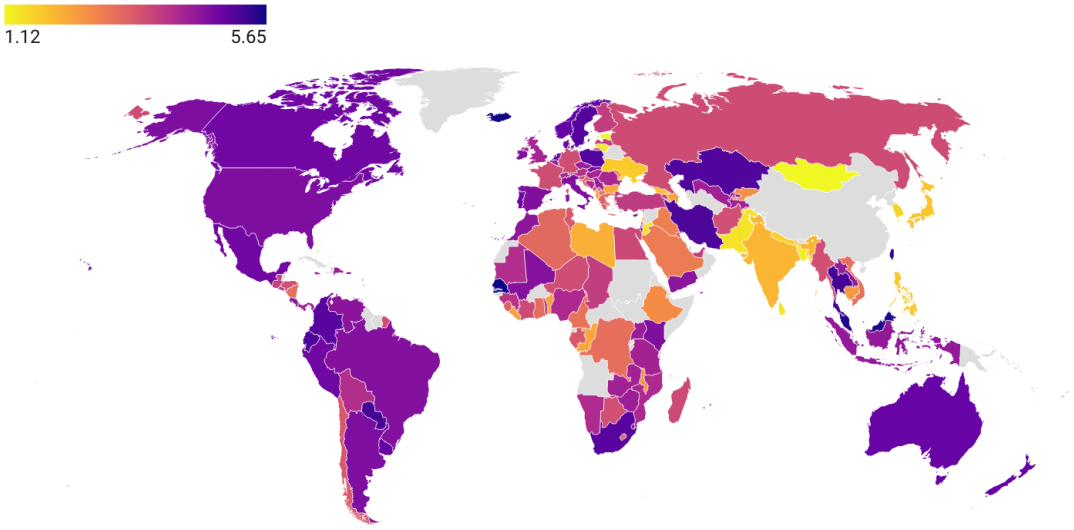
Appendix

Study 1 - Figures

Figure A1:

Global distribution of number of dinners shared

Average number of dinners eaten "with someone you know" in the past 7 days



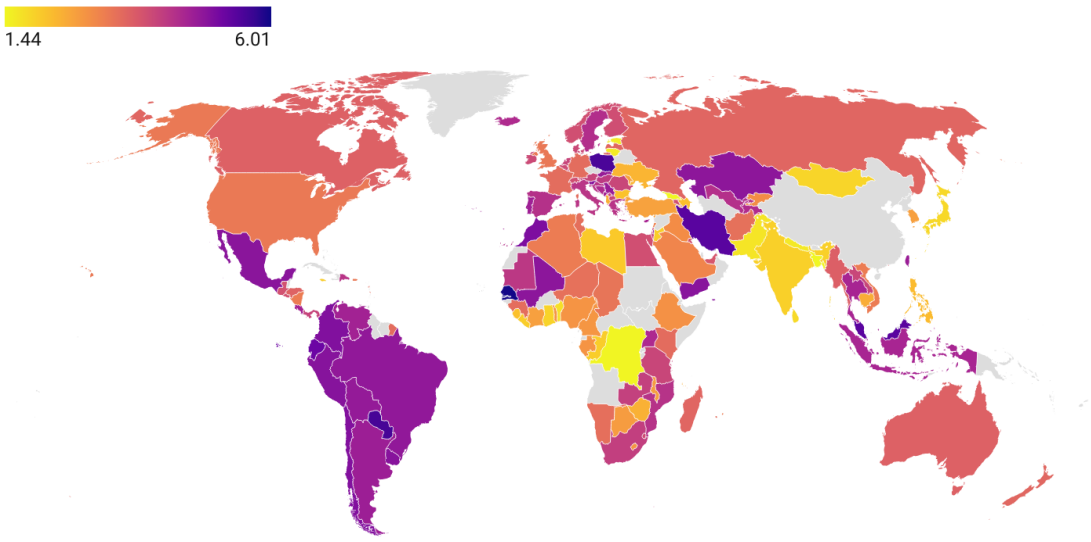
Note: Grey regions denote places for which there is no data

Source: Gallup World Poll, 2022-23 • Created with Datawrapper

Figure A2:

Global distribution of number of lunches shared

Average number of lunches eaten "with someone you know" in the past 7 days



Note: Grey regions denote places for which there is no data

Source: Gallup World Poll, 2022-23 • Created with Datawrapper

Figure A3: Meal sharing by region
Gallup World Poll, 2022-2023

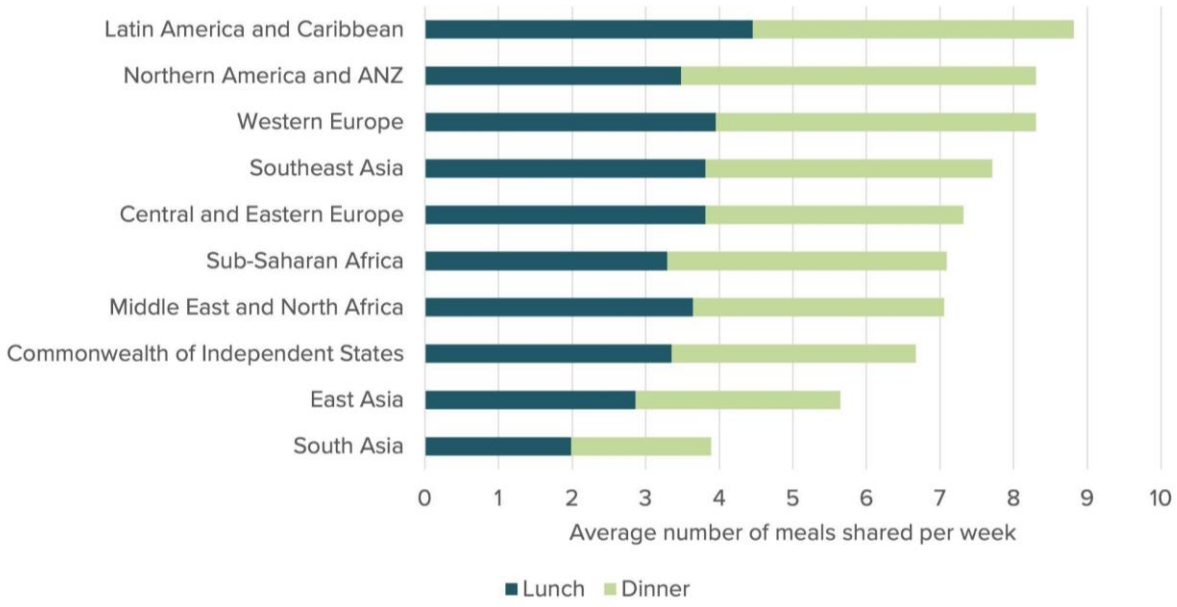


Figure A4: Meal sharing by region and gender
Gallup World Poll (2022-2023)

Figure A5: Meal sharing by region and age
Gallup World Poll, 2022-2023

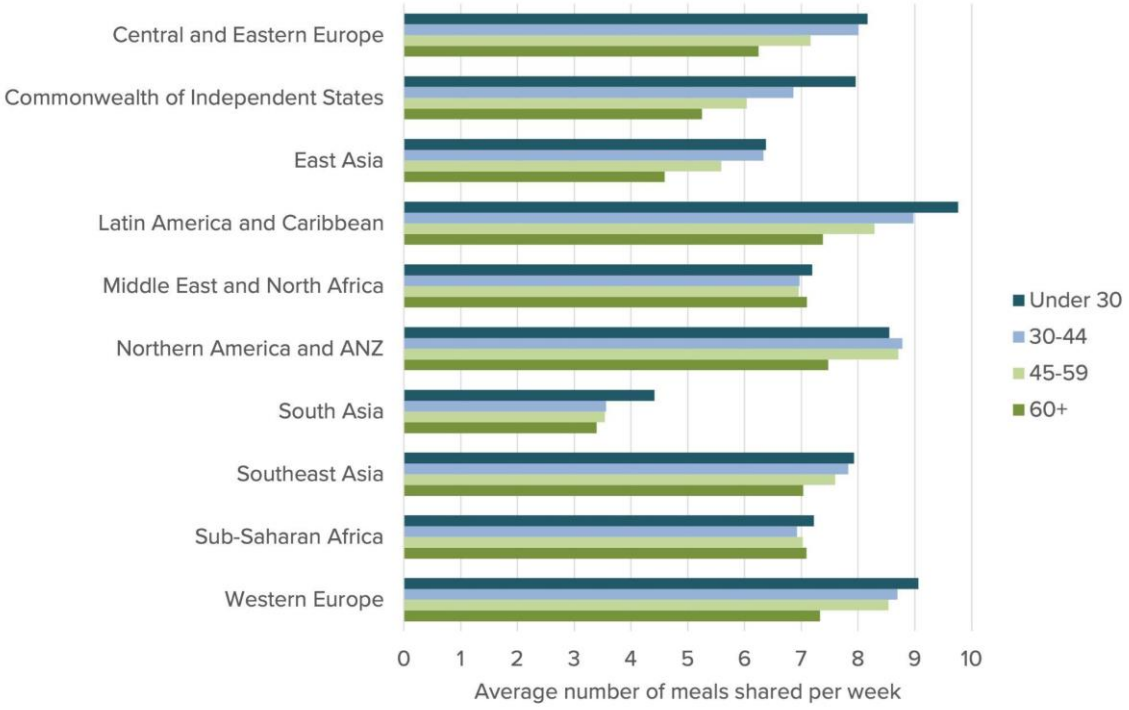


Figure A6: Meal sharing and life evaluations around the world
Gallup World Poll, 2022-2023

