

Data supplement to: Angermeyer et al - Attitudes towards psychiatric treatment and people with mental illness: changes over two decades. *Br J Psychiatry* (doi: 10.1192/bjp.bp.112.122978)

Table DS1 Sociodemographic characteristics of the population samples

	1990		2011	
Gender				
Male	46.1	48.5	45.6	48.6
Female	53.9	51.5	54.4	51.4
Age, years				
18-25	12.6	12.3	8.5	11.3
26-45	36.5	38.0	30.7	31.9
46-60	25.3	24.2	28.5	26.9
61+	25.6	25.5	32.3	29.9
Educational attainment				
Still student	0.5	0.4	0.0	1.0
No schooling completed	3.2	2.5	3.4	4.0
8/9 years of schooling	54.2	55.8	39.6	38.5
10 years of schooling	25.9	25.8	39.6	29.3
12/13 years of schooling	16.2	15.5	17.5	27.1

¹ Data from the Federal Statistical Office of Germany

Table DS2 Changes in beliefs about the causes of mental disorders (multinomial logit regression)

Response category	Schizophrenia Predicted percentages			Major depression Predicted percentages			Alcohol dependence Predicted percentages			
	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	
Brain disease	A cause	53	62	8 (4,12)	39	30	-9 (-13,-5)	28	21	-7 (-11,-3)
	Undecided	23	19	-4 (-7,-1)	29	26	-2 (-6,2)	25	23	-1 (-5,2)
	Not a cause	24	20	-4 (-8,-1)	32	43	11 (7,15)	47	56	8 (4,13)
Heredity	A cause	40	43	4 (0,8)	40	29	-11 (-16,-7)	28	25	-3 (-7,1)
	Undecided	29	27	-3 (-6,1)	29	28	-2 (-5,2)	23	27	4 (0,8)
	Not a cause	31	30	-1 (-5,3)	30	43	13 (9,17)	48	47	-1 (-5,4)
Stressful life event	A cause	71	66	-4 (-8,-1)	75	73	-3 (-6,1)	80	73	-7 (-11,-3)
	Undecided	20	22	2 (-1,5)	16	18	2 (-1,5)	14	18	4 (1,7)
	Not a cause	10	12	2 (0,5)	9	9	0 (-2,3)	6	9	3 (1,5)
Work-related stress	A cause	60	61	1 (-3,5)	70	80	10 (6,13)	76	76	0 (-4,4)
	Undecided	24	22	-2 (-6,1)	20	13	-7 (-10,-3)	16	16	1 (-2,4)
	Not a cause	16	17	1 (-2,4)	10	7	-3 (-5,0)	8	7	-1 (-3,2)
Grown up in a broken home	A cause	54	31	-23 (-27,-19)	55	26	-29 (-33,25)	66	40	-27 (-31,-23)
	Undecided	27	30	3 (-1,7)	25	26	2 (-2,5)	21	29	7 (4,11)
	Not a cause	19	39	20 (16,24)	20	48	27 (26,31)	12	32	19 (16,23)
Lack of parental affection	A cause	38	32	-6 (-10,-2)	43	30	-14 (-18,-9)	47	39	-8 (-12,-4)
	Undecided	32	27	-5 (-9,-1)	35	28	-7 (-11,-3)	31	25	-6 (-10,-2)
	Not a cause	30	40	10 (1,14)	22	42	20 (16,24)	21	36	14 (10,18)

^a Due to rounding figures shown will not always equal the difference between predicted percentages
Statistically significant changes in bold figures

Table DS3 Changes of help-seeking recommendations in case of mental disorder (multinomial logit regression)

