

Data supplement

Table DS1 Impact of risk factors on scoring above the cut-off (score 4+) on the General Health Questionnaire (GHQ-12) in the Operational Mental Health Needs Evaluation (OMHNE) sample^a

Risk factors	Number of participants in univariate analysis, <i>n</i> ^b	Unadjusted odds ratio (95% CI)	Multivariate model, adjusted odds ratio ^c (95% CI) (<i>n</i> = 511) ^b
<i>Demographic variables</i>			
Age, years			
<25	257	1.00	1.00
25–34	217	0.56 (0.36–0.87)	0.44 (0.25–0.77)
≥35	122	0.28 (0.15–0.54)	0.38 (0.15–0.96)
Gender			
Male	523	1.00	
Female	67	1.93 (1.10–3.38)	2.37 (1.21–4.68)
Relationship status			
Not in long-term relationship	222	1.00	–
In long-term relationship	371	0.92 (0.61–1.38)	–
<i>Military factors</i>			
Service			
Army	488	3.41 (1.03–11.29)	1.47 (0.41–5.27)
Royal Navy/Royal Marines	39	1.00	1.00
Royal Air Force	75	2.75 (0.74–10.24)	1.56 (0.38–6.47)
Rank			
Commissioned officer	74	0.37 (0.17–0.81)	0.89 (0.33–2.38)
Senior non-commissioned officer	102	0.45 (0.24–0.84)	0.94 (0.38–2.35)
Junior rank	425	1.00	1.00
Reserve			
Yes	33	1.24 (0.54–2.81)	–
No	569	1.00	–
Individual augmentee			
Yes	119	1.66 (0.94–2.91)	–
No	430	1.00	–
Within Harmony guidelines ^d			
Yes	533	1.00	–
No	69	0.78 (0.41–1.51)	–
Total number of tours	602	0.92 (0.80–1.05)	–
<i>Current deployment</i>			
Time in theatre, weeks	570	1.01 (0.97–1.04)	–
Location in theatre			
Inside Contingency Operating Base	334	1.00	–
Outside Contingency Operating Base	264	1.05 (0.71–1.57)	–
Frequency in hostile area			
Weekly/monthly/never	446	1.00	–
Several times a week/daily	133	1.14 (0.71–1.81)	–
Felt in danger of being killed			
No	424	1.00	–
Yes	170	1.46 (0.95–2.22)	–
Combat exposure	577	1.02 (0.99–1.05)	–
<i>Unit factors</i>			
Unit cohesion	587	0.68 (0.56–0.81)	0.79 (0.63–0.98)
Leadership	581	0.58 (0.48–0.69)	0.60 (0.48–0.75)
<i>Forces health protection factors</i>			
Received stress brief			
No	196	1.00	1.00
Yes	350	0.55 (0.36–0.83)	0.57 (0.35–0.93)
Rest and recuperation			
No	339	1.00	–
Yes	249	1.00 (0.67–1.49)	–

a. Statistically significant results ($P < 0.05$) are highlighted in bold.
b. Numbers may not add up to 611 because of missing data.
c. Adjusted for those variables found to be significant ($P < 0.05$) in univariate analysis (age, gender, service, rank, unit cohesion, leadership, receipt of a stress brief).
d. Harmony guidelines state that the period spent on operational duties should be 12 months or less in 36 months.

Table DS2 Negative binomial regression analysis showing risk factors for symptoms of post-traumatic stress disorder measured by the PTSD Checklist^a