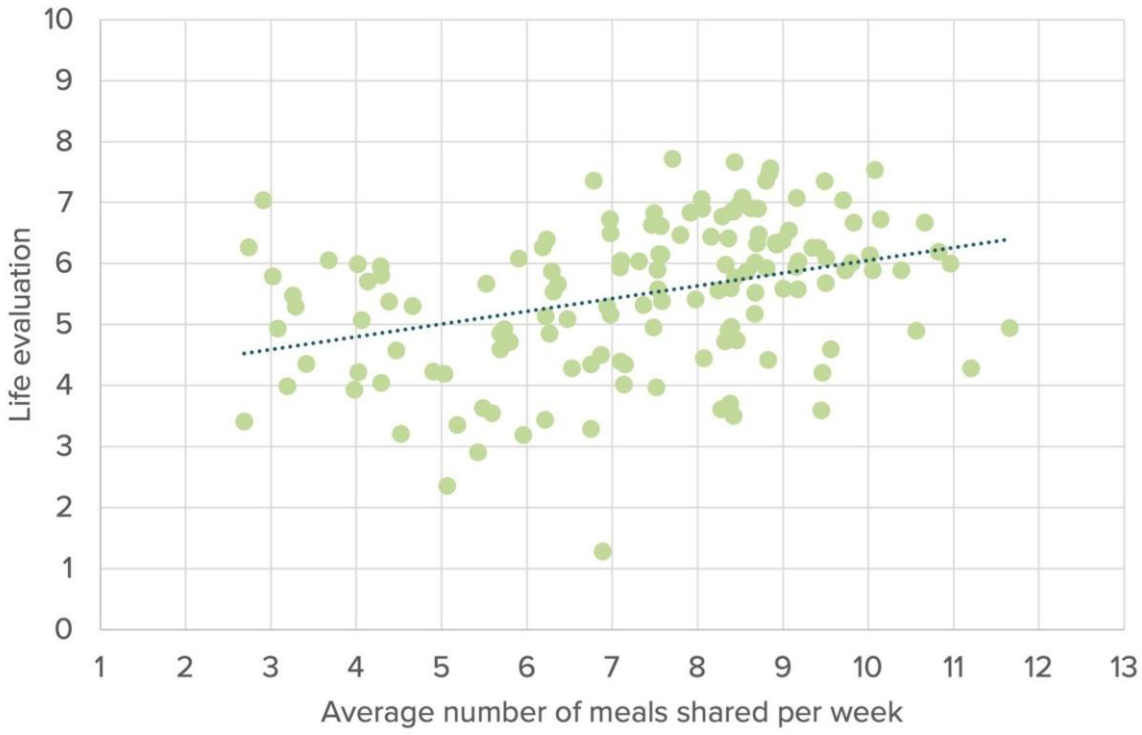


Figure A7: Shared meals and subjective wellbeing by gender
Gallup World Poll, 2022-2023

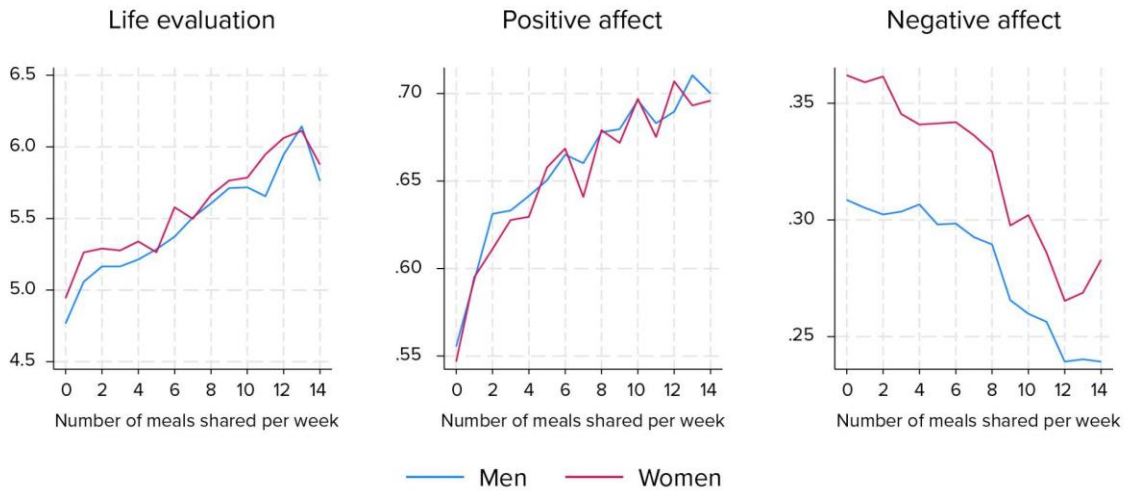


Figure A8: Relationships between sharing meals, life evaluation, positive affect, and negative affect around the world by age
Gallup World Poll (2022-2023)

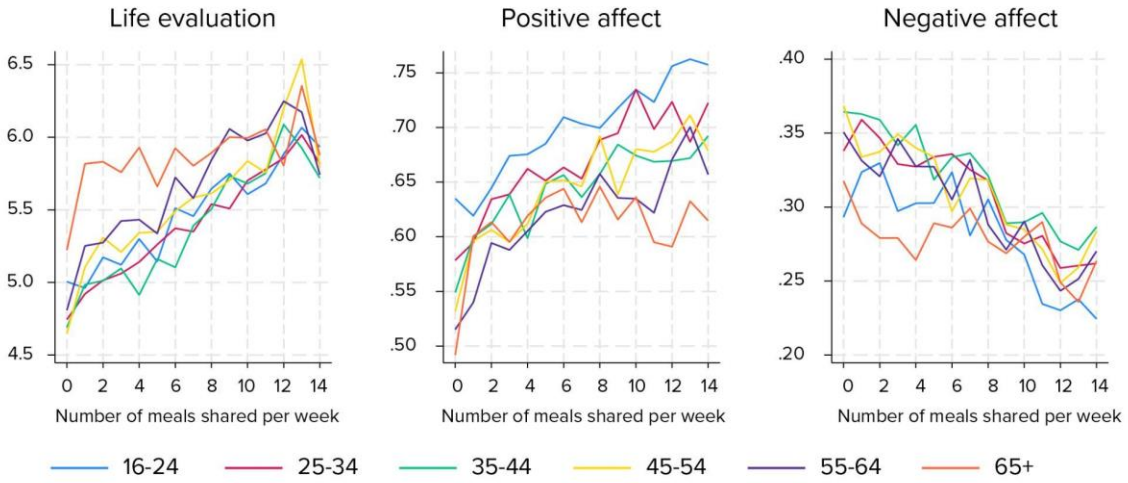
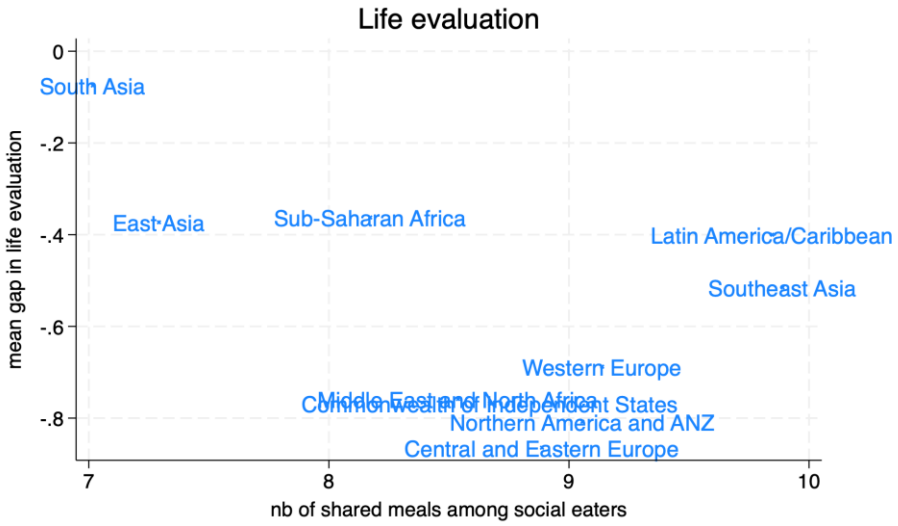
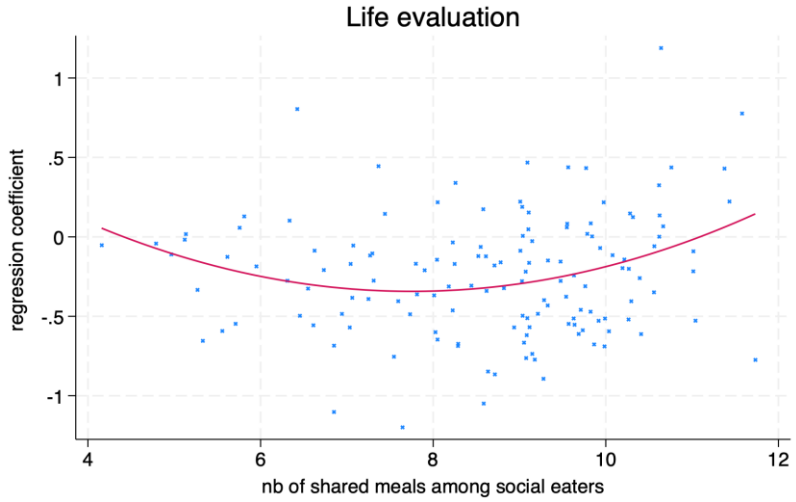