Response category	Schizophrenia Predicted percentages			Major depression Predicted percentages			Alcohol dependence Predicted percentages			
	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	
Psychiatrist	Recommend	65	81	16 (13,20)	54	67	13 (8,17)	43	52	10 (6,14)
	Undecided	17	10	-7 (-10,-4)	22	15	-6 (-10,-3)	22	22	0 (-4,3)
	Advise against	15	6	-9 (-11,-6)	21	15	-6 (-10,-3)	28	21	-7 (-11,-3)
	Don't know	3	2	-1 (-2,0)	3	3	0 (-1,1)	9	5	-3 (-5,-1)
Psychotherapist	Recommend	65	86	20 (17,24)	58	74	17 (13,21)	46	71	24 (20,29)
	Undecided	18	8	-10 (-13,-7)	23	13	-10 (-14,-7)	24	17	-7 (-10,-3)
	Advise against	12	4	-8 (-10,-6)	16	10	-6 (-9,-3)	21	9	-13 (-16,-9)
	Don't know	4	2	-2 (-3,0)	3	3	0 (-2,1)	9	4	-5 (-7,-3)
General practitioner	Recommend	69	74	5 (1,9)	74	77	3 (0,7)	73	83	10 (7,14)
	Undecided	14	13	-2 (-4,1)	14	14	-1 (-3,2)	12	12	0 (-2,3)
	Advise against	13	11	-2 (-4,1)	10	8	-2 (-4,1)	13	4	-10 (-12,-7)
	Don't know	4	2	-2 (-3,0)	2	1	-1 (-2,0)	2	1	-1 (-2,0)
Priest	Recommend	25	15	-10 (-13,-7)	28	15	-13 (-16,-9)	23	13	-10 (-14,-7)
	Undecided	26	22	-4 (-7,0)	29	19	-10 (-13,-6)	27	19	-8 (-11,-4)
	Advise against	45	50	5 (1,10)	40	55	15 (11,19)	43	57	15 (11,19)
	Don't know	4	13	8 (6,10)	4	11	7 (5,9)	8	11	3 (1,6)
Self-help group	Recommend	60	58	-2 (-6,2)	59	60	1 (-4,5)	81	79	-2 (-5,2)
	Undecided	21	19	-3 (-6,1)	21	21	0 (-3,3)	10	13	2 (0,5)
	Advise against	14	16	2 (-1,5)	15	13	-2 (-5,1)	5	5	0 (-1,2)
	Don't know	4	7	3 (1,5)	4	6	1 (0,3)	4	3	-1 (-3,0)

^a Due to rounding figures shown will not always equal the difference between predicted percentages
Statistically significant changes in bold figures

Table DS4 Changes of public treatment recommendations in case of mental disorder (multinomial logit regression)

Response category	Schizophrenia Predicted percentages			Major depression Predicted percentages			Alcohol dependence Predicted percentages			
	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	
Psychotropic medication	Recommend	30	53	23 (19,27)	26	35	9 (5,13)	14	28	15 (11,18)
	Undecided	26	21	-5 (-9,-2)	24	22	-2 (-6,2)	19	21	2 (-1,6)
	Advise against	36	16	-20 (-24,-16)	42	32	-10 (-14,-6)	53	41	-12 (-16,-7)
	Don't know	7	10	2 (0,4)	8	11	3 (0,5)	14	9	-5 (-8,-2)
Psychotherapy	Recommend	66	82	17 (13,20)	57	71	14 (10,18)	51	67	16 (12,21)
	Undecided	18	8	-9 (-12,-7)	21	12	-9 (-12,-6)	22	16	-6 (-9,-2)
	Advise against	10	4	-6 (-8,-4)	15	11	-4 (-7,-1)	18	10	-8 (-11,-5)
	Don't know	6	5	-2 (-3,0)	8	6	-2 (-4,0)	9	7	-3 (-5,0)
Relaxation techniques	Recommend	49	43	-6 (-11,-2)	50	52	3 (-1,7)	27	38	11 (7,15)
	Undecided	24	26	1 (-2,5)	26	24	-2 (-5,2)	24	25	1 (-2,5)
	Advise against	18	22	5 (1,8)	15	16	1 (-2,4)	35	27	-8 (-12,-4)
	Don't know	9	10	18(-2,3)	10	7	-2 (-5,0)	14	11	-4 (-7,-1)
Natural remedies	Recommend	20	24	4 (1,8)	21	27	7 (3,10)	11	20	9 (6,12)
	Undecided	24	25	1 (-3,4)	30	29	-2 (-5,2)	20	23	3 (0,7)
	Advise against	45	39	-6 (-10,-2)	37	33	-3 (-7,1)	56	43	-12 (-17,-8)
	Don't know	11	12	1 (-1,4)	12	11	-2 (-4,0)	13	13	0 (-3,3)
Meditation	Recommend	29	31	3 (-1,6)	30	40	10 (6,14)	18	29	11 (8,15)
	Undecided	28	29	2 (-2,5)	27	28	0 (-3,4)	21	28	7 (3,11)
	Advise against	30	27	-3 (-7,0)	28	21	-7(-10,-3)	44	31	-13 (-17,-9)
	Don't know	13	12	0 (-3,2)	15	11	-4 (-7,-1)	17	12	-6 (-9,-2)
Acupuncture	Recommend	13	17	3 (0,6)	12	19	6 (3,9)	10	16	6 (3,9)
	Undecided	19	23	3 (0,7)	23	23	0 (-3,4)	17	22	5 (1,8)
	Advise against	49	43	-6 (-10,-2)	45	39	-5 (-9,-1)	51	44	-7 (-12,-3)
	Don't know	18	18	0 (-3,3)	20	19	-1 (-5,2)	22	18	-4 (-7,0)