Risk factors	Participants in univariate analysis, <i>n</i> ^b	Unadjusted incidence rate ratios (95% CI)	Multivariate model, adjusted incidence rate ratios ^c (95% CI) (<i>n</i> = 503) ^b
<i>Demographic variables</i>			
Age, years			
<25	256	1.00	1.00
25–34	217	1.00 (0.77–1.31)	1.00 (0.74–1.37)
≥35	122	0.71 (0.52–0.98)	1.00 (0.65–1.54)
Gender			
Male	525	1.00	–
Female	65	1.00 (0.75–1.62)	–
Relationship status			
Not in long-term relationship	221	1.00	–
In long-term relationship	370	1.18 (0.92–1.52)	–
<i>Military factors</i>			
Service			
Army	493	1.21 (0.74–1.98)	–
Navy/marines	39	1.00	–
Royal Air Force	73	1.24 (0.69–2.24)	–
Rank			
Commissioned officer	74	0.58 (0.40–0.84)	0.84 (0.54–1.31)
Senior non-commissioned officer	103	0.69 (0.50–0.95)	0.81 (0.54–1.23)
Junior rank	427	1.00	1.00
Reserve			
Yes	34	1.30 (0.77–2.18)	–
No	571	1.00	–
Individual augmentee			
Yes	119	1.28 (0.95–1.73)	–
No	431	1.00	–
Within Harmony guidelines ^d			
Yes	536	1.17 (0.80–1.70)	–
No	69	1.00	–
Total number of tours	605	1.05 (0.97–1.13)	–
<i>Current deployment</i>			
Time in theatre, weeks	573	1.02 (0.997–1.04)	–
Location in theatre			
Inside Contingency Operating Base	337	1.00	–
Outside Contingency Operating Base	264	0.97 (0.76–1.24)	–
Frequency in hostile area			
Weekly/monthly/never	449	1.00	–
Several times a week/daily	132	1.21 (0.90–1.61)	–
Felt in danger of being killed			
No	427	1.00	1.00
Yes	170	1.77 (1.36–2.29)	1.35 (1.01–1.81)
Combat exposure	581	1.04 (1.01–1.06)	1.02 (0.99–1.05)
<i>Unit factors</i>			
Unit cohesion	586	0.91 (0.80–1.03)	–
Leadership	581	0.72 (0.65–0.80)	0.73 (0.66–0.82)
<i>Health protection factors</i>			
Received stress brief			
No	193	1.00	1.00
Yes	352	0.59 (0.45–0.76)	0.71 (0.55–0.92)
Rest and recuperation			
No	342	1.00	–
Yes	249	1.19 (0.93–1.52)	–

a. Statistically significant results ($P < 0.05$) are highlighted in bold.

b. Numbers may not add up to 611 because of missing data.

c. Adjusted for those variables found to be significant ($P < 0.05$) in univariate analysis (age, rank, danger of being killed, combat exposure, leadership, stress brief).

d. Harmony guidelines state that the period spent on operational duties should be 12 months or less in 36 months.

Table DS3 Ordinal logistic regression analysis showing risk factors for poorer self-rated health^a

Risk factors	Participants in univariate analysis, n ^b	Unadjusted odds ratio (95% CI)	Multivariate model, adjusted odds ratio ^c (95% CI) (n = 517) ^b
<i>Demographic variables</i>			
Age, years			
<25	256	1.00	
25–34	219	0.84 (0.61–1.17)	
≥35	123	0.92 (0.62–1.37)	
Gender			
Male	527	1.00	–
Female	67	1.26 (0.78–2.03)	–
Relationship status			
Not in long-term relationship	222	1.00	–
In long-term relationship	373	1.04 (0.77–1.41)	–
<i>Military factors</i>			
Service			
Army	495	1.05 (0.59–1.89)	
Royal Navy/Royal Marines	39	1.00	–
Royal Air Force	75	0.75 (0.37–1.52)	–
Rank			
Commissioned officer	76	0.47 (0.30–0.75)	0.50 (0.30–0.85)
Senior non-commissioned officer	103	0.91 (0.61–1.34)	0.95 (0.61–1.49)
Junior rank	429	1.00	1.00
Reserve			
Yes	34	2.07 (1.07–4.01)	1.63 (0.79–3.36)
No	575	1.00	1.00
Individual augmentee			
Yes	120	1.41 (0.97–2.06)	–
No	433	1.00	–
Within Harmony guidelines ^d			
Yes	540	1.00	–
No	69	0.69 (0.42–1.11)	–
Total number of tours	609	0.96 (0.87–1.06)	–
<i>Current deployment</i>			
Time in theatre, weeks			
	576	0.98 (0.95–1.01)	–
Location in theatre			
Inside Contingency Operating Base	339	1.00	–
Outside Contingency Operating Base	266	0.91 (0.68–1.21)	–
Frequency in hostile area			
Weekly/monthly/never	452	1.00	–
Several times a week/daily	133	1.09 (0.77–1.56)	–
Felt in danger of being killed			
No	426	1.00	–
Yes	170	1.17 (0.85–1.61)	–
Combat exposure	584	1.00 (0.97–1.02)	–
<i>Unit factors</i>			
Unit cohesion	589	0.75 (0.65–0.86)	0.80 (0.68–0.94)
Leadership	582	0.83 (0.74–0.93)	0.91 (0.79–1.04)
<i>Health protection factors</i>			
Received stress brief			
No	197	1.00	1.00
Yes	351	0.67 (0.49–0.93)	0.75 (0.53–1.05)
Rest and recuperation			
No	345	1.00	1.00
Yes	250	0.64 (0.47–0.87)	0.58 (0.42–0.81)

a. Statistically significant results ($P < 0.05$) are highlighted in bold.
b. Numbers may not add up to 611 because of missing data.
c. Adjusted for those variables found to be significant ($P < 0.05$) in univariate risk analysis (rank, reservist status, cohesion, leadership, receipt of a stress brief, rest and recuperation).
d. Harmony guidelines state that the period spent on operational duties should be 12 months or less in 36 months.