

Supplementary Table 1

Rates of suicidal thoughts and behaviours dependent on treatment of participants who skipped suicide related questions.

	Exclude (<i>n</i> = 13,751)			Include with 'no' (<i>N</i> = 14,868)			Include with 'yes' (<i>N</i> = 14,868)		
	<i>N</i>	%	95% CI	<i>N</i>	%	95% CI	<i>N</i>	%	95% CI
12 months -									
Thoughts	802	5.79	(5.3 – 6.3)	802	5.33	(4.9 – 5.8)	1975	13.29	(12.6 – 14.0)
Plans	320	2.15	(1.8 – 2.5)	320	1.97	(1.7 – 2.3)	1604	10.69	(10.0 – 11.3)
Attempts	49	0.32	(0.2 – 0.4)	49	0.30	(0.2 – 0.4)	1389	9.41	(8.8 – 10.0)
Lifetime -									
Thoughts	2015	13.34	(12.6 – 14.1)	2015	12.33	(11.7 – 13.0)	3133	19.89	(19.1 – 20.7)
Plans	930	6.17	(5.7 – 6.7)	930	5.71	(5.3 – 6.2)	2209	14.31	(13.6 – 15.0)
Attempts	303	2.02	(1.7 – 2.3)	303	1.87	(1.6 – 2.1)	1640	10.91	(10.3 – 11.6)

Supplementary Table 2

Rates of suicidal thoughts and behaviours among PES employees and Australian adults in the prior 12 months by age and sex.

	Less than 25	25-34 years	35-44 years	45-54 years	55-64 years	65 or older
PES Employees						
Male –						
Thoughts	2.4 (0.1 – 4.7)	4.1 (2.8 – 5.3)	6.4 (5.1 – 7.7)	6.4 (5.3 – 7.5)	6.0 (4.5 – 7.5)	10.5 (2.7 - 18.4)
Plans	n.p.	1.4 (0.7 – 2.2)	2.4 (1.6 – 3.2)	2.5 (1.9 – 3.2)	2.2 (1.3 – 3.2)	n.p.
Attempts	n.p.	n.p.	0.2 (0.0 – 0.5)	0.3 (0.1 – 0.6)	0.4 (0.0 – 0.8)	n.p.
Female –						
Thoughts	4.5 (1.5 – 7.6)	4.7 (3.4 – 6.1)	4.2 (3.0 – 5.4)	4.7 (3.3 – 6.0)	3.4 (1.4 – 5.5)	n.p.
Plans	1.6 (0.3 – 2.9)	2.0 (1.1 – 2.9)	0.7 (0.3 – 1.0)	1.8 (1.0 – 2.6)	1.8 (0.1 – 3.5)	n.p.
Attempts	0.5 (0.0 – 1.3)	0.5 (0.0 – 0.9)	0.2 (0.0 – 0.4)	0.3 (0.1 – 0.5)	n.p.	n.p.
Total –						
Thoughts	3.7 (1.6 – 5.7)	4.4 (3.4 – 5.3)	5.6 (4.7 – 6.5)	5.9 (5.0 – 6.8)	5.4 (4.1 – 6.7)	9.3 (2.6 – 16.1)
Plans	1.5 (0.4 – 2.6)	1.7 (1.1 – 2.3)	1.8 (1.2 – 2.3)	2.3 (1.8 – 2.8)	2.1 (1.3 – 2.9)	4.5 (0.0 – 9.1)
Attempts	0.8 (0.0 – 1.5)	0.3 (0.1 – 0.6)	0.2 (0.0 – 0.4)	0.3 (0.1 – 0.5)	0.3 (0.1 – 0.5)	0.3 (0.0 – 0.6)
Australian Adults						
Male –						
Thoughts	1.7 (0.7 – 22.7)	2.3 (0.8 – 23.8)	2.4 (0.7 – 24.1)	1.5 (0.8 – 22.3)	1.7 (0.7 – 22.6)	n.p.
Plans	0.5 (0.1 – 20.9)	0.5 (0.0 – 21.0)	0.6 (0.0 – 21.1)	0.2 (0.0 – 20.4)	n.p.	n.p.
Attempts	0.8 (0.0 – 21.8)	n.p.	n.p.	n.p.	n.p.	n.p.
Female –						

