**Table S2** Data on neophobia included in the meta-analysis, with their classifications and effect sizes (transformed Hedges’ *g* values) for: baseline neophobia vs. control (baseline score) and induced neophobia vs. baseline neophobia (induced score) sorted by taxonomic class with sample sizes in parentheses.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species by taxon (*n*)** | **Trophic position** | **Age class** | **Back-ground** | **Cue type** | **Inducing treatment** | **Baseline score** | **Induced score** | **Paper** |
| **Actinopterygii (23)** |  |  |  |  |  |  |  |  |
|  | *Amatitlania nigrofasciata* | tertiary | juvenile | unnatural | novel odour | predation exposure | -0.03 | 0.33 | Brown et al. [[1](#_ENREF_1)] |
|  | *Amatitlania nigrofasciata* | tertiary | juvenile | unnatural | novel odour | predation exposure | 0.12 | 0.83 | Brown et al. [[2](#_ENREF_2)] |
|  | *Amatitlania nigrofasciata* | tertiary | juvenile | unnatural | novel odour | predation exposure | -0.01 | 0.58 | Brown et al. [[3](#_ENREF_3)] |
|  | *Amatitlania nigrofasciata* | tertiary | juvenile | unnatural | novel odour | predation exposure | -0.34 | 0.89 | Brown et al. [[4](#_ENREF_4)] |
|  | *Amatitlania nigrofasciata* | tertiary | juvenile | unnatural | novel odour | predation exposure | 0.02 | 1.00 | Brown et al. [[4](#_ENREF_4)] |
|  | *Amatitlania nigrofasciata* | tertiary | adult | unnatural | novel odour | predation exposure | 0.15 | -0.34 | Joyce et al. [[5](#_ENREF_5)] |
|  | *Amatitlania nigrofasciata* | tertiary | juvenile | unnatural | novel odour | predation exposure | 0.04 | 0.48 | Joyce et al. [[5](#_ENREF_5)] |
|  | *Etheostoma caeruleum* | lower | adult | natural | novel odour | predation exposure | — | 0.75 | Abudayah & Mathis [[6](#_ENREF_6)] |
|  | *Gambusia holbrooki* | lower | adult | natural | novel odour | — | 0.25 | — | Dunlop-Hayden & Rehage [[7](#_ENREF_7)] |
|  | *Gambusia holbrooki* | lower | adult | natural | novel visual cue | — | -0.09 | — | Dunlop-Hayden & Rehage [[7](#_ENREF_7)] |
|  | *Jordanella floridae* | lower | adult | natural | novel odour | — | 0.22 | — | Dunlop-Hayden & Rehage [[7](#_ENREF_7)] |
|  | *Jordanella floridae* | lower | adult | natural | novel visual cue | — | 0.13 | — | Dunlop-Hayden & Rehage [[7](#_ENREF_7)] |
|  | *Pelvicachromis taeniatus* | lower | juvenile | unnatural | novel sound | predation exposure | — | 0.26 | Meuthen et al. [[8](#_ENREF_8)] |
|  | *Pimephales promelas* | lower | adult | natural | novel odour | predation exposure | — | 0.97 | Crane et al. [[9](#_ENREF_9)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | — | 0.32 | — | Brown et al. [[1](#_ENREF_1)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | — | 0.26 | — | Brown et al. [[1](#_ENREF_1)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | — | 0.17 | — | Brown et al. [[1](#_ENREF_1)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | — | 0.15 | — | Brown et al. [[1](#_ENREF_1)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | — | 0.04 | — | Brown et al. [[1](#_ENREF_1)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | predation exposure | — | 0.30 | Brown et al. [[10](#_ENREF_10)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | — | 0.32 | — | Brown et al. [[10](#_ENREF_10)] |
|  | *Poecilia reticulata* | lower | adult | natural | novel odour | — | -0.02 | — | Brown et al. [[10](#_ENREF_10)] |
|  | *Pomacentrus chrysurus* | lower | juvenile | unnatural | novel odour | predation exposure | 0.36 | 0.14 | Chivers et al. [[11](#_ENREF_11)] |
| **Amphibia (19)** |  |  |  |  |  |  |  |  |
|  | *Ambystoma macrodactylum* | lower | adult | natural | novel odour | — | 0.02 | — | Murray et al. [[12](#_ENREF_12)] |
|  | *Bufo bufo* | lower | juvenile | unnatural | novel odour | — | -0.05 | — | Marquis et al. [[13](#_ENREF_13)] |
|  | *Bufo calamita* | lower | juvenile | natural | novel odour | — | 0.48 | — | Polo-Cavia et al. [[14](#_ENREF_14)] |
|  | *Eurycea sosorum* | lower | adult | unnatural | novel odour | — | 0.61 | — | DeSantis et al. [[15](#_ENREF_15)] |