Figure A9: Scatterplot of dining alone penalty and average number of shared meals (simple differences, by world region)



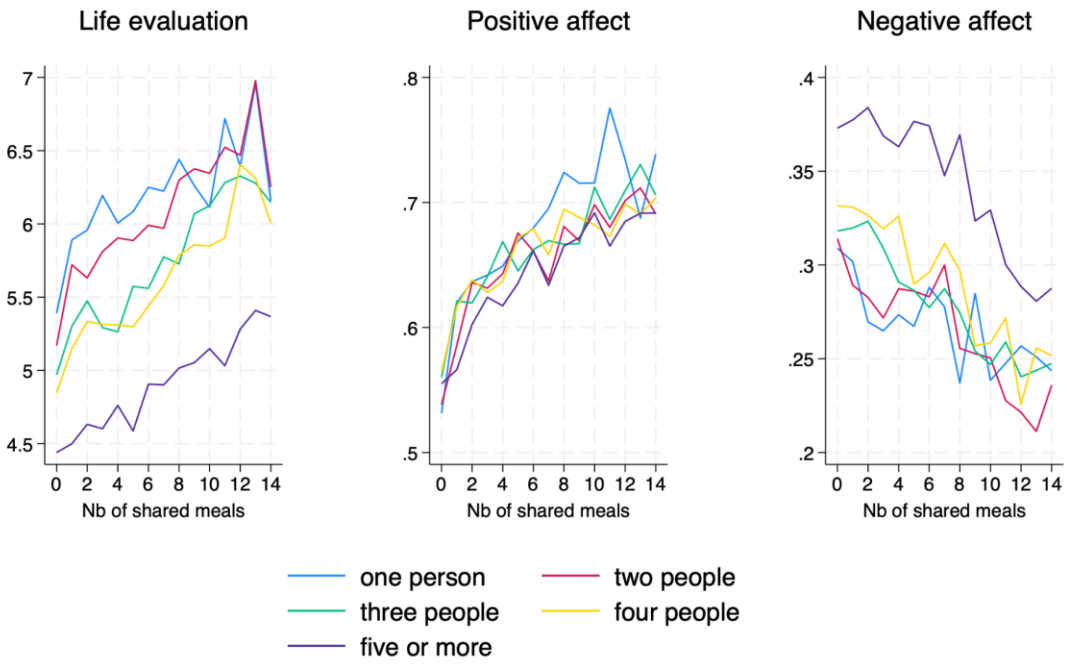
Note: *Scatterplot, where each point is calculated from a world region. The x-axis reports the average number of shared meals per week among those who shared at least one meal. The y-axis reports the simple average difference in the life evaluation between those who dine alone and those who don't. Life evaluation is expressed on a 0-10 scale. Data includes the 2023 sample. Averages are calculated using country-level survey weights.*

Figure A10: Scatterplot of dining alone penalty and average number of shared meals (regression coefficients, by country)



Note: *Scatterplot with quadratic fit, where each point is calculated from a country. The x-axis reports the average number of shared meals per week among those who shared at least one meal. The y-axis reports the coefficients associated with the binary variable "dining alone" in 144 linear regressions where life evaluation is the dependent variable. Controls: income quintile, household size, gender, age, age-squared, education group, employment group, people's ability to meet basic needs for food. Life evaluation is expressed on a 0-10 scale. Data includes the 2023 sample. Regressions use country-level survey weights.*

Figure A11: Relationships between sharing meals, life evaluation, positive affect, and negative affect around the world by household size
Gallup World Poll (2022-2023)



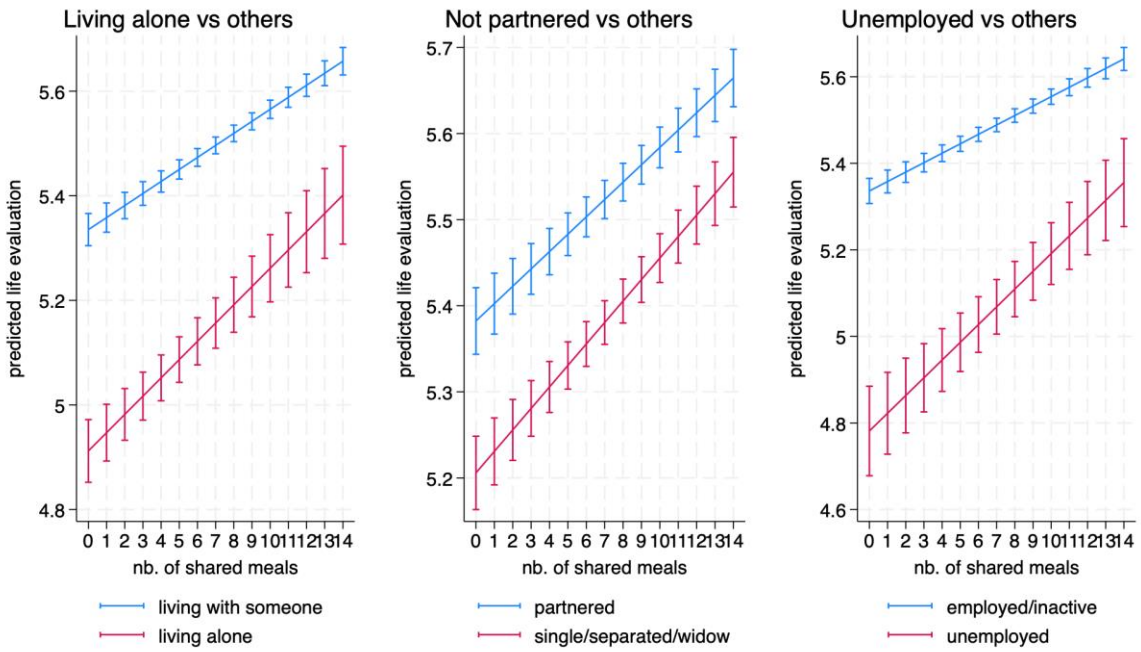
Comment on Fig.A12-A15

Lower life evaluations are predicted for those with relatively reduced opportunity of social connections - that is, those living alone (-0.381, p<0.001), not married/in a couple (-0.266, p<0.001), or unemployed (-0.553, p<0.001). However, these social groups are also the ones who benefit the most from sharing extra meals. This is indicated by the relatively steeper line among those living alone (0.013, p=0.001), not married/in a couple (0.009, p<0.001), or unemployed (0.019, p=0.002). That is, the wellbeing gap between those with low and high opportunity of connections is reduced when sharing more meals.

It's important to notice that these global statistics mask stark differences across world regions. Figures A13-A15 show the same type of graph as Fig. A12, but decomposed by world region. To illustrate these differences, let us compare two regions which sometimes display diverging patterns: Western Europe and Latin America/Caribbean.

