 | 0,4972 |
| Q13.12 Politicians | 81 | 0,4525 | 69 | 0,3855 | 29 | 0,1620 |
| Q13.13 NGOs | 55 | 0,3073 | 80 | 0,4469 | 44 | 0,2458 |
| Q13.14 Local communities | 45 | 0,2514 | 63 | 0,3520 | 71 | 0,3966 |
| Q13.15 'General public' | 24 | 0,1341 | 58 | 0,3240 | 97 | 0,5419 |

Participatory contexts

| Have you performed any of the following science communication activities? | Never | I time | 2-3 times | More than 4 times |
|---|-------|--------|-----------|-------------------|
| Q19.1 Citizen Science Activity | 120 | 0,6704 | 20 | 0,1117 |
| Q19.2 Public clarification session | 95 | 0,5307 | 26 | 0,1453 |
| Q19.3 Debate with local communities | 86 | 0,4804 | 27 | 0,1508 |
| Q19.4 Focus groups | 107 | 0,5978 | 24 | 0,1341 |

Self-perceived competence

| | Not prepared | Moderately prepared | Well/very well prepared |
|---|--------------|---------------------|-------------------------|
| Q30.1 Do you feel with the necessary skills to communicate science? (=self-efficacy) | 10 | 0,0562 | 76 |
| Q30.2 Do you feel prepared to communicate about the social and ethical implications of science? | 44 | 0,2472 | 73 |

Goals

| What are your goals when you communicate science? | Disagree | Moderately agree | Strongly agree |
|--|----------|------------------|----------------|
| Q34.1 to make the <i>importance</i> of geosciences in everyday life known | 1 | 0,0056 | 22 |
| Q34.2 to show that geosciences are <i>interesting</i> | 1 | 0,0056 | 47 |
| Q34.3 to share my passion for geosciences (= <i>enthusiasm</i>) | 18 | 0,1006 | 56 |
| Q34.4 to ensure that the public is better <i>informed</i> about science and technology | 2 | 0,0112 | 28 |
| Q34.5 to enable citizens to make more <i>informed decisions</i> | 0 | 0 | 29 |
| Q34.6 to transmit the <i>science values</i> | 6 | 0,0335 | 53 |
| Q34.7 to support <i>decision makers</i> | 38 | 0,2123 | 62 |

| | | | | | | |
|---|----|---------|----|---------|----|---------|
| Q34.8 to know <i>public opinion</i> on geoscientific topics | 12 | 0,06704 | 83 | 0,46369 | 84 | 0,46927 |
| Q34.9 to make my work known (= <i>show work</i>) | 33 | 0,1844 | 78 | 0,4358 | 68 | 0,3799 |
| Q34.10 to contribute to <i>public debates</i> about science | 16 | 0,0894 | 76 | 0,4246 | 87 | 0,4860 |
| Q34.11 to know the <i>implication</i> of geosciences and of my work in citizens' life | 13 | 0,0726 | 70 | 0,3911 | 96 | 0,5363 |
| Q34.12 to <i>attract professionals</i> to my area | 39 | 0,2179 | 91 | 0,5084 | 49 | 0,2737 |
| Q34.13 to promote the public <i>image of my institution</i> | 28 | 0,1564 | 77 | 0,4302 | 74 | 0,4134 |

Obstacles to science communication

| <i>What obstacles do you find in the science communication?</i> | <i>Disagree</i> | <i>Moderately agree</i> | <i>Strongly agree</i> | |
|---|-----------------|-------------------------|-----------------------|--------|
| Q37.3 discomfort in communicating with lay audiences | 113 | 0,6313 | 53 | 0,2961 |
| Q37.4 lack of preparation/training | 78 | 0,4358 | 76 | 0,4246 |
| Q37.5 lack of public interest | 64 | 0,3575 | 91 | 0,5084 |
| Q37.6 lack of public knowledge | 70 | 0,3911 | 78 | 0,4358 |
| Q37.7 negative opinion by peers | 102 | 0,5698 | 52 | 0,2905 |
| | | | 25 | 0,1397 |

Perceived effectiveness of communication channels

Q42 List the most effective communication channels in science communication:

| | | |
|------------------------------|-----|--------|
| Video | 104 | 0,5810 |
| TV interview | 98 | 0,5475 |
| Social media post | 96 | 0,5363 |
| News in the media | 88 | 0,4916 |
| Public debate | 86 | 0,4804 |
| Popular science news article | 75 | 0,4190 |
| Interactive module | 68 | 0,3799 |
| Leaflet/brochure | 59 | 0,3296 |
| Book | 57 | 0,3184 |
| Panel | 57 | 0,3184 |
| Game | 56 | 0,3128 |
| Scientific paper | 54 | 0,3017 |