Thoughts	5.1 (3.2 – 7.0)	2.4 (1.4 – 3.4)	3.4 (1.7 – 5.0)	3.3 (1.2 – 5.5)	1.4 (0.0 – 2.7)	n.p.
Plans	1.6 (0.4 – 2.8)	0.6 (0.1 – 1.1)	0.8 (0.3 – 1.4)	0.9 (0.1 – 1.6)	n.p.	n.p.
Attempts	1.7 (0.7 – 2.6)	0.8 (0.1 – 1.6)	n.p.	n.p.	n.p.	n.p.
Total –						
Thoughts	3.4 (2.3 – 4.4)	2.3 (1.5 – 3.2)	2.9 (1.7 – 4.0)	2.4 (1.3 – 3.6)	1.5 (0.6 – 2.4)	1.1 (0.6 – 1.6)
Plans	1.0 (0.4 – 1.7)	0.5 (0.2 – 0.9)	0.7 (0.3 – 1.1)	0.5 (0.1 – 0.9)	n.p.	0.3 (0.0 – 0.7)
Attempts	1.1 (0.6 – 1.5)	0.8 (0.2 – 1.4)	0.2 (0.0 – 0.3)	0.2 (0.0 – 0.5)	n.p.	n.p.

Note. n.p. = not available for publication due to frequencies below 5.

Supplementary Table 3

Proportion (95% CI) of employees indicating suicidal thoughts and/or behaviours by service and demographic factors.

Less than 35 years	4.3 (3.4 – 5.1)	1.7 (1.2 – 2.2)	0.4 (0.2 – 0.6)	9.9 (8.6 – 11.1)	4.3 (3.5 – 5.2)	2.0 (1.4 – 2.5)
35-44 years	5.6 (4.7 – 6.5)	1.8 (1.2 – 2.3)	0.2 (0.0 – 0.4)	12.3 (11.0 – 13.6)	5.3 (3.5 – 6.2)	1.5 (1.1 – 2.0)
45-54 years	5.9 (5.0 – 6.8)	2.3 (1.8 – 2.8)	0.3 (0.1 – 0.5)	14.0 (12.7 – 15.2)	7.0 (4.4 – 7.9)	2.3 (1.7 – 2.8)
55 years or over	5.7 (4.4 – 6.9)	2.3 (1.5 – 3.1)	0.3 (0.0 – 0.6)	13.8 (12.0 – 15.7)	6.7 (5.4 – 7.9)	1.6 (1.0 – 2.2)
Total Service –						
Less than 2 years	2.1 (0.6 – 3.6)	0.4 (0.0 – 0.8)	0.1 (0.0 – 0.3)	6.9 (4.4 – 9.3)	2.9 (1.3 – 4.5)	1.6 (0.6 – 2.6)
2-5 years	4.7 (3.3 – 5.6)	1.7 (1.0 – 2.4)	0.6 (0.2 – 1.0)	11.0 (9.4 – 12.7)	4.6 (3.5 – 5.7)	2.8 (1.8 – 3.7)
5-10 years	4.9 (3.7 – 6.0)	1.8 (1.1 – 2.4)	0.2 (0.0 – 0.5)	10.5 (8.8 – 12.1)	4.7 (3.5 – 5.9)	1.4 (0.7 – 2.0)
Over 10 years	5.8 (5.2 – 6.5)	2.2 (1.8 – 2.6)	0.3 (0.1 – 0.4)	13.4 (12.6 – 14.3)	6.4 (5.8 – 7.0)	1.8 (1.5 – 2.1)
Sexual Orientation –						
Straight	5.0 (4.5 - 5.5)	1.8 (1.5 – 2.1)	0.3 (0.2 – 0.4)	11.7 (11.0 – 12.3)	5.2 (4.8 – 5.7)	1.6 (1.3 – 1.8)
LGBQ+	9.2 (7.1 – 11.3)	4.0 (2.7 – 5.4)	0.6 (0.2 – 1.0)	21.0 (17.9 – 24.0)	11.4 (9.0 – 13.7)	5.5 (3.8 – 7.2)
Operational Status –						
Non-Operational	4.9 (4.3 – 5.5)	1.9 (1.6 – 2.3)	0.3 (0.1 – 0.4)	11.2 (10.3 – 12.0)	5.1 (4.6 – 5.7)	1.5 (1.2 – 1.8)

