**Data**

id study r\_freq r\_hetero r\_netsize n\_freq n\_hetero n\_netsize design type\_knowledge domain partner sample countrybinary ES election items covariates

1 "An et al., 2006" 0.13 1499 1499 1499 survey general candidate positions family or friends adult US regression 1 12

2 "Andersen & Hopmann, 2018" 0.08 1925 1925 1925 panel general issues family or friends adult NON regression 1 16 5

3 "Atkin & Heald, 1976" 0.29 323 323 323 survey general candidate positions family or friends adult US r 1 5

4 "Bae et al., 2010" 0.24 777 777 777 survey general figures & institutions family or friends adult US regression 1 4 8

5 "Barabas, 2002" 0.13 2351 2351 2351 survey issue-specific issues family or friends adult US regression 0 7 9

6 "Barnidge, 2018" -0.02 489 489 489 survey general other other adult US regression 0 4 15

7 "Beaudoin, 2004" 0.15 422 422 422 survey issue-specific issues general adult US regression 1 8 18

8 "Bennett et al., 2000 (UK)" 0.11 2103 2103 2103 survey general figures & institutions general adult NON regression 1 11 9

9 "Bennett et al., 2000 (US)" 0.21 1842 1842 1842 survey general figures & institutions family or friends adult US regression 1 11 9

10 "Brundidge & Rice, 2009" 0.12 440 440 440 survey general other family or friends adult US regression 0 4 6

11 "Brundidge, 2010a" 0.12 781 781 781 survey general other other adult US regression 0 4 19

12 "Brundidge, 2010b" 0.09 680 680 680 survey general other other adult US regression 0 4 11

13 "Campbell, 2008" 0.1 2078 2078 2078 survey general other family or friends youth US regression 0 49 9

14 "Chan et al., 2016" 0.02 2672 2672 2672 survey general other general adult NON regression 0 5 14

15 "Cho et al., 2009 (2000 Model)" 0.17 1902 1902 1902 panel general figures & institutions other adult US regression 1 10

16 "Cho et al., 2009 (2004 Model)" 0.15 1484 1484 1484 panel general figures & institutions other adult US regression 1 10

17 "Chung, 1973" 0.29 339 339 339 survey general figures & institutions other youth NON 0 6

18 "Collet & Kato, 2014" 0.12 1801 1801 1801 survey general figures & institutions other adult NON regression 1 8 16

19 "Conover et al., 2002 (UK)" -0.04 375 375 375 survey general issues family or friends adult NON regression 0 7 17

20 "Conover et al., 2002 (US)" 0.005 375 375 375 survey general issues family or friends adult US regression 0 7 17

21 "Cui, 2016" 0.34 1119 1119 1119 survey general other family or friends adult NON r 0 12

22 "De Vreese & Boomgaarden, 2006 (Denmark)" 0.09 1127 1127 1127 panel general issues general adult NON regression 0 2

23 "De Vreese & Boomgaarden, 2006 (Netherlands)" 0.11 2122 2122 2122 panel general issues general adult NON regression 0 2

24 "Delli Carpini & Keeter, 1996 (1988 ANES)" 0.12 2040 2040 2040 survey general figures & institutions family or friends adult US regression 1 17

25 "Delli Carpini & Keeter, 1996 (1989 Data)" 0.18 610 610 610 survey general figures & institutions family or friends adult US regression 0 13

26 "Diehl et al., 2016" 0.34 0.4 947 947 947 survey general figures & institutions other adult US r 0 8

27 "Ekstro\_m & Östman, 2013 " 0.11 1050 1050 1050 survey general figures & institutions family or friends youth NON regression 0 7 11

28 "Eveland & Hively, 2009" 0.23 0.14 0.11 466 466 466 panel issue-specific candidate positions general adult US r 1 6

29 "Eveland & Thomson, 2006" 0.12 903 903 903 panel general other family or friends adult US regression 1 8 11

30 "Eveland et al., 1998" 0.41 290 290 290 survey general other family or friends youth US r 1 14

31 "Eveland et al., 2005" 0.19 1109 1109 1109 panel issue-specific candidate positions family or friends adult US regression 1 8 7

32 "Eveland, 2004-Study 1" 0.13 1555 1555 1555 panel general other family or friends adult US regression 1 8 9

33 "Eveland, 2004-Study 2" 0.12 97 97 97 panel general candidate positions general adult US regression 1 3 8

34 "Feldman & Price, 2008" 0.15 0.06 1389 1255 1255 survey issue-specific candidate positions family or friends adult US regression 1 7