^a Due to rounding figures shown will not always equal the difference between predicted percentages
Statistically significant changes in bold figures

Table DS5 Changes of emotional reactions towards people with mental disorder (multinomial logit regression)

Response category	Schizophrenia			Major depression			Alcohol dependence			
	Predicted percentages			Predicted percentages			Predicted percentages			
	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	
I feel the need to help him/her	Agree	65	60	-5 (-9,-1)	61	68	7 (3,11)	55	53	-2 (-6,3)
	Undecided	25	26	1 (-3,5)	25	23	-3 (-6,1)	28	33	5 (1,9)
	Disagree	10	14	4 (1,6)	14	10	-4 (-7,-1)	18	14	-3 (-7,0)
I feel pity for him/her	Agree	59	68	9 (5,13)	60	67	7 (3,11)	56	56	0 (-4,4)
	Undecided	25	22	-3 (-6,1)	26	23	-3 (-7,1)	25	27	2 (-2,6)
	Disagree	16	9	-6 (-9,-3)	14	10	-4 (-7,-1)	19	17	-2 (-5,1)
I feel sympathy for him/her	Agree	23	24	1 (-3,4)	27	32	5 (1,9)	13	18	5 (2,8)
	Undecided	39	37	-1 (-5,3)	38	40	1 (-3,5)	30	31	1 (-3,5)
	Disagree	38	38	0 (-4,5)	35	29	-7 (-11,3)	57	51	-6 (-10,-1)
I feel uncomfortable	Agree	40	49	8 (4,13)	37	30	-6 (-10,-2)	45	42	-3 (-7,1)
	Undecided	24	24	0 (-4,4)	26	22	-4 (-7,0)	22	27	5 (1,9)
	Disagree	35	27	-8 (-12,-5)	38	48	10 (6,14)	34	32	-2 (-6,2)
He/she makes me feel insecure	Agree	32	30	-2 (-6,2)	24	21	-4 (-7,0)	27	25	-2 (-6,2)
	Undecided	22	30	8 (5,12)	25	26	1 (-3,5)	24	29	6 (2,10)
	Disagree	46	39	-6 (-11,-2)	51	54	3 (-1,7)	56	46	-4 (-8,1)
He/she scares me	Agree	30	37	7 (3,11)	23	20	-3 (-7,0)	27	26	-2 (-6,2)
	Undecided	23	23	0 (-3,4)	22	18	-4 (-7,-1)	22	23	1 (-2,5)
	Disagree	47	40	-7 (-12,-3)	55	62	7 (3,11)	51	51	0 (-4,5)
I feel annoyed by him/her	Agree	12	13	1 (-2,4)	9	9	0 (-3,2)	15	22	8 (4,11)
	Undecided	24	24	0 (-4,3)	19	19	0 (-3,3)	23	28	5 (1,9)
	Disagree	64	63	-1 (-5,3)	72	72	0 (-3,4)	62	50	-12 (-17,-8)
I react angrily	Agree	8	9	1 (-1,3)	6	9	3 (1,5)	15	24	9 (6,13)
	Undecided	16	16	0 (-3,3)	13	13	0 (-3,3)	19	23	4 (1,8)
	Disagree	76	74	-1 (-5,2)	81	78	-3 (-6,1)	67	53	-13 (-18,-9)
I am amused by something like that	Agree	4	5	1 (0,3)	4	3	-1 (-2,1)	3	4	1 (-1,3)
	Undecided	8	7	-1 (-3,1)	6	5	-1 (-3,0)	6	7	1 (-1,3)
	Disagree	89	88	0 (-3,2)	90	92	2 (0,4)	91	89	-2 (-5,0)

