**Supplementary file**

Impacts of the COVID-19 pandemic on animal behaviour and welfare researchers

**Table S1.** Online survey questions and response options.

**Part 1. You and your household during the covid-19 pandemic**

|  |  |
| --- | --- |
| **Question** | **Response options** |
| In what country did you live during the Covid-19 pandemic? | [Drop-down menu] |
| What is the gender you identify with? |  Female   Male   Transgender   Non-binary   Other   Prefer not to answer |
| In what year were you born? | [Open question] |
| Are you a parent or caretaker of children? |  Yes [if selected skipped to question 5]   No [if selected skipped to question 9] |
| How many children do you have or take care of? | [Open question] |
| If you are a caretaker of children, please indicate their age. Tick all that apply. |  0-1 yr old   1-5 yr old   5-10 yr old   10-15 yr old   15 – 20 yr old   >20 yr old |
| Who took most care of your children during the covid-19 pandemic? |  Me   My partner   My partner and I equally share tasks   A family member (e.g. your parents)   Institution like school or kindergarten   Someone else |
| Did the time you spend taking care of your child(ren) change during the lock-down? | **** No, it stayed the same.   It increased   It decreased |
| Did you have other care roles during the covid-19 pandemic? Tick all that apply. |  No   Yes, I’m taking care of older family members   Yes, I’m taking care of elderly / disabled people   Other [please specify] |
| To what extent do the following statements describe you? Please answer the following questions on a scale of 1-7, with 1 being ‘fully disagree’ and 7 ‘fully agree’. |  I am good at multi-tasking   I easily get emotionally affected by others’ situation   I am satisfied with my life   I get a strong urge to help when I see someone who is upset   I consider myself a perfectionist   I tend to work more than what is demanded from me   I tend to worry a lot |

**Part 2. Your work**

|  |  |
| --- | --- |
| **Question** | **Response options** |
| What best describes your field of research? |  Animal welfare   Animal behaviour   Animal production   Veterinary research   Other |
| What is your current role? |  PhD student   Post doc / Fellow / Scholar   Assistant Professor   Associate Professor   Adjunkt Professor   Professor   Lecturer   Research assistant   Research associate / Scientist   Independent researcher   Veterinarian   Other |
| What type of institution do you currently work with? Select all that apply. |  University   College   Contract   Research Organization   Non-profit organization   Government   I’m an independent researcher / self-employed   Other |
| How financially secure would you rate your current job contract? | [Slider rating scale 0 to 7] |
| In practice, how many hours do you usually work per week (outside of the Covid-19 lock-down)? |  <30h   30-35 h   36-42 h   43-50 h   51-60 h   >60 h |
| Do you work more hours than paid for? |  Yes   No |
| Did your working hours (amount) change during the pandemic/lock-down? Multiple choice possible. |  No   I had to take up holidays during the lockdown   I reduced my working hours   I increased my working hours   I took / had to take special leave during the lock-down   I had to stop working temporarily due to the inability to manage the different tasks in my personal life   I had to stop working temporarily based on my doctor’s recommendation   I had to quit my job   My employer put me on furlough (special leave of absence) during the lock-down   Other (Please specify) |
| What is your current work situation given the Covid-19 pandemic? |  In lock-down, working from home   In lock-down, working (partly) in the office   Not in lock-down, working from home   Not in lock-down, working in the office   Not working this month |
| What percentage of your job is commonly spent on education (teaching)? | [0 to 100% slider rating scale] |
| Did this percentage change during the covid-19 pandemic? |  Yes, it went up   Yes, it went down   No, it remained at a similar percentage |
| What percentage of your job is approximately spent on research? | [0 to 100% slider rating scale] |
| Did this percentage change during the covid-19 pandemic? |  Yes, it went up   Yes, it went down   No, it remained at a similar percentage |
| How well have you been able to work on research grants and manuscripts for publication? |  As usual   More time available for writing   Less time available for writing   No time for writing publications at all |
| To what extent do you agree with the following statements: Please answer the following questions on a scale of 1-7, with 1 being ‘fully disagree’ and 7 ‘fully agree’. |  Working from home has positively influenced my productivity   My caring commitments have made it challenging to complete my workload   I would prefer to remain working from home   I have the feeling that female researchers have faced more challenges during the lock-down than male researchers   I feel competent to use online tools for virtual meetings (incl. online teaching if relevant) |
| This open question is optional. What aspects of lock-down have had a positive / negative impact on your career? | [Open question] |

**Part 3. Perceived Stress Scale** (see Table S3).

**Part 4. Inventory of Socially Supportive Behaviours** (see Table S4).

|  |  |
| --- | --- |
| Do you have any further comments you would like to add on your experiences working during the Covid-19 lockdown and pandemic? | [open question] |

**Table S2.** The number of children and their age category under the care of the respondents, in percentage and number of all female (F; n = 94) and male (M; n = 20) respondents.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Children | % F (n) | % M (n) |  | Children’s age | % F (n) | % M (n) |
| 0 | 65.9 (62) | 35.0 (7) |  | < 1 year | 4.2 (4) | 5.0 (1) |
| 1 | 9.6 (9) | 35.0 (7) |  | 1 – 5 years | 12.8 (12) | 40.0 (8) |
| 2 | 21.3 (20) | 25.0 (5) |  | 5 – 10 years | 11.7 (11) | 5.0 (1) |
| 3 | 1.1 (1) | 5.0 (1) |  | 10 – 15 years | 8.5 (8) | 20.0 (4) |
| 4 | 1.1 (1) | 0 |  | 15 – 20 years | 7.5 (7) | 15.0 (3) |
| 5 | 1.1 (1) | 0 |  | > 20 years | 3.2 (3) | 0 |

**Table S3.** Perceived stress scale (PSS) with the full question and the percentage of respondents (n = 110) for each option. The darker the colour the higher the percentage of respondents.