35 "Feldman et al., 2007 (Fall 2002)" 0.27 1292 1292 1292 panel general figures & institutions other youth US regression 1 6 4

36 "Feldman et al., 2007 (Spring 2003)" 0.2 844 844 844 panel general figures & institutions other youth US regression 1 6 4

37 "Finkel & Ernst, 2005" 0.19 589 589 589 survey general figures & institutions family or friends youth NON regression 0 8 9

38 "Finkel & Smith, 2011" 0.26 5003 5003 5003 panel general figures & institutions family or friends adult NON r 1 4

39 "Gajora, 2011" 0.11 104 104 104 survey general issues family or friends adult US r 0 10

40 "Gastil, 2006" 0.21 994 994 994 survey issue-specific issues family or friends adult US 0

41 "Gil de Zuniga et al., 2012" 0.12 474 474 474 survey general figures & institutions family or friends adult US r 0 4

42 "Gil de Zuniga et al., 2016" -0.1 956 956 956 survey general other family or friends adult US regression 0 8 12

43 "Gil de Zuniga et al., 2017" -0.04 0.12 1017 1017 1017 panel general other family or friends adult US regression 0 8 17

44 "Guidetti et al., 2016" -0.02 1508 1508 1508 survey general figures & institutions family or friends adult NON r 1 3

45 "Hao et al., 2014" 0.19 397 397 397 survey issue-specific issues family or friends adult NON r 0 7

46 "Hardy, 2005" 0.15 781 781 781 survey general figures & institutions other adult US regression 0 4 8

47 "Hardy, 2007" 0.26 36912 36912 36912 survey general candidate positions family or friends adult US regression 1 8 11

48 "Hively & Eveland, 2009" 0.21 0.41 720 711 711 survey general figures & institutions general youth US regression 0 13 8

49 "Holbert et al., 2002" 0.12 1494 1494 1494 survey issue-specific candidate positions family or friends adult US regression 1 19 9

50 "Horowitz, 2001" 0.28 1480 1480 1480 survey general other parents youth US r 0 6

51 "Hutchens et al., 2018" -0.02 1524 1524 1524 survey general issues other adult US regression 0 6

52 "Ichilov, 2007" 0.05 4642 4642 4642 survey general other other youth NON r 0 28

53 "Jackson-Beeck, 1979" -0.05 191 191 191 survey general other family or friends youth US r 0 7

54 "Jebril et al., 2013" 0.13 4751 4751 4751 panel general other general adult NON regression 1 4 6

55 "Jeffres et al., 2008" 0.18 0.05 505 505 505 survey general figures & institutions family or friends adult US r 1 5

56 "Johnson et al., 1999" 0.13 320 320 320 survey issue-specific candidate positions general adult US regression 1 6 32

57 "Jung et al., 2011" 0.2 1159 1159 1159 survey general figures & institutions family or friends adult US regression 1 4 5

58 "Jung, 2010" 0.16 2102 2102 2102 survey general other family or friends adult US regression 1 12 19

59 "Kaufhold et al., 2010" 0.12 958 958 958 survey general figures & institutions family or friends adult US regression 0 4 10

60 "Kennamer, 1987" 0.32 324 324 324 survey issue-specific issues other adult US regression 1 4 4

61 "Kennamer, 1990" 0.28 500 500 500 survey general other general adult US regression 1 4 8

62 "Kenski & Stroud, 2006" 0.2 10935 10935 10935 survey issue-specific other family or friends adult US regression 1 10 18

63 "Kenski, 2006 (2000 Data)" 0.31 0.2 924 924 924 survey general issues family or friends adult US r 1 13

64 "Kenski, 2006 (2004 Data)" 0.29 1095 1095 1095 survey general issues family or friends adult US r 1 13

65 "Kentmen, 2010" 0.13 752 752 752 survey general figures & institutions family or friends adult NON regression 0 3 7

66 "Kim & Hyun, 2017" 0.13 542 542 542 survey general figures & institutions other adult NON r 0 4

67 "Kim, 2009 (2000 Data)" 0.11 1445 1445 1445 survey issue-specific candidate positions family or friends adult US regression 1 2 13

68 "Kim, 2009 (2004 Data)" 0.12 946 946 946 survey issue-specific candidate positions family or friends adult US regression 1 2 13

69 "Klofstad et al., 2013" 0.09 1225 1225 1225 survey general other other adult US 1

70 "Kwak et al., 2005" 0.21 0.2 0.23 392 392 392 survey general other family or friends adult US regression 0 6 11

71 "Landreville et al., 2010" 0.11 740 740 740 survey issue-specific candidate positions family or friends adult US regression 1 9 12