Operational	6.0 (4.9 – 7.1)	2.3 (1.6 – 3.0)	0.5 (0.1 – 0.8)	14.5 (13.0 – 16.1)	6.9 (5.7 – 8.1)	2.9 (2.1 – 3.6)
Both	6.0 (4.7 – 7.3)	1.6 (1.1 – 2.1)	0.2 (0.0 – 0.3)	14.0 (12.2 – 15.8)	6.3 (5.1 – 7.6)	2.0 (1.3 – 2.7)
Marital Status –						
Single/Divorced/Widowed	7.7 (6.5 – 8.9)	3.1 (2.4 – 3.8)	0.7 (0.3 – 1.0)	16.9 (15.2 – 18.6)	8.8 (7.5 – 10.1)	3.6 (2.7 – 4.4)
In a relationship /Married	4.7 (4.2 – 5.2)	1.7 (1.4 – 2.0)	0.2 (0.1 – 0.3)	11.1 (10.4 – 11.8)	4.9 (4.4 – 5.4)	1.4 (1.2 – 1.7)
Dependent Children at Home –						
No	5.3 (4.6 – 6.1)	2.1 (1.6 – 2.6)	0.4 (0.1 – 0.6)	12.7 (11.6 – 13.9)	6.1 (5.3 – 6.9)	2.1 (1.6 – 2.5)
Yes	5.3 (4.7 – 5.9)	1.9 (1.6 – 2.2)	0.3 (0.1 – 0.4)	12.9 (11.2 – 12.9)	5.5 (4.9 – 6.1)	1.8 (1.4 – 2.1)
Location of Service –						
Metropolitan	5.1 (4.6 – 5.7)	2.0 (1.6 – 2.3)	0.3 (0.1 – 0.4)	12.0 (11.2 – 12.8)	5.5 (4.9 – 6.1)	1.8 (1.5 – 2.1)
Rural	5.6 (4.8 – 6.4)	2.0 (1.5 – 2.4)	0.4 (0.2 – 0.5)	12.9 (11.7 – 14.0)	6.0 (5.2 – 6.8)	2.0 (1.5 – 2.5)

Note: SES = State Emergency Service. LGBQ+ = Lesbian, Gay, Bisexual, Queer, Aromantic, Asexual or Pansexual.

Supplementary Table 4

Associations between workplace factors and suicidal thoughts and behaviours among the full sample.

	Odds Ratio (95% CI)		
	Suicidal Ideation (N = 14,868)	Suicide Plans (n = 801)	Suicide Attempts (n = 801)
Bullying –	1.38*** (1.22 – 1.57)	1.74*** (1.44 – 2.11)	2.21*** (1.42 – 3.44)
Perceived stigma (DSS) –	1.24*** (1.12 – 1.28)	1.27*** (1.08 – 1.49)	1.14 (0.80 – 1.63)
Organisational stigma –	0.94 (0.82 – 1.08)	0.89 (0.73 – 1.09)	1.08 (0.68 – 1.70)
Experience emotionally disturbing events –	1.12 (0.97 – 1.31)	1.14 (0.90 – 1.43)	1.50 (0.88 – 2.57)
Limited time to recover following trauma –	1.02 (0.88 – 1.18)	1.02 (0.81 – 1.27)	1.32 (0.79 – 2.19)
Work/family conflict (COPSOQ-II)	1.78*** (1.58 – 2.02)	1.79*** (1.48 – 2.17)	1.59* (1.03 – 2.45)
Low meaning of work (COPSOQ-II)	1.31*** (1.16 – 1.48)	1.10 (0.92 – 1.32)	1.59* (1.06 – 2.39)
Poor work recognition and fairness (COPSOQ-II)	1.14 (0.95 – 1.36)	1.15 (0.89 – 1.50)	1.59 (0.87 – 2.92)
Poor management support (COPSOQ-II)	1.10 (0.97 – 1.26)	1.09 (0.89 – 1.33)	0.79 (0.50 – 1.25)
Work Life Balance	0.91 (0.80 – 1.04)	1.01 (0.83 – 1.24)	1.24 (0.79 – 1.97)

PPV	14.4%	8.5%	0.00%
Sensitivity	31.4%	7.2%	0.00%
Specificity	89.3%	100.0%	100.0%

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. CI = Confidence Interval. ref = reference category. Gender, age, country of birth, and education controlled for in each regression. Significant associations are boldfaced.