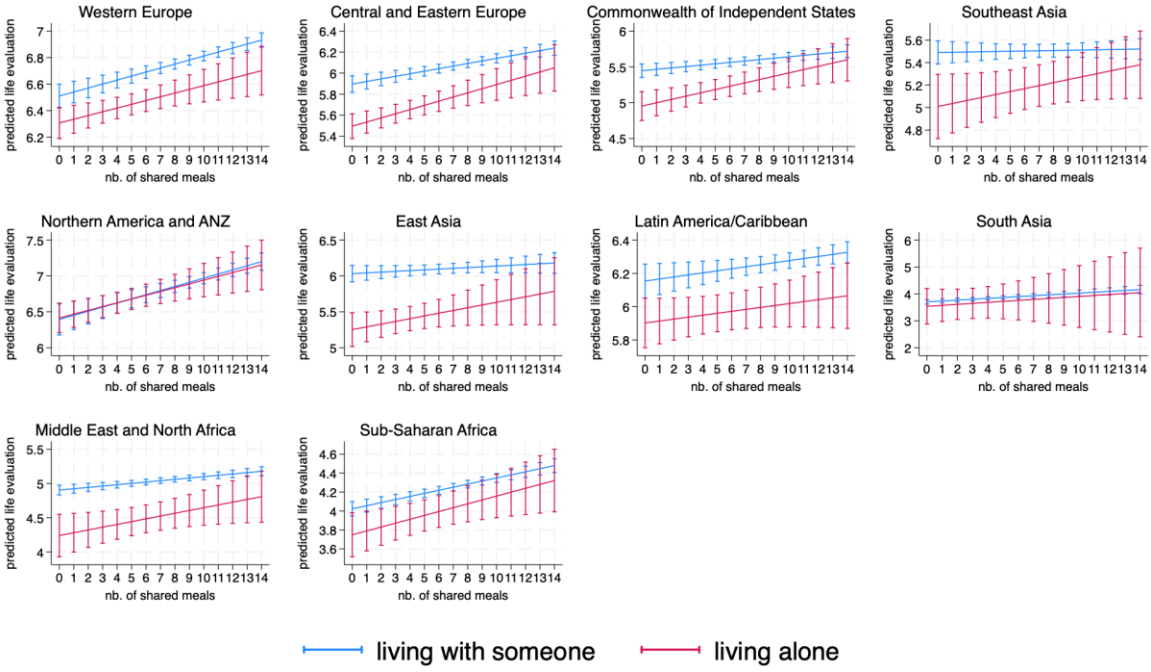
In Western Europe, the more meals are shared the smaller the wellbeing gap between those who are not in a couple (married or partnership) and those who are, while this is not observed in Latin America/Caribbean, where multi-generational households are more common. In Latin America/Caribbean the wellbeing gap of unemployment is greatly reduced by sharing extra meals. Instead, no such convergence is observed in Western Europe. Finally, both in Western Europe - where single-households are relatively common - and in Latin America/Caribbean - where single-households are rare - those living alone and those living with others seem to benefit equally from sharing additional meals.

Figure A12: Predicted life evaluation among different social groups, by the number of shared meals (world)



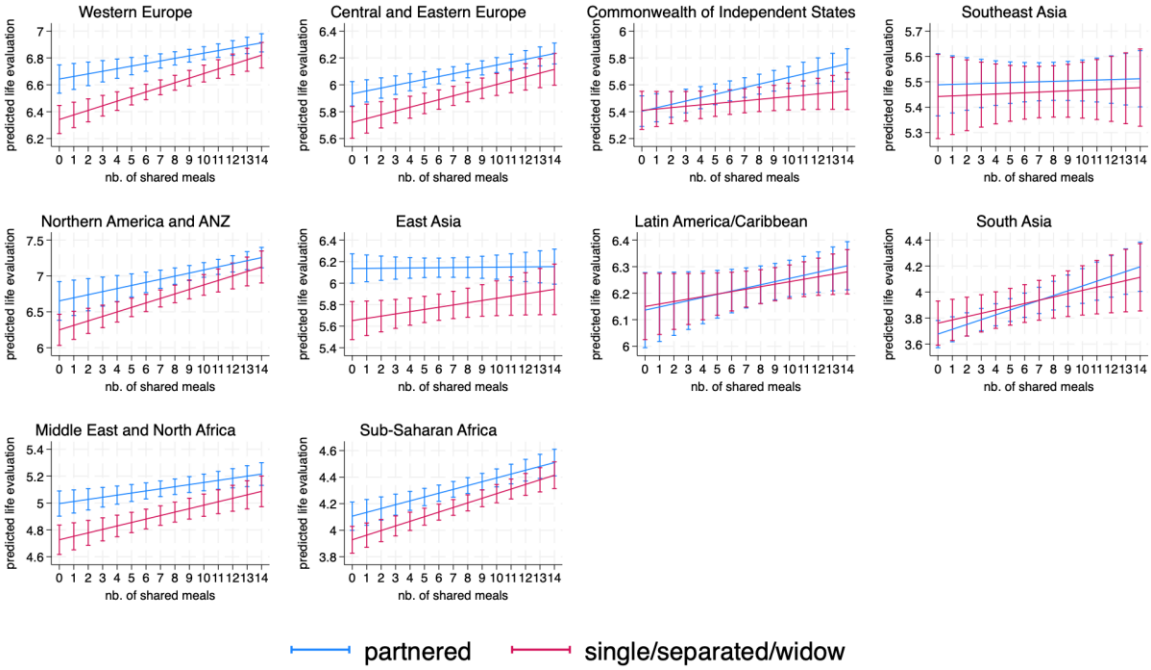
Note: *Two separate regressions per image. Controls: country fixed effects, income quintile, household size (except in Panel A), gender, age, age-squared, education group, employment group (except in Panel C), people's ability to meet basic needs for food. Life evaluation is expressed on a 0-10 scale. Data includes the 2023 sample. Predictive effect of the number of shared meals is assumed to be linear. Regressions use country-level survey weights.*

Figure A13: Predicted life evaluation among those living alone vs others, by the number of shared meals (world regions)



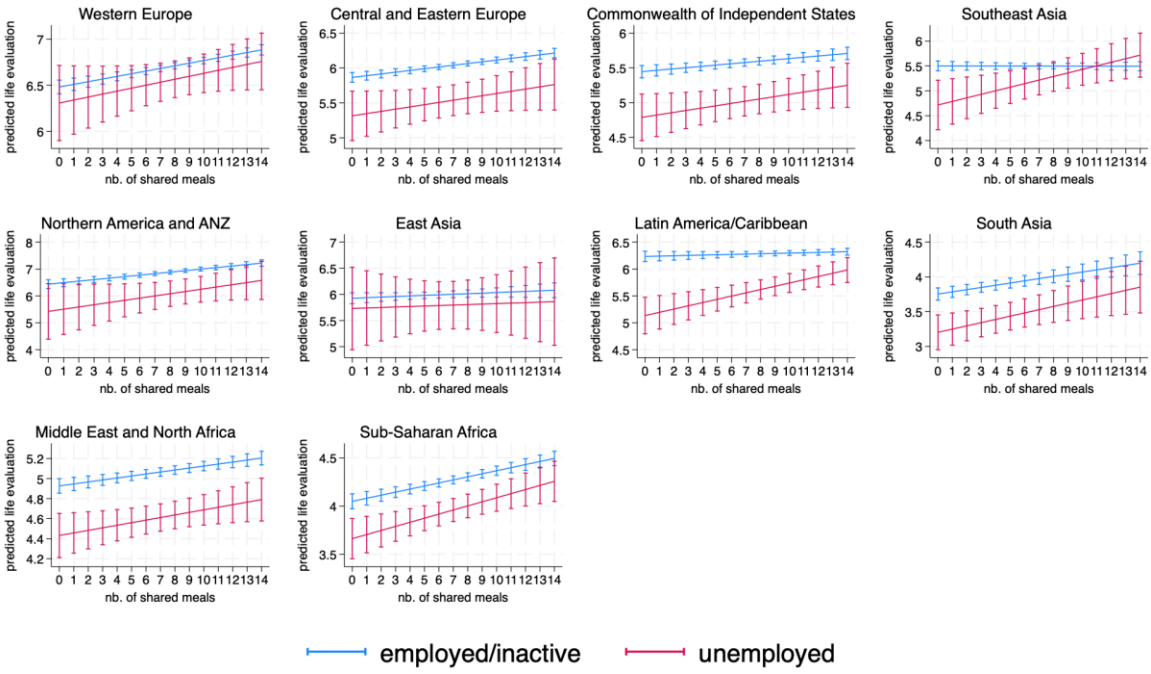
Note: *Two separate regressions per image. Controls: country fixed effects, income quintile, gender, age, age-squared, education group, employment group, people's ability to meet basic needs for food. Life evaluation is expressed on a 0-10 scale. Data includes the 2023 sample. Predictive effect of the number of shared meals is assumed to be linear. Regressions use country-level survey weights.*

Figure A14: Predicted life evaluation among those not partnered vs others, by the number of shared meals (world regions)



Note: *Two separate regressions per image. Controls: country fixed effects, income quintile, household size, gender, age, age-squared, education group, employment group, people's ability to meet basic needs for food. Life evaluation is expressed on a 0-10 scale. Data includes the 2023 sample. Predictive effect of the number of shared meals is assumed to be linear. Regressions use country-level survey weights.*

Figure A15: Predicted life evaluation among those unemployed vs others, by the number of shared meals (world regions)



Note: *Two separate regressions per image. Controls: country fixed effects, income quintile, household size, gender, age, age-squared, education group, people's ability to meet basic needs for food. Life evaluation is expressed on a 0-10 scale. Data includes the 2023 sample. Predictive effect of the number of shared meals is assumed to be linear. Regressions use country-level survey weights.*

Study 1 - Tables

Table A1: Number of meals shared with others in the last week by region, gender and age
Gallup World Poll (2022-23)