72 "Lee, 2009" 0.15 0.07 771 771 771 survey general figures & institutions family or friends adult NON regression 0 4 11

73 "Lee, 2012" 0.14 -0.07 0.12 777 777 777 survey general issues family or friends adult US regression 1 4 8

74 "McCraw, 2006" 0.2 401 401 401 survey general figures & institutions other adult US regression 1 12 11

75 "McDevitt & Chaffee, 2000" 0.23 457 457 457 survey issue-specific other parents adult US regression 1 11 8

76 "McDevitt & Kiousis, 2004" 0.26 271 271 271 panel general candidate positions parents adult US regression 1 10 6

77 "McDevitt & Kiousis, 2006" 0.15 288 288 288 panel general candidate positions other youth US regression 1 7 9

78 "McDevitt & Kiousis, 2007" 0.1 187 187 187 panel general candidate positions parents youth US regression 1 10 9

79 "McIntosh et al., 2007" 0.17 3779 3779 3779 survey general figures & institutions parents youth US regression 0 5 26

80 "McIntosh, 2006" 0.19 3857 3857 3857 survey general figures & institutions parents youth US regression 0 5 16

81 "McLeod et al., 1999" 0.07 389 389 389 survey general other general adult US regression 0 4 5

82 "Meirick & Wackman, 2004" 0.17 297 297 297 panel general candidate positions other youth US regression 1 14 7

83 "Mondak, 1999a (1994 Data)" 0.1 1704 1704 1704 survey general figures & institutions other adult US regression 1 9 8

84 "Mondak, 1999a (1996 Data)" 0.1 1470 1470 1470 survey general figures & institutions other adult US regression 1 7 8

85 "Mondak, 1999b" 0.09 2157 2157 2157 survey general figures & institutions other adult US regression 1 9 8

86 "Moy & Gastil, 2006" 0.26 0.23 149 149 149 survey general figures & institutions family or friends adult US regression 8

87 "Moy, 1998" 0.23 -0.17 0.12 416 416 416 survey general figures & institutions other adult US regression 0 4 12

88 "Myers, 1994" 0.34 425 425 425 survey general figures & institutions family or friends adult US r 1

89 "Nir, 2011" 0.06 998 998 998 survey general figures & institutions other adult US 1 8

90 "Nisbet & Scheufele, 2004" 0.08 1807 1807 1807 survey general figures & institutions family or friends adult US regression 1 4 11

91 "Norris, 2000 (EU Institutions)" 0.19 65178 65178 65178 survey general figures & institutions general adult NON regression 0 21

92 "Norris, 2000 (Leaders and Parties)" 0.13 1281 1281 1281 survey general figures & institutions general adult US regression 1 10

93 "Norris, 2000 (Risks, Euro, and EU Rights)" 0.11 16247 16247 16247 survey issue-specific figures & institutions general adult NON regression 0 21

94 "Ondercin et al., 2011" 0.13 17249 17249 17249 survey issue-specific figures & institutions family or friends adult US regression 1 5 22

95 "Parsons, 2010" 0.08 1529 1529 1529 survey general candidate positions other adult US regression 1 10 6

96 "Partheymu\_ller & Faas, 2015 (2005 Data)" 0.12 2405 2405 2405 panel issue-specific candidate positions general adult NON regression 1 15 4

97 "Partheymu\_ller & Faas, 2015 (2009 Data)" 0.1 3971 3971 3971 panel issue-specific candidate positions general adult NON regression 1 15 4

98 "Prough, 2008" 0.23 843 843 843 survey general figures & institutions family or friends youth US r 4

99 "Quintelier et al., 2012" 0.09 0.08 2486 2486 2486 panel general other family or friends youth NON regression 0 10

100 "Reedy & Gastil, 2015" 0.15 278 278 278 survey general figures & institutions family or friends adult US regression 1 11 6

101 "Reedy et al., 2016" 0.11 53 53 53 survey general figures & institutions family or friends adult US 1 5

102 "Reichert & Print, 2017" 0.18 3513 3513 3513 survey general other family or friends youth NON regression 0 42 2

103 "Richardson, 2003" 0.11 2808 2808 2808 survey general other family or friends youth US r 0 38

104 "Rojas, 2008" -0.05 -0.04 0.09 715 715 715 panel general figures & institutions family or friends adult NON regression 0 9

105 "Scheufele & Nisbet, 2002" -0.03 468 468 468 survey issue-specific issues other adult US regression 4 9

106 "Scheufele et al., 2003" 0.15 1807 1807 1807 survey general figures & institutions other adult US regression 1 4 12