COPSOQ-II = Copenhagen Psychosocial Questionnaire – II. DSS = Depression Stigma Scale. PPV = Positive Predictive Value.

Supplementary Table 5

Associations between personal factors and suicidal thoughts and behaviours among the full sample.

	Odds Ratio (95% CI)					
	Suicidal Ideation (N = 14,868)		Suicide Plans (n = 801)		Suicide Attempts (n = 801)	
Resilience (BRS) –	0.61* (0.40 – 0.94)		0.63 (0.33 – 1.19)		0.71 (0.17 – 2.91)	
Social support (2WSS) –	0.62*** (0.54 – 0.70)		0.63*** (0.52 – 0.77)		0.66 (0.42 – 1.04)	
PTSD score –	1.50*** (1.32 – 1.70)		1.70*** (1.41 – 2.05)		1.11 (0.73 – 1.69)	
Psychological distress (K10) –	2.02*** (1.75 – 2.34)		2.09*** (1.69 – 2.58)		4.14*** (2.64 – 6.54)	
Intermittent explosive anger –						
Low	1 (ref)		1 (ref)		1 (ref)	
Medium	1.31 (0.91 – 1.91)		0.88 (0.57 – 1.35)		1.04 (0.47 – 2.33)	
High	1.45** (1.14 – 1.83)		0.93 (0.50 – 1.72)		1.24 (0.46 – 3.38)	
Sleep quality –						
Good	1 (ref)		1 (ref)		1 (ref)	
Fair	1.15 (0.90 – 1.41)		1.11 (0.76 – 1.56)		0.66 (0.29 – 1.50)	

Poor	1.05	(0.79 – 1.31)	1.22	(0.80 – 1.77)	0.81	(0.35 – 1.90)
Illegal drug use (Past 12 months) –						
No	1	(ref)	1	(ref)	1	(ref)
Yes	2.36***	(1.66 – 3.35)	2.05**	(1.24 – 3.39)	1.42	(0.55 – 3.66)
Prescription medication (Past 12 months) –						
No	1	(ref)	1	(ref)	1	(ref)
Yes	1.83***	(1.36 – 2.39)	1.87***	(1.29 – 2.71)	4.14*	(2.06 – 8.31)
Daily binge drinking –						
No	1	(ref)	1	(ref)	1	(ref)
Yes	1.24	(0.39 – 4.00)	1.46	(0.18 – 6.95)	2.90	(0.26 – 31.80)

Model Performance (Full Sample, N=14,868)

PPV	20.4%	17.0%	22.0%
Sensitivity	53.9%	35.0%	16.9%
Specificity	88.0%	96.2%	99.5%

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. CI = Confidence Interval. ref = reference category. Gender, age, country of birth, and education controlled for in each regression. Significant associations are boldfaced. BRS = Brief Resilience Scale; K10 = Kessler 10-Item Psychological Distress Scale; 2WSS = 2-Way Social Support Scale. PPV = Positive Predictive Value.