Category	n	Mean	CI: LL	CI: UL
Region				
Western Europe	21535	8.3	8.2	8.4
Central and Eastern Europe	18511	7.3	7.2	7.5
Commonwealth of Independent States	11555	6.7	6.5	6.9
Southeast Asia	10009	7.7	7.5	7.9
South Asia	8012	3.9	3.7	4.1
East Asia	5491	5.6	5.5	5.8
Latin America and Caribbean	20036	8.8	8.7	8.9
North America, Australia, and New Zealand	4010	8.3	8.1	8.5
Middle East and North Africa	16972	7.1	6.9	7.2
Sub-Saharan Africa	36006	7.1	7.0	7.2
Gender				
Male	70122	7.4	7.3	7.4
Female	82015	7.3	7.2	7.3
Age				
Under 30	44129	7.7	7.6	7.8
30-44	43342	7.4	7.4	7.5
45-59	31325	7.2	7.1	7.3
60+	33088	6.6	6.5	6.7

Table A2: Number of shared meals with others in the last week by country
Gallup World Poll (2022-23)

	Country	Total meals shared per week	Dinners shared per week	Lunches shared per week
1	Senegal	11.7	5.7	6.0
2	Gambia	11.2	5.2	6.0
3	Malaysia	11.0	5.6	5.4
4	Paraguay	10.8	5.2	5.6
5	Poland	10.7	5.1	5.6
6	Iran	10.6	5.2	5.4
7	Ecuador	10.4	5.2	5.2
8	Taiwan	10.2	5.5	4.7
9	Iceland	10.1	5.6	4.4
10	Colombia	10.1	5.1	5.0
11	Kazakhstan	10.0	5.1	4.9
12	Uruguay	9.8	4.9	4.9
13	Thailand	9.8	5.3	4.6
14	Peru	9.7	4.8	4.9
15	Mexico	9.7	4.8	4.9
16	Morocco	9.6	4.5	5.0
17	Slovakia	9.5	4.7	4.7
18	Portugal	9.5	4.9	4.7
19	Sweden	9.5	5.1	4.4
20	Mali	9.5	4.6	4.9
21	Yemen	9.5	4.5	4.9
22	Brazil	9.4	4.6	4.8

23	Argentina	9.3	4.7	4.7
24	Cyprus	9.2	4.6	4.5
25	South Africa	9.2	5.1	4.1
26	Costa Rica	9.2	4.6	4.6
27	Venezuela	9.2	4.5	4.6
28	Serbia	9.1	4.3	4.7
29	Spain	9.0	4.7	4.4
30	Indonesia	9.0	4.4	4.5
31	Italy	8.9	4.7	4.3
32	Malta	8.9	5.0	3.9
33	Denmark	8.9	4.9	4.0
34	Netherlands	8.8	4.8	4.0
35	Uganda	8.8	4.4	4.5
36	Bolivia	8.8	4.0	4.8
37	Norway	8.8	4.9	3.9
38	Slovenia	8.7	3.8	4.9
39	Czech Republic	8.7	4.4	4.3
40	Singapore	8.7	4.5	4.2
41	Dominican Republic	8.7	4.3	4.3
42	Uzbekistan	8.7	4.3	4.4
43	Tajikistan	8.7	4.3	4.4
44	Ireland	8.6	4.7	4.0
45	Bosnia Herzegovina	8.6	4.1	4.5
46	Luxembourg	8.5	4.4	4.2
47	Moldova	8.5	4.6	3.9
48	Australia	8.5	4.9	3.6
49	Mozambique	8.5	4.1	4.3
50	Israel	8.4	4.4	4.0
51	Hungary	8.4	4.2	4.2
52	New Zealand	8.4	4.9	3.5
53	Eswatini	8.4	4.5	3.9
54	Canada	8.4	4.8	3.6
55	Laos	8.4	4.4	4.0
56	Zambia	8.4	4.3	4.1
57	Montenegro	8.4	3.8	4.6
58	Palestine	8.4	3.4	5.0
59	Chile	8.4	3.4	5.0
60	Panama	8.3	4.3	4.1
61	Mauritania	8.3	4.1	4.2
62	Belgium	8.3	4.4	4.0
63	Tanzania	8.3	4.3	4.0
64	Mauritius	8.3	5.1	3.2
65	Romania	8.2	4.2	4.0
66	Kenya	8.1	4.7	3.4
67	Austria	8.1	4.0	4.0
68	Switzerland	8.1	4.2	3.9
69	Hong Kong	8.0	4.4	3.6
70	United States	7.9	4.7	3.2
71	El Salvador	7.8	4.0	3.8
72	Finland	7.7	3.8	3.9
73	Armenia	7.6	3.7	3.9
74	Guatemala	7.6	3.8	3.8
75	United Arab Emirates	7.6	3.8	3.8
76	Kosovo	7.6	3.5	4.0
77	Croatia	7.5	3.2	4.3
78	Greece	7.5	3.2	4.3
79	Egypt	7.5	3.6	3.9
80	Kuwait	7.5	3.6	3.9
81	Namibia	7.5	4.1	3.4
82	United Kingdom	7.5	4.2	3.3
83	Guinea	7.4	3.9	3.4
84	Latvia	7.3	3.8	3.5
85	Myanmar	7.2	3.5	3.6

86	Madagascar	7.1	3.6	3.5
87	Russia	7.1	3.6	3.5
88	Chad	7.1	3.8	3.3
89	Honduras	7.1	3.5	3.6
90	France	7.0	3.6	3.4
91	Germany	7.0	3.6	3.4
92	North Macedonia	7.0	3.0	4.0
93	Nigeria	6.9	4.1	2.8
94	Afghanistan	6.9	3.5	3.4
95	Niger	6.9	3.6	3.4
96	Zimbabwe	6.8	4.4	2.4
97	Tunisia	6.8	3.4	3.4
98	Togo	6.5	3.7	2.8
99	Turkey	6.5	3.8	2.6
100	Algeria	6.3	3.1	3.2
101	Jamaica	6.3	4.3	2.0
102	Ivory Coast	6.3	3.6	2.7
103	Nicaragua	6.2	3.1	3.2
104	Gabon	6.2	3.4	2.8
105	Botswana	6.2	3.5	2.7
106	Vietnam	6.2	3.0	3.2
107	Lesotho	6.0	3.2	2.8
108	Saudi Arabia	5.9	2.9	3.1
109	Cameroon	5.8	3.0	2.8
110	Iraq	5.7	2.8	2.9
111	Comoros	5.6	3.2	2.4
112	Kyrgyzstan	5.5	2.6	2.9
113	Ethiopia	5.5	2.6	2.9
114	Sierra Leone	5.4	3.2	2.2
115	Moldova	5.3	2.6	2.6
116	Malawi	5.2	2.5	2.7
117	Lebanon	5.1	2.0	3.1
118	Ghana	5.0	3.1	1.9
119	Cambodia	4.9	2.4	2.5
120	Albania	4.7	2.2	2.4
121	Congo Kinshasa	4.5	3.0	1.5
122	Azerbaijan	4.5	2.3	2.2
123	Bulgaria	4.4	2.2	2.2
124	Congo Brazzaville	4.3	2.3	2.0
125	South Korea	4.3	1.6	2.7
126	Liberia	4.3	2.3	2.0
127	Libya	4.1	2.1	2.1
128	Ukraine	4.1	1.7	2.4
129	Philippines	4.0	1.8	2.3
130	Benin	4.0	2.3	1.8
131	India	4.0	2.0	2.0
132	Japan	3.7	1.8	1.9
133	Jordan	3.4	1.4	2.0
134	Georgia	3.3	1.9	1.5
135	Nepal	3.3	1.7	1.6
136	Sri Lanka	3.2	1.4	1.8
137	Pakistan	3.1	1.4	1.7
138	Mongolia	3.0	1.1	1.9
139	Lithuania	2.9	1.3	1.6
140	Estonia	2.7	1.1	1.6
141	Bangladesh	2.7	1.3	1.4

Table A3: Dining alone and life evaluations around the world
Gallup World Poll (2022,2023)

	Western Europe	Central and Eastern Europe	Commonwealth of Independent States	Southeast Asia	Northern America and ANZ	East Asia	Latin America/ Caribbean	South Asia	Middle East and North Africa	Sub-Saharan Africa
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	Life evaluation (0-10)									
Dining alone	-0.393***	-0.264***	-0.351***	-0.145*	-0.772***	-0.193**	-0.177**	-0.312***	-0.312***	-0.155**
	(0.067)	(0.053)	(0.067)	(0.075)	(0.145)	(0.086)	(0.072)	(0.074)	(0.054)	(0.062)
Observations	21,219	18,704	10,049	9,528	3,874	5,417	18,610	7,676	16,504	33,394
R-squared	0.184	0.240	0.140	0.168	0.174	0.149	0.102	0.247	0.327	0.105

Life evaluations measured using the Cantril Ladder on a scale from 0 to 10. Individual-level data from the Gallup World Poll. Dining alone indicates eating all meals alone the previous week. Controlling for country fixed effects, income quintile, household size, gender, age, age-squared, education group, employment group, people's ability to meet basic needs for food. Standard errors in parentheses. Data weighted to be nationally representative. *** p<.01, ** p<.05, * p<.1