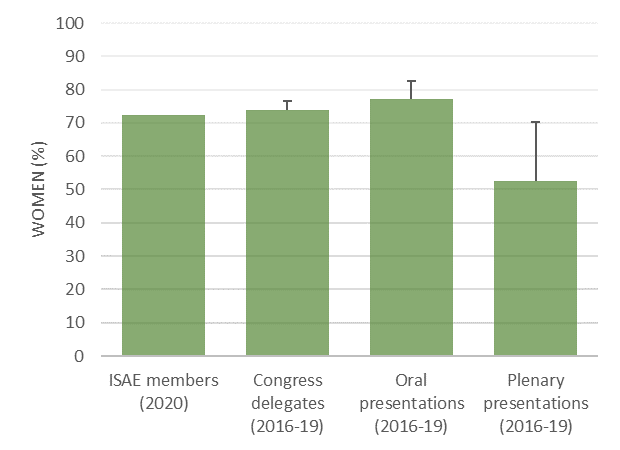
*The questions in this scale ask you about your feelings and thoughts* ***during the last month****. In each case, you will be asked to indicate by circling how often you felt or thought a certain way. 0 = Never, 1 = Almost Never, 2 = Sometimes, 3 = Fairly Often, 4 = Very Often.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 0 | 1 | 2 | 3 | 4 |
| 1. In the last month, how often have you been upset because of something that happened unexpectedly? | 5 | 30 | 38 | 19 | 7 |
| 2. In the last month, how often have you felt that you were unable to control the important things in your life? | 2 | 18 | 41 | 26 | 13 |
| 3. In the last month, how often have you felt nervous and “stressed”? | 3 | 6 | 40 | 31 | 20 |
| 4. In the last month, how often have you felt confident about your ability to handle your personal problems? | 2 | 16 | 44 | 31 | 7 |
| 5. In the last month, how often have you felt that things were going your way? | 5 | 25 | 50 | 16 | 4 |
| 6. In the last month, how often have you found that you could not cope with all the things that you had to do? | 4 | 25 | 34 | 25 | 13 |
| 7. In the last month, how often have you been able to control irritations in your life? | 6 | 18 | 41 | 30 | 5 |
| 8. In the last month, how often have you felt that you were on top of things? | 10 | 38 | 35 | 17 | 0 |
| 9. In the last month, how often have you been angered because of things that were outside of your control? | 4 | 24 | 38 | 25 | 10 |
| 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? | 15 | 25 | 24 | 25 | 11 |

**Table S4.** Inventory of Socially Supportive Behaviours (ISSB) with the full question and the percentage of respondents (n = 109) for each option.

*We are interested in learning about some of the ways that you feel people have helped you or tried to make life more pleasant for you over the past month. Below you will find a list of activities that other people might have done for you, to you, or with you in recent weeks. During the past four weeks, how often did other people do these activities for you, to you, or with you?*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Not at all | Once or twice | About once a week | Several times a week | About every day |
| Gave you some information on how to do something. | 7 | 48 | 28 | 16 | 2 |
| Helped you understand why you didn’t do something well. | 53 | 32 | 11 | 4 | 0 |
| Suggested some action you should take. | 13 | 43 | 35 | 8 | 1 |
| Gave you feedback on how you were doing without saying it was good or bad. | 37 | 42 | 17 | 4 | 0 |
| Made it clear what was expected of you. | 30 | 40 | 24 | 4 | 2 |
| Told you what he/she did in a situation that was similar to yours. | 39 | 41 | 15 | 4 | 1 |
| Told you that he/she feels close to you. | 41 | 21 | 14 | 16 | 8 |
| Let you know that he/she will always be around if you need help. | 17 | 33 | 24 | 18 | 8 |
| Told you that you are OK just the way you are. | 41 | 21 | 20 | 13 | 5 |
| Expressed interest and concern in your well-being. | 6 | 27 | 25 | 29 | 13 |
| Comforted you by showing you some physical affection. | 36 | 17 | 11 | 17 | 19 |
| Told you that he/she would keep the things you talk about private. | 56 | 26 | 9 | 6 | 3 |
| Agreed that what you wanted to do was the right thing. | 18 | 32 | 35 | 13 | 2 |
| Did some activity together to help you get your mind off things. | 21 | 21 | 28 | 22 | 7 |
| Gave or loaned you over €25. | 88 | 9 | 0 | 3 | 0 |
| Provided you with a place to stay. | 82 | 6 | 1 | 2 | 9 |
| Loaned you or gave you something (a physical object) that you needed. | 63 | 25 | 7 | 4 | 1 |
| Pitched in to help you do something that needed to get done. | 31 | 35 | 23 | 7 | 4 |
| Went with you to someone who could take action. | 88 | 8 | 3 | 1 | 0 |



**Figure S1.** **Gender balance within the ISAE.** Percentage of women among ISAE members in 2020 and the mean percentage (± SD) of women for different variables calculated for the four annual congresses of the International Society for Applied Ethology (ISAE) in 2016-2019. The gender distribution was counted from the ISAE membership database (N=707) in July 2020 and from delegates, oral presenters and plenary speakers of the ISAE conferences in 2016-2019. At these conferences, the number of delegates ranged from 302 to 500, the number of spoken presentations ranged from 86-188, and the number of plenary speakers per conference ranged from 3-11. First names were used to assign gender. In cases where gender could not be determined from the first name, the gender of the person was registered as ‘unidentified’. There was no significant deviation from the 2020 membership gender distribution for conference attendance (*t* = 1.27; P = 0.29), oral presentations (*t* = 1.93; P = 0.15) and plenary presentations (*t* = -2.18; P = 0.12).