|  | *Hyla arborea* | lower | juvenile | natural | novel odour | — | 0.26 | — | Polo-Cavia et al. [[14](#_ENREF_14)] |
|  | *Hyla regilla* | lower | juvenile | natural | novel odour | — | -0.22 | — | Chivers et al. [[16](#_ENREF_16)] |
|  | *Lithobates sylvaticus* | lower | juvenile | unnatural | novel odour | predation exposure | -0.07 | 0.29 | Brown et al. [[1](#_ENREF_1)] |
|  | *Lithobates sylvaticus* | lower | juvenile | unnatural | novel odour | predation exposure | 0.10 | 0.26 | Mitchell et al. [[17](#_ENREF_17)] |
|  | *Pelobates cultripes* | lower | juvenile | unnatural | novel odour | — | -0.11 | — | Polo-Cavia & Gomez-Mestre [[18](#_ENREF_18)] |
|  | *Pelobates cultripes* | lower | juvenile | natural | novel odour | — | 0.30 | — | Polo-Cavia et al. [[14](#_ENREF_14)] |
|  | *Pelophylax perezi* | lower | juvenile | natural | novel odour | — | 0.22 | — | Polo-Cavia et al. [[14](#_ENREF_14)] |
|  | *Pseudacris regilla* | lower | adult | natural | novel odour | — | -0.08 | — | Murray et al. [[12](#_ENREF_12)] |
|  | *Pseudacris regilla* | lower | juvenile | natural | novel odour | — | 0.05 | — | Pease & Wayne [[19](#_ENREF_19)] |
|  | *Rana aurora* | lower | juvenile | unnatural | novel odour | — | 0.40 | — | Kiesecker & Blaustein [[20](#_ENREF_20)] |
|  | *Rana boylii* | lower | juvenile | unnatural | novel odour | — | 0.30 | — | Paoletti et al. [[21](#_ENREF_21)] |
|  | *Rana cascadae* | lower | juvenile | unnatural | novel odour | — | 1.14 | — | Hartman & Lawler [[22](#_ENREF_22)] |
|  | *Rana luteiventris* | lower | adult | natural | novel odour | — | 0.14 | — | Murray et al. [[12](#_ENREF_12)] |
|  | *Rana temporaria* | lower | juvenile | unnatural | novel odour | — | 0.41 | — | Marquis et al. [[13](#_ENREF_13)] |
|  | *Taricha granulosa* | lower | adult | natural | novel odour | — | 0.07 | — | Murray et al. [[12](#_ENREF_12)] |
| **Aves (15)** |  |  |  |  |  |  |  |  |
|  | *Corvus orru* | lower | adult | natural | novel object | — | 1.38 | — | Brown and Jones [[23](#_ENREF_23)] |
|  | *Dendroica pensylvanica* | lower | juvenile | unnatural | novel area | — | 1.64 | — | Greenberg [[24](#_ENREF_24)] |
|  | *Dendroica pensylvanica* | lower | juvenile | natural | novel area | social isolation | — | 0.16 | Greenberg [[25](#_ENREF_25)] |
|  | *Melospiza georgiana* | lower | adult | natural | novel object | — | 0.80 | — | Greenberg [[26](#_ENREF_26)] |
|  | *Melospiza georgiana* | lower | juvenile | natural | novel object | — | 1.57 | — | Greenberg [[27](#_ENREF_27)] |
|  | *Melospiza georgiana* | lower | juvenile | unnatural | novel object | — | 1.24 | — | Greenberg [[28](#_ENREF_28)] |
|  | *Melospiza melodia* | lower | adult | natural | novel object | — | 0.37 | — | Greenberg [[26](#_ENREF_26)] |
|  | *Melospiza melodia*  | lower | juvenile | natural | novel object | — | 0.78 | — | Greenberg [[27](#_ENREF_27)] |
|  | *Melospiza melodia*  | lower | juvenile | unnatural | novel object | — | 1.38 | — | Greenberg [[28](#_ENREF_28)] |
|  | *Milvago chimango* | tertiary | adult | natural | novel object | — | 0.14 | — | Biondi et al. [[29](#_ENREF_29)] |
|  | *Milvago chimango* | tertiary | juvenile | natural | novel object | — | 0.12 | — | Biondi et al. [[29](#_ENREF_29)] |
|  | *Saltatricula multicolor* | lower | adult | natural | novel object | — | 1.01 | — | Camin et al. [[30](#_ENREF_30)] |
|  | *Sturnus vulgaris* | lower | adult | unnatural | novel object | social isolation | 0.61 | -0.16 | Apfelbeck & Raess [[31](#_ENREF_31)] |
|  | *Taeniopygia guttata*  | lower | adult | unnatural | novel object | social isolation | 1.00 | 1.29 | Coleman & Mellgren [[32](#_ENREF_32)] |
|  | *Zonotrichia capensis* | lower | adult | natural | novel object | — | 1.10 | — | Camin et al. [[30](#_ENREF_30)] |
| **Gastropoda (2)** |  |  |  |  |  |  |  |  |
|  | *Haustrum vinosum* | lower | adult | natural | novel odour | — | 0.45 | — | Freeman et al. [[33](#_ENREF_33)] |
|  | *Lymnaea stagnalis* | lower | adult | natural | novel odour | — | 0.09 | — | Dalesman et al. [[34](#_ENREF_34)] |