Table A4: Household size, sharing meals and life evaluations around the world
Gallup World Poll (2022,2023)

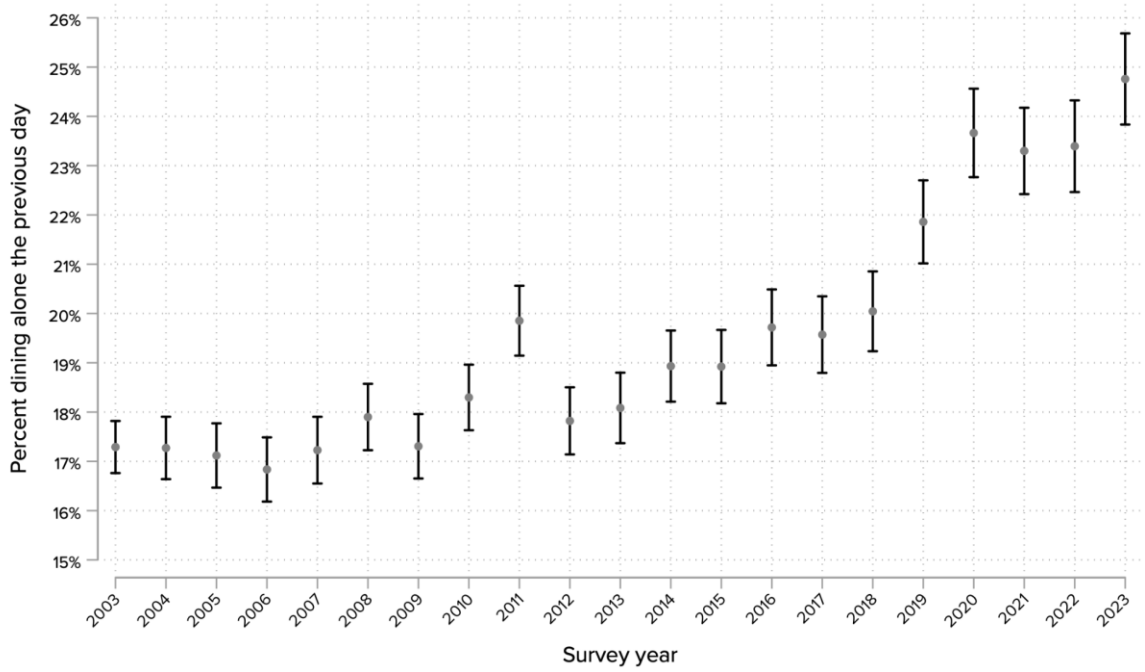
	Life evaluation (0-10)
nb. of shared meals	0.036***
	(0.005)
HH1	ref. category
	(.)
HH2	0.315***
	(0.041)
HH3	0.453***
	(0.045)
HH4	0.602***
	(0.046)
HH5+	0.611***
	(0.044)
HH1 # nb. of shared meals	ref. category
	(.)
HH2 # nb. of shared meals	-0.016***
	(0.005)
HH3 # nb. of shared meals	-0.011**
	(0.006)
HH4 # nb. of shared meals	-0.018***
	(0.006)
HH5+ # nb. of shared meals	-0.013**
	(0.005)
Observations	144,975
R squared	0.271

Life evaluations measured using the Cantril Ladder on a scale from 0 to 10. Individual-level data from the Gallup World Poll. HH1, HH2, HH3, HH4, HH5+ refer to the respective sizes of the household. Controlling for country fixed effects, income quintile, household size, gender, age, age-squared, education group, employment group, people's ability to meet basic needs for food. Standard errors in parentheses. Data weighted to be nationally representative. *** p<.01, ** p<.05, * p<.1.

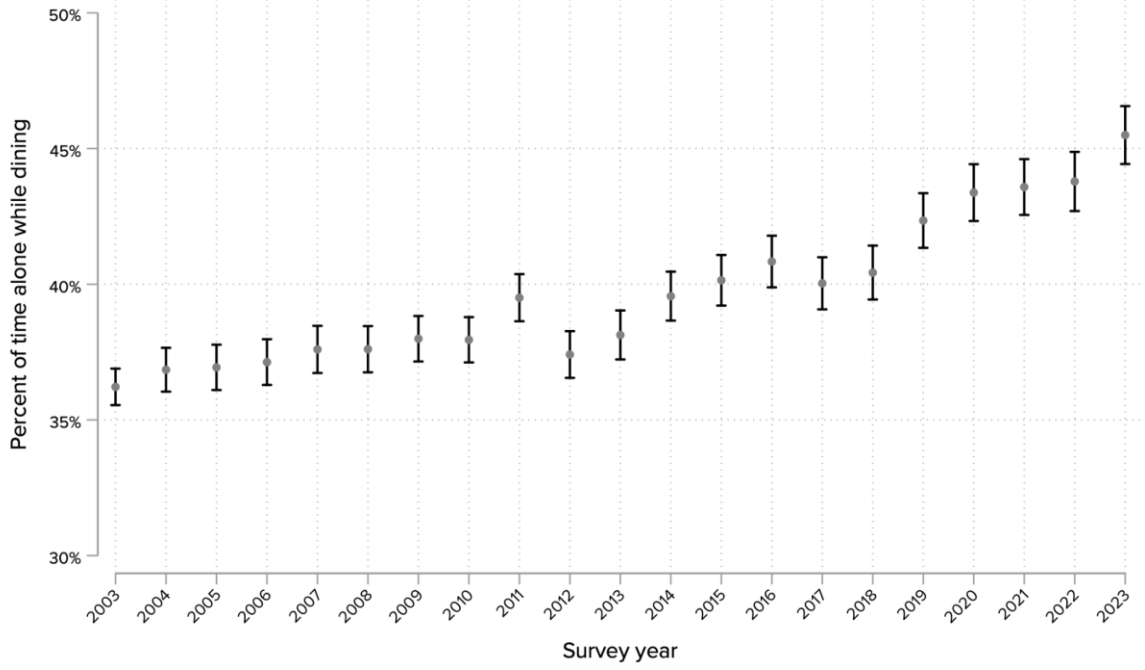
Study 2 - Figures

Figure B1: Robustness checks using alternative measures of meal sharing
American TIme Use Survey (ATUS)

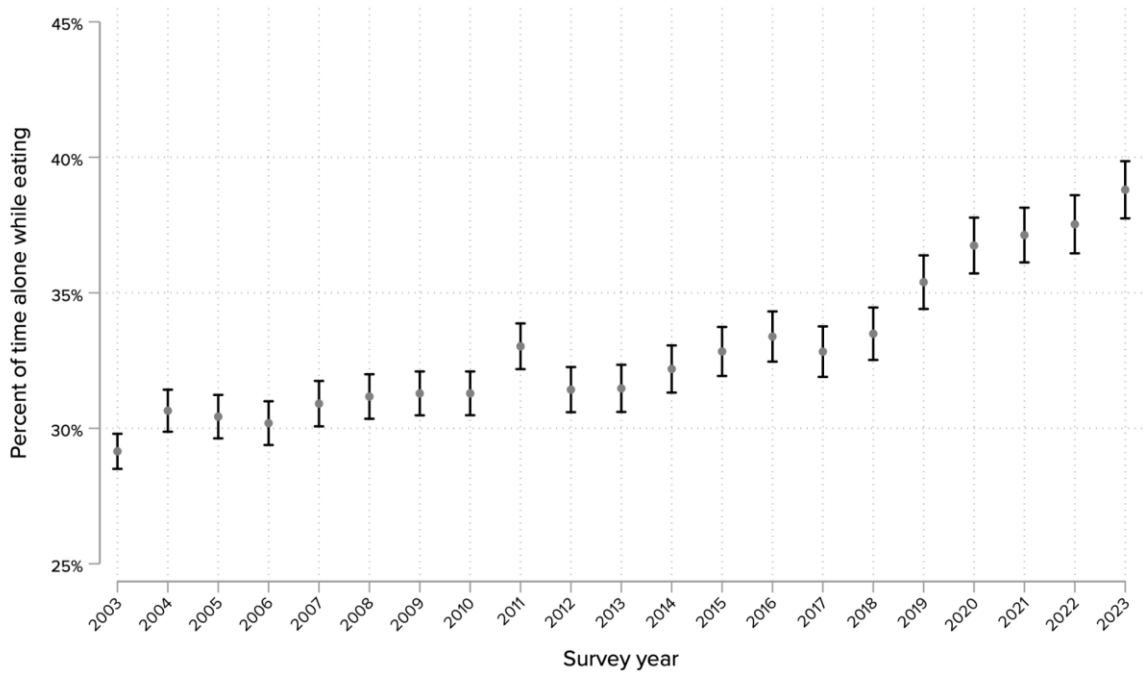
Panel A: Percent dining alone including time spent on food preparation



Panel B: Percent of time alone while dining



Panel C: Percent of time alone while dining including time spent on food preparation



Note: Data from the American Time Use Survey weighted to be representative of the general population. 95% confidence intervals.

