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Third location decompression for individual augmentees after a military deployment

M. Fertout*, N. Jones* and N. Greenberg

Academic Centre for Defence Mental Health, Department of Psychological Medicine, Institute of Psychiatry, King's College London, Weston Education Centre, 10 Cutcombe Road, London SE5 9RJ, UK.

*Joint first authors.

Correspondence to: M. Fertout, Academic Centre for Defence Mental Health, Department of Psychological Medicine, Institute of Psychiatry, King's College London, Weston Education Centre, 10 Cutcombe Road, London SE5 9RJ, UK. Tel: +44 (0)20 7848 5214; fax: +44 (0)20 7848 5397; e-mail: mohammed.fertout@kcl.ac.uk

Background Third location decompression (TLD) refers to the initial process, undertaken by military personnel at the end of an operational deployment, whereby adjustment from military operations commences. TLD has been shown to be useful for personnel in formed units (FU).

Aims To examine the subjective utility of TLD for personnel deployed as individual augmentees (IAs) by comparing their experience with FU personnel.

Methods One hundred and twenty-nine IAs and 121 FU personnel completed a short survey at the end of the decompression period asking about operational exposures, perceived usefulness, stigma, concerns about readjustment and post-traumatic stress symptoms (PTSS).

Results The strongest predictor of perceived utility was the desire to participate prior to arrival at the facility. FU personnel were more likely to want to participate in TLD than IAs (60% versus 30%); however, on completion, IAs reported high usefulness ratings with 78% of IAs and 84% of FU personnel finding it useful or a little useful. More FU personnel reported substantial PTSS, reporting that high numbers of PTSS were associated with finding the briefings that dealt with traumatic stress useful. Personnel reporting substantial operational exposures also reported greater levels of PTSS.

Conclusions IAs found TLD to be as useful as FU personnel; therefore, exclusion from the TLD process is not warranted. Military commanders should consider restricting TLD to both IA and FU personnel deemed to be at increased risk of a difficult adjustment due to greater operational exposure. Our data suggest that smaller numbers of IA personnel would fall into this group.

Key words Armed forces; education; mental health; military; post-deployment; post-traumatic stress; psychosocial; PTSD; stigma.

Introduction

Organizations that routinely deploy staff to high threat or dangerous roles have moral, and in some cases legal, obligations to mitigate the psychological impact upon their personnel. The UK armed forces (UK AF) currently make use of a process called third location decompression (TLD) to allow personnel who have deployed together to begin to mentally and physically 'unwind' together [1]. TLD is the first step of a comprehensive post-operational stress management process [2]. For the last 5 years, the UK AF has conducted TLD at a purpose-developed facility in Cyprus at which personnel spend 24–36 h going through a number of discrete TLD elements including psychoeducation and group and individual activities intended to facilitate post-deployment adjustment. TLD aims to foster relaxation, encourage social support and allow for an informal discussion of operational experiences [3–5]. TLD also allows for a controlled reintroduction to alcohol during an evening social function in order to mitigate the potential for post-deployment alcohol misuse [6].

Since 2006, only formed units (FU) have attended TLD as it was deemed to be primarily a group-based process. Individual augmentees (IAs), who are personnel who do not deploy with their usual home unit, have not had routine access to TLD. IAs' deployment experiences often differ from FU personnel in that they are less likely to serve in frontline combat roles and they may find accessing social support more difficult while deployed. IAs are often specialists who may be considered similar to non-military workers in conflict zones and dangerous environments. Examples of IAs include medical, logistic, engineering and aviation specialists. Occasionally, IAs

may serve as reinforcements for combat units. When deployed, IAs often work in small teams that come together for deployments. IAs who serve with FU's when deployed are usually treated as FU personnel including attending TLD. To date, no formal assessment has been undertaken of how IAs who have not deployed with a FU might receive the TLD process. This survey therefore aims to assess IA perceptions of TLD by comparing them with those of FU personnel undertaking TLD process concurrently.