| **Malacostraca (2)** |  |  |  |  |  |  |  |  |
|  | *Palaemonetes paludosus* | lower | adult | natural | novel odour | — | 0.13 | — | Dunlop-Hayden & Rehage [[7](#_ENREF_7)] |
|  | *Palaemonetes paludosus* | lower | adult | natural | novel visual cue | — | 0.10 | — | Dunlop-Hayden & Rehage [[7](#_ENREF_7)] |
|  |  |  |  |  |  |  |  |  |  |
| **Mammalia (28)** |  |  |  |  |  |  |  |  |
|  | *Bos taurus* | lower | juvenile | unnatural | novel object | social isolation | — | 0.52 | Meagher et al. [[35](#_ENREF_35)] |
|  | *Canis latrans* | tertiary | adult | unnatural | novel object | — | 0.88 | — | Mettler & Shivik [[36](#_ENREF_36)] |
|  | *Canis lupus* | tertiary | juvenile | unnatural | novel object | social isolation | — | -0.70 | Moretti et al. [[37](#_ENREF_37)] |
|  | *Canis lupus familiaris*  | tertiary | adult | unnatural | novel object | social isolation | — | -0.26 | Moretti et al. [[37](#_ENREF_37)] |
|  | *Canis lupus familiaris*  | tertiary | juvenile | unnatural | novel object | — | 0.18 | — | Pluijmakers et al. [[38](#_ENREF_38)] |
|  | *Homo sapiens* | tertiary | adult | unnatural | novel sound | predation exposure | — | 0.06 | Brocke et al. [[39](#_ENREF_39)] |
|  | *Macaca fascicularis* | lower | juvenile | unnatural | novel object | social isolation | 0.32 | 0.20 | Timmermans et al. [[40](#_ENREF_40)] |
|  | *Mesocricetus auratus* | lower | juvenile | unnatural | novel odour | castration | — | 0.34 | Cornwell-Jones & Kovanic [[41](#_ENREF_41)] |
|  | *Mesocricetus auratus* | lower | adult | unnatural | novel odour | castration | — | 1.23 | Cornwell-Jones & Kovanic [[41](#_ENREF_41)] |
|  | *Mus musculus* | lower | adult | unnatural | novel area | drug | 1.29 | 0.15 | Agmo & Belzung [[42](#_ENREF_42)] |
|  | *Mus musculus* | lower | adult | unnatural | novel area | drug | — | 0.55 | Kopp et al. [[43](#_ENREF_43)] |
|  | *Mus musculus* | lower | adult | unnatural | novel object | social isolation | — | 0.22 | Laviola & Loggi [[44](#_ENREF_44)] |
|  | *Mus musculus* | lower | adult | unnatural | novel area | drug | — | 1.28 | Laviola et al. [[45](#_ENREF_45)] |
|  | *Mus musculus* | lower | adult | unnatural | novel object | drug | — | 1.21 | Laviola et al. [[45](#_ENREF_45)] |
|  | *Mus musculus* | lower | adult | unnatural | novel area | drug | — | 0.41 | Sarowar et al. [[46](#_ENREF_46)] |
|  | *Mus musculus* | lower | adult | unnatural | novel area | drug | — | 0.68 | Sarowar et al. [[46](#_ENREF_46)] |
|  | *Mus musculus* | lower | adult | unnatural | novel object | drug | -0.10 | 0.77 | Sarowar et al. [[46](#_ENREF_46)] |
|  | *Peromyscus californicus* | lower | adult | unnatural | novel area | social isolation | — | 0.68 | Chauke et al. [[47](#_ENREF_47)] |
|  | *Peromyscus californicus* | lower | adult | unnatural | novel object | social isolation | — | 0.83 | Chauke et al. [[47](#_ENREF_47)] |
|  | *Pseudalopex culpaeus* | tertiary | adult | natural | novel object | — | 0.09 | — | Travaini et al. [[48](#_ENREF_48)] |
|  | *Pseudalopex griseus* | tertiary | adult | natural | novel object | — | 0.10 | — | Travaini et al. [[48](#_ENREF_48)] |
|  | *Rattus norvegicus* | lower | adult | unnatural | novel area | drug | — | 1.07 | Siemiatkowski [[49](#_ENREF_49)] |
|  | *Rattus norvegicus* | lower | adult | natural | novel object | — | 1.14 | — | Stryjek & Modlinska [[50](#_ENREF_50)] |
|  | *Rattus norvegicus* | lower | adult | unnatural | novel area | brain lesion | — | 1.59 | Velley et al. [[51](#_ENREF_51)] |
|  | *Rattus norvegicus* | lower | adult | unnatural | novel area | brain lesion | — | 0.67 | Walker & Winn [[52](#_ENREF_52)] |
|  | *Rattus norvegicus* | lower | adult | unnatural | novel area | brain lesion | — | 0.70 | Walker & Winn [[52](#_ENREF_52)] |
|  | *Rattus norvegicus* | lower | adult | unnatural | novel area | brain lesion | — | 0.80 | Walker & Winn [[52](#_ENREF_52)] |
|  | *Rattus norvegicus* | lower | adult | unnatural | novel area | brain lesion | — | 0.94 | Walker & Winn [[52](#_ENREF_52)] |

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