Figure B2: Percent living alone in the United States
American Time Use Survey (ATUS)

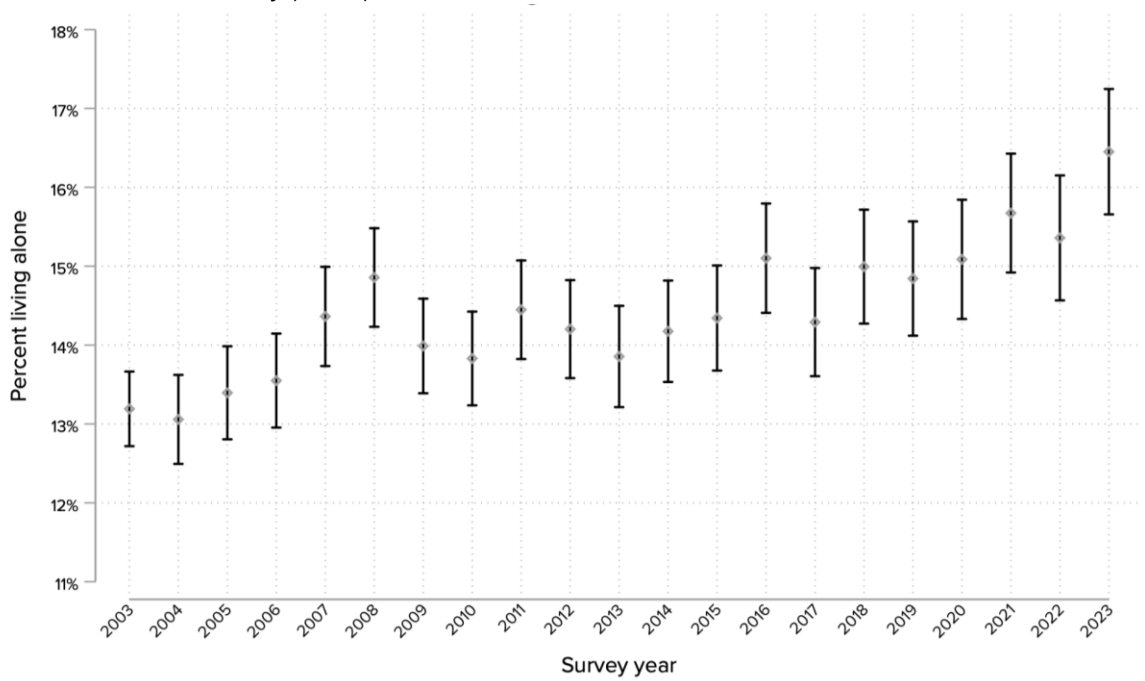
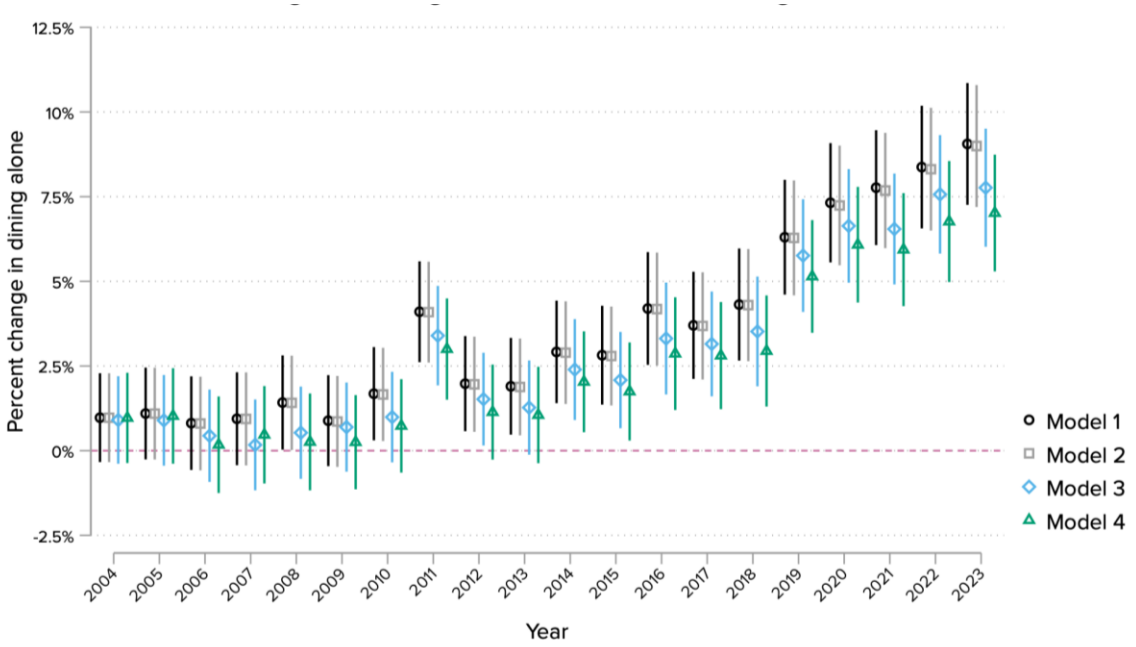
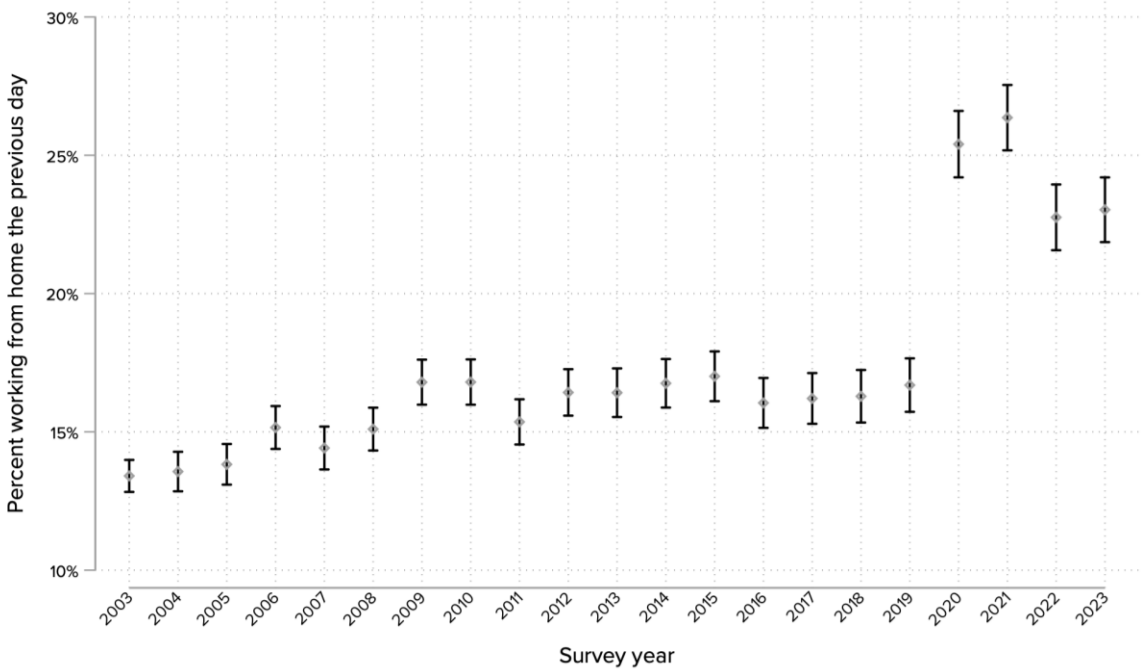


Figure B3: Estimating changing in dining alone in the USA controlling for other factors
American Time Use Survey (ATUS)