107 "Scheufele et al., 2004" 0.09 0.09 787 787 787 survey general other other adult US regression 0 4 5

108 "Scheufele et al., 2006" -0.01 0.21 781 781 781 survey general figures & institutions other adult US regression 0 4 10

109 "Scheufele, 1999" 0.12 226 226 226 panel issue-specific candidate positions family or friends adult US r 1 3

110 "Scheufele, 2000" 0.16 414 414 414 survey general issues family or friends adult US regression 0 6 8

111 "Scheufele, 2002" 0.19 2517 2517 2517 survey general issues general adult US regression 0 8 8

112 "Smith, 2016" 0.24 17749 17749 17749 panel general candidate positions family or friends adult NON regression 1 8 20

113 "Son, 2003" -0.14 0.25 1555 1555 1555 panel general other other adult US r 1 16

114 "Song & Eveland, 2015" 0.13 -0.02 432 432 432 survey issue-specific candidate positions other adult US r 1 5

115 "Sotirovic & McLeod, 2001" 0.31 739 739 739 survey general issues other adult US r 0 13

116 "Taylor & Clerkin, 2011" 0.18 234 234 234 survey general figures & institutions other adult US regression 0 5 15

117 "Testa et al., 2014 (CCAP)" 0.01 705 705 705 survey general figures & institutions other adult US r 1 5

118 "Testa et al., 2014 (MTurk)" 0.11 399 399 399 survey general figures & institutions other adult US r 0 5

119 "Testa et al., 2014 (Students)" 0.16 696 696 696 survey general figures & institutions other adult US r 1 5

120 "Thomson, 2007 (Study 1)" 0.15 0.1 0.18 1288 1288 1288 survey general figures & institutions family or friends adult US regression 1 10 10

121 "Thomson, 2007 (Study 3)" 0.2 0.25 0.11 196 196 196 survey general figures & institutions other youth US regression 0 11 8

122 "Thorson, 2014" 0.16 6330 6330 6330 survey issue-specific candidate positions general adult US regression 1 10 14

123 "Toka, 2007" 0.15 299 299 299 panel general other family or friends adult NON regression 1

124 "Torney-Purta et al., 2007" 0.19 2811 2811 2811 survey general other parents youth US regression 0 11

125 "Trepte & Schmitt, 2017" 0.31 69125 69125 69125 survey general other family or friends adult NON regression 0 9 5

126 "Valenzuela, 2011 (2004 Data)" 0.19 323 323 323 panel general candidate positions family or friends adult US regression 1 7 7

127 "Valenzuela, 2011 (2008-2009 Data)" 0.12 2267 2267 2267 panel general candidate positions family or friends adult US regression 1 20 7

128 "Waldman, 2000" 0.24 0.16 5029 1581 1581 survey general candidate positions other adult US regression 1 13 11

129 "Weinschenk, 2017 (Democratic)" 0.13 446 446 446 panel issue-specific candidate positions family or friends adult US regression 1 9 11

130 "Weinschenk, 2017 (Republican)" 0.12 431 431 431 panel issue-specific candidate positions family or friends adult US regression 1 9 11

131 "Wen et al., 2013.pdf" 0.11 397 397 397 survey general issues family or friends adult NON regression 0 7 9

132 "Wojcieszak et al., 2010" -0.13 709 709 709 survey general figures & institutions other adult US r 0 5

133 "Young, 2007" 0.11 24219 24219 24219 survey general figures & institutions family or friends adult US regression 1 4 17

134 "Zhang, 2000" 0.16 0.25 379 379 379 survey general figures & institutions family or friends adult US r 0 3

**R Code**

# Load data

data = read.csv("data.csv")

# Load necessary packages

library(meta)

library(metafor)

library(grid)

# Subset data by discussion dimension

freq = subset(data, data$r\_freq!="NA")

hetero = subset(data, data$r\_hetero!="NA")

size = subset(data, data$r\_netsize!="NA")

# Main meta-analyses (Table 1)

# Discussion frequency

x = metacor(cor = r\_freq, n = n\_freq, studlab = study, data = freq, prediction = T); x

# Discussion heterogeneity

y = metacor(cor = r\_hetero, n = n\_hetero, studlab = study, data = hetero, prediction = T); y

# Discussion network size

z = metacor(cor = r\_netsize, n = n\_netsize, studlab = study, data = size, prediction = T); z

# Moderator analyses (Table 2)

# Study design (survey vs. panel)

x1 <- metacor(cor = freq$r\_freq, n = freq$n\_freq, studlab = freq$X...id, data = freq, byvar = freq$design); x1