Methods

This study took place in March 2010, using a similar methodology to that of a previous study of FU personnel conducted in 2008 [1]. Since this survey was initially conducted, it has become mandatory UK policy for all personnel including IAs to attend TLD. Surveys were administered to IAs and a comparison group of FU personnel transiting the TLD facility in Cyprus. All personnel were returning from UK operations in Afghanistan; surveys were completed at the end of TLD just before leaving Cyprus on a voluntary basis. Ethical approval was gained from the Ministry of Defence research ethics committee (study number 0834/189 approved on 16 October 2008) and written consent was obtained from all participants.

The survey tool, which took 5–10 min to complete, included basic demographic information, previous deployment and operational experiences, perceived usefulness of the TLD components, stigmatizing beliefs about mental health and perceived barriers to care [7], homecoming readjustment concerns and the Primary Care-Postraumatic Stress Disorder (PC-PTSD) Scale [8,9] and a brief four-item primary care screening instrument for possible post-traumatic stress disorder (PTSD). Those endorsing three or four items on the PC-PTSD were classified as possible PTSD cases [8,9]. Sex was indicated by a binary survey item, however, where this was missing the use of a sex-specific service number for those enlisted prior to 2007 and forename was utilized. Data were excluded or treated as missing where these variables could not be accurately assessed. Combat role or otherwise was established by examining the deployed unit. Responses were classified as missing when questions were either not answered or answered ambiguously.

Questionnaire items that formed a group were combined to produce compound variables: an operational exposure scale was generated by combining 'yes' responses to being in serious danger many times, encountering daily or multiple daily base attacks and operating in a hostile area for periods of <1 month. A second binary operational exposure variable was then generated from this scale comparing two or more positive responses to all others. A composite stigma measure was generated by combining the 'strongly agree' and 'agree' responses to each of the seven stigma items to produce a single positive or negative response to each item. A binary stigma variable was then generated, which compared three or more positive responses with all others. Adjustment concerns were examined by creating a variable where the 'often' and 'all of the time' responses to each of the four adjustment concern items were combined to generate a single positive or negative response to each item. Personnel who scored positively to three or four adjustment items were classed as having significant adjustment concerns. Personnel were designated as having a combat role if they either reported being from the combat arms or had deployed with a combat unit. For the purpose of analysis, combat personnel were compared with all others. Junior ranks were compared with all other ranks with a command function.

Data analysis was conducted using the statistics package for social sciences SPSS—version 15 [10]. Categorical variables and the differences in perceived usefulness ratings between the IA and FU groups were examined using Pearson's chi-squared (χ^2) test. Statistical significance was defined as $P \leq 0.05$. Odds ratios (ORs) and 95% confidence intervals (CIs) examined the association between perceived usefulness, demographic, operational, psychological characteristics and perceived usefulness ratings of the combined IA and FU groups. Multivariable logistic regression examined the effect of adjusting for those variables that were significant in the unadjusted model.

Results

Two hundred and fifty (129 IAs and 121 FU) personnel completed the survey during TLD. It was not possible to determine that an accurate response rate as refusal to take part was not recorded; however, our previous TLD survey had a response rate in excess of 85% and we have established that refusal to complete this survey was low. The demographic characteristics of the sample are shown in Table 1. The IA sample contained significantly fewer combat personnel than the FU sample (2% versus 34%, $\chi^2 = 41.9$, df = 1, $P \leq 0.001$) and significantly fewer junior ranks (20% versus 39%, $\chi^2 = 11.0$, df = 2, $P < 0.01$). The gender mix was not significantly different.

Twenty-seven per cent ($n = 33$) of IAs found TLD useful and 51% ($n = 63$) a little useful, whereas 36% ($n = 42$) of FU personnel found it useful and 48% ($n = 57$) found it a little useful. The difference in usefulness ratings between the two groups was not statistically significant. IAs were significantly more likely to be attending TLD for the first time (92% versus 57%, $\chi^2 = 41.7$, df = 1, $P \leq 0.001$) and were significantly less likely to want to participate in TLD (IA 4% versus FU 31%, $\chi^2 = 37.1$, df = 2, $P \leq 0.001$). FU personnel were