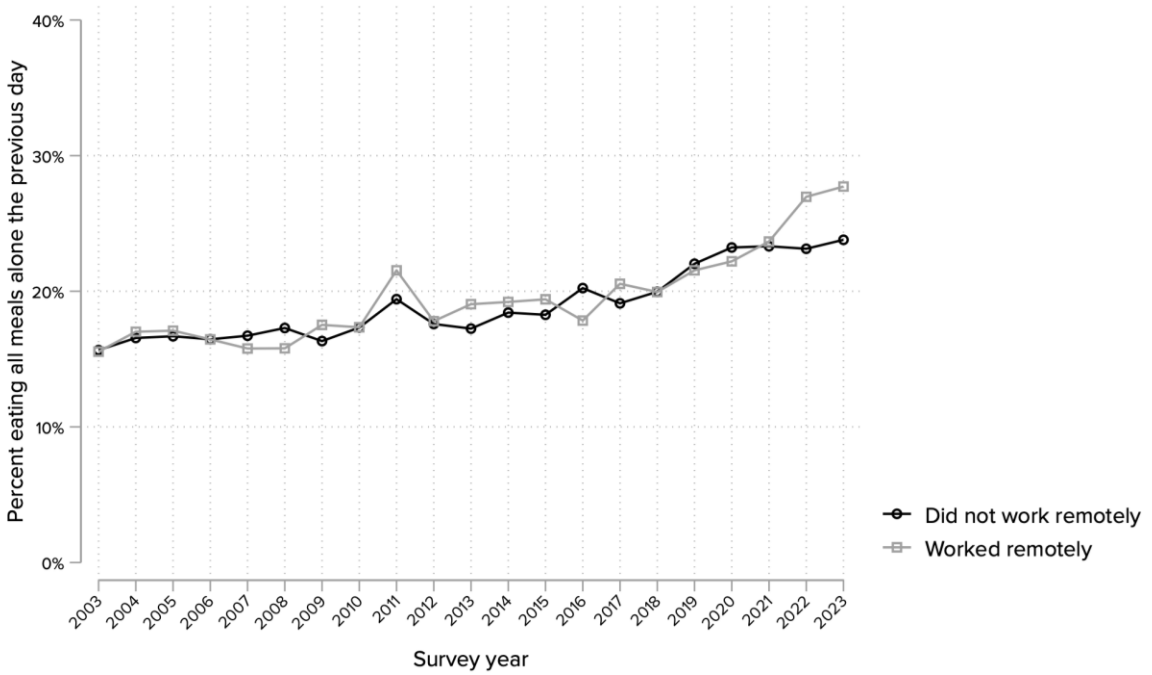
Note: Coefficients from four separate linear regression models estimating the percent change in dining alone since 2003. Data weighted to be representative of the general population. Sample limited to employed adults. Model 1 has no controls. Model 2 controls for working from home. Model 3 controls for living alone. Model 4 controls for working from home, living alone, county, age, sex, race, marital status, and income.

Figure B4: Percent of employed adults working from home
ATUS, 2003–2023



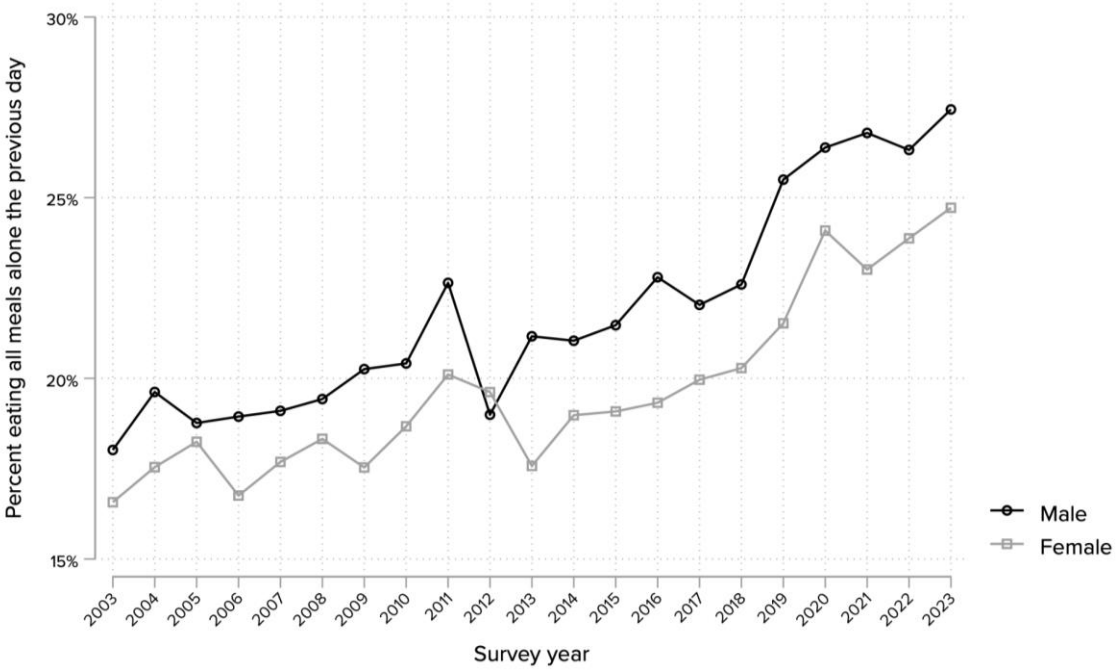
Note: *Data from the American Time Use Survey weighted to be representative of the general population. Sample limited to employed adults (n = 150,888). 95% confidence intervals displayed. Remote work estimated as the percent of respondents who report spending at least some of their time working from home in the previous day..*

Figure B5: Dining alone in the United States, by remote work
ATUS, 2003–2023



Note: *Data from the American Time Use Survey weighted to be representative of the general population. Sample limited to employed adults (n = 143,546). Working remotely measured as the percent of employed adults who report working from home at least part of the time in the previous day. Dining alone measured as the share of respondents in each survey year reporting eating all meals alone in the previous day. 95% confidence intervals displayed.*

Figure B6: Dining alone in the United States by gender
ATUS, 2003–2023



Note: *Data from the American Time Use Survey weighted to be representative of the general population (n = 234,185). 95% confidence intervals displayed. Dining alone measured as the share of respondents in each survey year reporting eating all meals alone in the previous day.*

Study 2 - Tables

Table B1: Dining alone and life evaluations in the United States
American Time Use Survey (2012, 2013, 2021)

	Overall	Male	Female	18-24	25-34	35-44	45-54	55-64	65+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Life evaluation (0-10)								
Dining alone	-.272***	-.279***	-.274***	-.319**	-.222**	-.183*	-.264**	-.422***	-.354***
	(.042)	(.062)	(.057)	(.14)	(.113)	(.104)	(.105)	(.098)	(.082)
Observations	27556	12307	15210	2424	4222	5197	4595	4538	6253
R-squared	.078	.106	.095	.158	.169	.152	.137	.142	.104

Life evaluations measured using the Cantril Ladder on a scale from 0 to 10. Individual-level data from the American Time Use Survey (2012, 2013, 2021). Dining alone indicates eating all meals alone the previous day. Controlling for age, sex, county, marital status, and race. Standard errors in parentheses. Data weighted to be nationally representative. *** p<.01, ** p<.05, * p<.1

Table B2: Dining alone and affect in the United States
American Time Use Survey (2012, 2013, 2021)

	(1) Happy	(2) Pain	(3) Sad	(4) Tired	(5) Stress
Dining alone	-.493***	.124***	.209***	.001	.134***
	(.041)	(.041)	(.036)	(.049)	(.045)
Observations	18754	18809	18795	18810	18814
R-squared	.069	.101	.067	.066	.063

Affect variables measured on a scale from 1 to 6. Dining alone indicates eating all meals alone the previous day. Activity-level data from the American Time Use Survey (2010, 2012, 2013, 2021). Dining alone indicates eating all meals alone the previous day. Controlling for age, sex, county, marital status, and race. Standard errors in parentheses. Data weighted to be nationally representative. *** p<.01, ** p<.05, * p<.1

Table B3: Dining alone, life evaluation, and affect (standardized)
American Time Use Survey (2012, 2013, 2021)

	(1) Life evaluation	(2) Happy	(3) Stress	(4) Sad	(5) Tired	(6) Pain
Dining alone	-.136***	-.255***	.127***	.157***	.04**	.102***
	(.021)	(.018)	(.019)	(.018)	(.018)	(.017)
Observations	27556	39810	39853	39848	39856	39854
R-squared	.078	.049	.05	.043	.058	.074

All dependent variables averaged at the individual-level standardized with mean 0 and standard deviation 1. Individual-level data from the American Time Use Survey (2012, 2013, 2021). Dining alone indicates eating all meals alone the previous day. Controlling for age, sex, county, marital status, and race. Standard errors in parentheses. Data weighted to be nationally representative.*** p<.01, ** p<.05, * p<.1

Table B4: Dining alone and life evaluation across demographic groups
American Time Use Survey (2012, 2013, 2021)

	(1)	(2)	(3)	(4)	(5)
	Life evaluation (0-10)				
Dining alone	-.272***	-.257***	-.227***	-.238***	-.233***
	(.042)	(.052)	(.051)	(.055)	(.058)
Married		.634***			
		(.041)			
Married *x* dining alone		-.064			
		(.087)			
Unemployed			-.325***		
			(.045)		
Unemployed *x* dining alone			-.111		
			(.08)		
Lives alone				-.047	
				(.066)	
Lives alone *x* dining alone				-.067	
				(.085)	
Remote work					-.018
					(.049)
Remote work *x* dining alone					-.029
					(.113)
County	X	X	X	X	X
Age	X	X	X	X	X
Race	X	X	X	X	X
Gender	X	X	X	X	X
Marital status	X	-	X	X	X
Employment status	X	X	-	X	-
Constant	7.246***	6.917***	7.374***	7.252***	7.256***
	(.018)	(.031)	(.023)	(.02)	(.023)
Observations	27556	27556	27556	27556	16463
R-squared	.083	.082	.083	.083	.095

Life evaluations measured using the Cantril Ladder on a scale from 0 to 10. Individual-level data from the American Time Use Survey (2012, 2013, 2021). All independent variables measured on a binary 0 to 1 scale. Dining alone indicates eating all meals alone the previous day. Standard errors in parentheses. Data weighted to be nationally representative. *** p<.01, ** p<.05, * p<.1