Supplementary Table 6

Correlations between predictors.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	Mean	SD	Min	Max	
1.	Bullying Score	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.48	2.48	2	12	
2.	Perceived stigma	0.24	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85	2.39	3	15	
3.	Organisational commitment	-0.35	-0.51	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	3.71	5	25	
4.	Frequency of emotionally disturbing events	0.12	0.17	-0.24	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.77	1.10	1	5	
5.	Time off after trauma	-0.23	-0.33	0.53	-0.30	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.16	1.31	1	5	
6.	Low meaning of work	0.12	0.20	-0.33	-0.02	-0.28	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.29	1.82	0	8	
7.	Work/family conflict	0.23	0.30	-0.36	0.39	-0.37	0.22	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.44	2.09	0	8	
8.	Poor fairness/recognition	0.42	0.35	-0.60	0.21	-0.50	0.42	0.37	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3.45	1.85	0	8	
9.	Low supervisor support	0.34	0.28	-0.53	0.15	-0.46	0.35	0.30	0.67	1	-	-	-	-	-	-	-	-	-	-	-	-	3.33	2.23	0	8	
10.	Poor work/life balance	0.19	0.22	-0.38	0.35	-0.49	0.22	0.41	0.46	0.40	1	-	-	-	-	-	-	-	-	-	-	-	3.96	2.06	0	8	
11.	Resilience score	-0.23	-0.23	0.31	-0.12	0.24	-0.21	-0.33	-0.29	-0.23	-0.20	1	-	-	-	-	-	-	-	-	-	-	1.37	2.51	3	15	
12.	Receiving support score	-0.17	-0.25	0.34	-0.11	0.30	-0.26	-0.32	-0.32	-0.30	-0.26	0.42	1	-	-	-	-	-	-	-	-	-	20.76	5.47	6	30	
13.	PTSD symptoms	0.31	0.31	-0.36	0.25	-0.30	0.20	0.46	0.33	0.27	0.25	-0.54	-0.44	1	-	-	-	-	-	-	-	-	17.13	8.03	9	50	
14.	K10 distress score	0.30	0.28	-0.35	0.20	-0.29	0.26	0.46	0.36	0.29	0.25	-0.58	-0.49	0.78	-	-	-	-	-	-	-	-	8.91	6.87	0	40	
15.	Anger Score	0.20	0.22	-0.28	0.19	-0.22	0.20	0.32	0.26	0.21	0.18	-0.31	-0.30	0.53	0.53	1	-	-	-	-	-	-	1.83	1.77	0	16	
16.	Sleep quality	0.16	0.17	-0.22	0.14	-0.20	0.12	0.29	0.20	0.16	0.19	-0.29	-0.31	0.43	0.41	0.24	1	-	-	-	-	-	-	-	-	-	
17.	Prescription medication	0.05	0.05	-0.05	0.02	-0.06	0.04	0.04	0.06	0.04	0.05	-0.09	-0.06	0.11	0.10	0.07	0.05	1	-	-	-	-	-	-	-	-	
18.	Illegal drug use	0.03**	0.00	-0.01 ^{ns}	-0.01 ^{ns}	-0.02**	0.02**	0.01 ^{ns}	0.03	0.01 ^{ns}	0.04	-0.05	-0.02*	0.04	0.04	0.02*	0.01 ^{ns}	0.84	1	-	-	-	-	-	-	-	-
19.	Daily binge drinking	0.02*	0.03	-0.05	0.06	-0.02	0.00 ^{ns}	0.05	0.02*	0.03	0.01 ^{ns}	-0.02	-0.06	0.09	0.08	0.11	0.05	-0.68	-0.71	1	-	-	-	-	-	-	-
20.	Suicidal thoughts 12month	0.11	0.09	-0.10	0.05	-0.07	0.09	0.12	0.11	0.10	0.07	-0.19	-0.20	0.27	0.30	0.22	0.13	0.06	0.02**	0.05	1	-	-	-	-	-	
21.	Suicide plan 12month	0.09	0.06	-0.07	0.04	-0.05	0.04	0.08	0.07	0.07	0.05	-0.13	-0.12	0.21	0.22	0.15	0.09	0.05	0.02*	0.04	0.59	1	-	-	-	-	

22.	Suicide attempt 12month	0.04	0.01 ^{ns}	-0.02*	0.02**	-0.01 ^{ns}	0.01 ^{ns}	0.04	0.04	0.01 ^{ns}	0.03	-0.06	-0.06	0.10	0.13	0.10	0.05	0.06	0.02*	0.01 ^{ns}	0.23	0.38	1	-	-	-	-
-----	-------------------------	------	--------------------	--------	--------	---------------------	--------------------	------	------	--------------------	------	-------	-------	------	------	------	------	------	-------	--------------------	------	------	---	---	---	---	---

Note. All correlations significant at $p < .001$ unless otherwise noted. ^{ns} = non-significant, * $p < .05$, ** $p < .01$. Spearman correlations used for categorical predictors.