# Type of knowledge (issue-specific vs. general)

x2 <- metacor(cor = freq$r\_freq, n = freq$n\_freq, studlab = freq$X...id, data = freq, byvar = freq$type\_know); x2

# Knowledge domain

x3 <- metacor(cor = freq$r\_freq, n = freq$n\_freq, studlab = freq$X...id, data = freq, byvar = freq$domain); x3

# Discussion partner

x4 <- metacor(cor = freq$r\_freq, n = freq$n\_freq, studlab = freq$X...id, data = freq, byvar = freq$partner); x4

# Sample composition (adult vs. youth)

x5 <- metacor(cor = freq$r\_freq, n = freq$n\_freq, studlab = freq$X...id, data = freq, byvar = freq$sample); x5

# Country (US vs. non-US)

x6 <- metacor(cor = freq$r\_freq, n = freq$n\_freq, studlab = freq$X...id, data = freq, byvar = freq$countrybinary); x6

# Type of effect size (regression vs. correlation)

subset1 = subset(freq, ES!="")

x7 <- metacor(cor = subset1$r\_freq, n = subset1$n\_freq, studlab = subset1$X...id, data = subset1, byvar = subset1$ES); x7

# Context (election vs. non-election)

subset2 = subset(freq, !is.na(election))

x8 <- metacor(cor = subset2$r\_freq, n = subset2$n\_freq, studlab = subset2$X...id, data = subset2, byvar = subset2$election); x8

# Number of items measuring knowledge

x9 <- metareg(x,items); x9

# Number of covariates controlled for

x10 <- metareg(x,covariates); x10

# Sensitivity analyses (Table 3)

# Trim-and-fill

trimfill(x, estimator = "L0", ma.fixed="T")

trimfill(x, estimator = "L0", ma.fixed="F")

trimfill(y, estimator = "L0", ma.fixed="T")

trimfill(y, estimator = "L0", ma.fixed="F")

trimfill(z, estimator = "L0", ma.fixed="T")

trimfill(z, estimator = "L0", ma.fixed="F")

# Funnel plots (Online Appendix C)

funnel(trimfill(x, estimator = "L0", ma.fixed="T"), xlab= paste("Fisher's z-Transformed Correlation"),main = "Discussion Frequency")

funnel(trimfill(y, estimator = "L0", ma.fixed="T"), xlab= paste("Fisher's z-Transformed Correlation"),main = "Discussion Heterogeneity")

funnel(trimfill(z, estimator = "L0", ma.fixed="T"), xlab= paste("Fisher's z-Transformed Correlation"),main = "Discussion Network Size")

# Cumulative meta-analyses (Online Appendix D)

# Frequency

cum.freq = metacum(x, pooled="random", -n)

forest(cum.freq)

# Heterogeneity

cum.hetero = metacum(y, pooled="random", -n)

forest(cum.hetero)

# Network size

cum.netsize = metacum(z, pooled="random", -n)

forest(cum.netsize)

# Influence diagnostics

# Frequency

res = rma(ri=r\_freq, ni=n\_freq, measure="ZCOR", data = freq)

inf.freq = influence(res)

plot(inf.freq)

# Heterogeneity

res2 = rma(ri=r\_hetero, ni=n\_hetero, measure="ZCOR", data = hetero)

inf.hetero = influence(res2)

plot(inf.hetero)

# Network size

res3 = rma(ri=r\_netsize, ni=n\_netsize, measure="ZCOR", data = size)

inf.netsize = influence(res3)

plot(inf.netsize)

# Reanalyze after removing influential studies

# Removing Gil de Zuniga et al. (2016) from frequency meta-analysis

rerun1 = freq[-c(38),]

x\_no\_outlier = metacor(cor = r\_freq, n = n\_freq, studlab = study, data = rerun1); x\_no\_outlier

# Removing Diehl et al. (2016) from network size meta-analysis

rerun2 = size[-c(2),]

z\_no\_outlier = metacor(cor = r\_netsize, n = n\_netsize, studlab = study, data = rerun2); z\_no\_outlier

# One sample removed

options(max.print=1000)

# Frequency

osr.freq = rma(ri=r\_freq, ni=n\_freq, measure="ZCOR", data = freq)

leave1out(osr.freq, digits=3)

# Heterogeneity

osr.hetero = rma(ri=r\_hetero, ni=n\_hetero, measure="ZCOR", data = hetero)

leave1out(osr.hetero, digits=3)

# Network size

osr.netsize = rma(ri=r\_netsize, ni=n\_netsize, measure="ZCOR", data = size)

leave1out(osr.netsize, digits=3)