Table 1. IAs and FU personnel demographic characteristics

Characteristic (IA, n = 129; FU, n = 121)	IA, n (%)	FU, n (%)	χ^2, df = 1, P
Sex			NS
Male	118 (91)	115 (95)	
Female	11 (9)	6 (5)	
Combat arm (IA, n = 129; FU, n = 113)			χ^2 = 41.9, df = 1, $P \leq 0.001$
Combat	3 (2)	38 (34)	
Non-combat	126 (98)	75 (66)	
Rank (*IA, n = 128; FU, n = 116)			
Junior rank	26 (20)	45 (39)	
JNCO	48 (38)	38 (33)	
SNCO	18 (14)	13 (11)	
WO	6 (5)	8 (9)	
Officer	30 (23)	12 (10)	
Rank grouped by seniority (*IA, n = 128; FU, n = 116)			
Junior rank	26 (20)	45 (39)	χ^2 = 11.0, df = 2, $P < 0.01$
JNCO/SNCO	66 (52)	51 (44)	
WO/officer	36 (28)	20 (17)	

*Numbers may not add up to sample n due to missing data.

significantly more likely to hold stigmatizing beliefs (FU 29% versus IA 17%, χ^2 = 4.99, df = 1, $P < 0.05$), to report higher levels of operational exposure (FU 31% versus IA 24%, χ^2 = 6.33, df = 1, $P < 0.05$) and to report possible PTSD (8% versus 1%, χ^2 = 8.33, df = 1, $P < 0.01$). All other group differences were non-significant.

The responses to the survey categories are shown in Table 2.

Those attending TLD for the first time were less likely to find TLD useful, particularly in the IA sample (IA 77% useful versus FU 89% (χ^2 = 32.2, df = 1, $P \leq 0.001$). In both groups, those reporting higher levels of operational exposure were more likely to find TLD useful (χ^2 = 3.85, df = 1, P = 0.05) and this was also the case in the combined groups (OR 3.06, 95% CI 1.15–8.16). However, the effect of operational exposure became non-significant when adjusted for wanting to participate and rank (OR 2.24, 95% CI 0.80–6.23). Combat personnel who were IAs were less likely to find TLD useful than non-Combat Arm personnel (67% versus 78%, χ^2 = 32.4, df = 1, $P \leq 0.001$); however; the usefulness findings were equivocal in the FU sample. Junior ranks in both the IA and FU samples were more likely to find TLD useful. When the samples were combined, junior ranks were more likely than commanders at all levels to find TLD useful (OR 2.57, 95% CI 1.08–6.08) though the effect of rank upon usefulness ratings became non-significant when adjusted for wanting to participate in TLD and operational exposure (OR 2.08, 95% CI 0.84–5.14).

Both IAs and FU personnel who wanted to participate in TLD prior to their arrival were more likely to find it useful (100% IA and 97% FU) than those who did not (IA 73% and FU 67%, χ^2 = 33.0, df = 2, $P \leq 0.001$). In the combined groups, those who wanted to participate were more likely to find TLD useful (OR 2.17, 95% CI 2.17–123.19) and those with no strong feelings about participation were also more likely to do so (OR 3.56, 95% CI 1.49–8.49). The effect of wanting to participate remained significant when adjusted for rank and operational exposure (OR 4.39, 95% CI 2.03–9.51).

Across both groups, all those reporting possible PTSD found TLD useful compared to 78% of IAs and 82% of FU personnel with fewer post-traumatic stress symptoms (PTSS) (χ^2 = 7.52, df = 1, $P < 0.01$). There were however no differences between how the groups rated the psychoeducational briefings that target PTSS and adjustment generally. The presence of stigmatizing beliefs, gender and adjustment concerns had no effect upon perceived usefulness. Table 3 shows the associations between perceived usefulness as a binary outcome and the compound variables that were generated using the strategy described above and Table 4 shows the combined sample interactions with perceived usefulness.

The majority of both IA and FU personnel rated most of the mandatory components of TLD positively. FU personnel were significantly more likely to rate the social event as being useful than IAs (FU 96% useful or a little useful versus IA 87% useful or a little useful, χ^2 = 4.92, df = 1, $P < 0.05$). All other differences in activity ratings were non-significant. The results of the TLD component ratings are shown in Figure 1.