^a Due to rounding figures shown will not always equal the difference between predicted percentages
Statistically significant changes in bold figures

Table DS6 Changes of the public's desire for social distance from people with mental disorder (multinomial logit regression)

Response category		Schizophrenia			Major depression			Alcohol dependence		
		Predicted percentages			Predicted percentages			Predicted percentages		
		1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)	1990	2011	Change ^a (95% C.I.)
Have as neighbor	Accept	47	36	-10 (-15,-6)	53	57	4 (0,9)	32	32	0 (-4,4)
	Undecided	34	35	1 (-3,5)	31	28	-3 (-6,1)	33	37	4 (0,8)
	Reject	19	29	10 (6,13)	16	15	-2 (-5,1)	36	31	-4 (-9,0)
Work together	Accept	54	38	-16 (-20,-12)	55	54	-1 (-5,4)	34	34	0 (-4,4)
	Undecided	27	32	5 (2,9)	30	28	-2 (-6,2)	32	33	1 (-3,5)
	Reject	20	31	11 (7,14)	15	18	3 (-1,6)	35	34	-1 (-6,3)
Introduce to a friend	Accept	30	20	-10 (-14,-7)	35	32	-4 (-8,1)	19	16	-3 (-7,0)
	Undecided	31	27	-4 (-8,-1)	31	31	0 (-4,4)	25	24	-1 (-5,2)
	Reject	39	53	15 (11,19)	33	37	3 (-1,7)	56	60	5 (1,9)
Recommend for a job	Accept	21	11	-10 (-13,-7)	24	19	-5 (-8,-1)	10	11	1 (-2,3)
	Undecided	35	26	-8 (-12,-5)	36	36	-1 (-4,4)	28	23	-4 (-8,-1)
	Reject	44	63	18 (14,22)	40	45	5 (1,9)	62	66	3 (-1,8)
Rent a room	Accept	21	17	-4 (-7,-1)	26	34	8 (4,12)	13	14	1 (-2,4)
	Undecided	33	24	-9 (-13,-5)	37	31	-6 (-10,-2)	25	24	-1 (-4,3)
	Reject	46	58	13 (8,17)	37	35	-2 (-6,2)	62	61	-1 (-5,3)
Have marry into family	Accept	19	16	-3 (-7,0)	17	23	6 (3,10)	8	10	3 (0,5)
	Undecided	25	24	-1 (-5,2)	31	36	5 (1,9)	17	22	5 (1,8)
	Reject	56	60	5 (1,9)	52	41	-11 (-15,-7)	75	68	-7 (-11,-3)
Take care of children	Accept	10	6	-4 (-6,-2)	18	13	-4 (-7,-1)	6	7	0 (-2,2)
	Undecided	23	14	-8 (-12,-5)	25	25	0 (-4,4)	14	12	-2 (-5,1)
	Reject	67	79	12 (9,16)	58	62	4 (0,8)	80	81	1 (-2,5)

^a Due to rounding figures shown will not always equal the difference between predicted percentages
Statistically significant changes in bold figures