Table 2. IAs and FU personnel differential responses to the survey categories

Survey category	IAs, *n* (%)	FU, *n* (%)	Total, *n* (%)	χ^2, df, *P*
Perceived usefulness (*n* = 241)				NS
TLD useful	33 (27)	42 (36)	75 (31)	
TLD a little useful	63 (51)	57 (48)	120 (50)	
TLD not useful	27 (22)	19 (16)	46 (19)	
TLD attendance (*n* = 247)				$\chi^2 = 41.7$ df = 1, $P \leq 0.001$
First TLD	119 (92)	67 (57)	186 (75)	
Second or subsequent TLD	10 (8)	51 (43)	61 (25)	
Desire to participate (*n* = 247)				$\chi^2 = 37.1$, df = 2, $P \leq 0.001$
Wanted to participate	5 (4)	36 (30)	41 (17)	
Did not want to participate	91 (70)	47 (40)	138 (56)	
No strong feelings either way	33 (26)	35 (30)	68 (27)	
Adjustment concerns (*n* = 250)				NS
3 or more concerns	8 (6.2)	14 (11.6)	22 (8.8)	
2 or fewer concerns	121 (93.8)	107 (88)	228 (91)	
Briefings helpful? (*n* = 214)				NS
Helpful or a little helpful	73 (59)	70 (66)	143 (62)	
Not helpful	50 (41)	36 (34)	86 (38)	
Traumatic stress brief helpful? (*n* = 219)				NS
Helpful or a little helpful	82 (70)	79 (77)	161 (74)	
Not helpful	35 (30)	23 (23)	58 (27)	
Stigmatizing belief (*n* = 250)				$\chi^2 = 5.0$, df = 1, $P < 0.05$
High stigmatization	22 (17)	35 (29)	57 (23)	
Low stigmatization	107 (83)	86 (71)	193 (77)	
Operational exposure (*n* = 250)				$\chi^2 = 6.33$, df = 1, $P < 0.05$
High exposure	22 (17)	37 (31)	59 (24)	
Low exposure	107 (83)	84 (69)	191 (76)	
Possible PTSD (*n* = 250)				$\chi^2 = 8.33$, df = 1, $P < 0.01$
Non-case	128 (99)	111 (92)	239 (96)	
Case	1 (1)	10 (8)	11 (4)	

Numbers may not add up to sample *n* due to missing data.

Discussion

Our study found (as in our previous survey) that those who were ambivalent or wanted to participate in TLD prior to their arrival in Cyprus were more likely to find it helpful than those who did not. This finding remained significant following adjustment and was common to both IA and FU personnel. While significantly more IA personnel did not want to attend TLD prior to arriving, upon completion, there was no significant difference between the groups' helpfulness ratings; three-quarters of IAs who did not want to participate prior to their arrival in Cyprus still found TLD useful upon completion compared to two-thirds of unwilling FU personnel. This is the first published study to compare how military personnel who deploy with and without their main unit perceive TLD, which further develops the understanding of post-deployment interventions [1,2,11,12].

These findings add to the results of our previous study, determining that IAs (and FU personnel) who were attending TLD for the second or subsequent time, those reporting higher levels of operational exposure, IA combat personnel and junior ranks in both samples were all more likely to find TLD helpful. However, these differences became non-significant when adjusted for wanting to participate and operational exposure.

TLD aims to lessen the impact of traumatic stressors [5,8] and, in both groups, all personnel reporting possible PTSD found TLD more useful than those personnel with fewer PTSS. However, there were no such differences in utility ratings for the psychoeducational briefings targeting PTSS. This further suggests that opportunities to informally discuss operational experiences are more important, in terms of psychological health impact, than specific interventions [5]. Women taking part in a male-dominated activity were no less likely to find it useful.

FU personnel reported more possible PTSD (8%) than IAs (~1%), which is greater than the rates reported by UK personnel surveyed in epidemiological cohort studies [11,13]. This could be related to significantly higher levels of operational exposure in the FU group, which is a known risk factor for PTSD [4]. This result should be treated with caution however, as our study contains small numbers, which may have resulted in a type 1 error.

Table 3. The differential effect of demographic, operational and psychological factors upon IAs and FU personnel perceived helpfulness ratings

	Perceived helpfulness		
	IA, *n*/category, *n* (%)	FU, *n*/*N* (%)	χ^2, df, *P*
First or subsequent TLD attendance (*n* = 239)			$\chi^2 = 32.2$, df = 1, $P \leq 0.001$
First TLD attendance (*n* = 179, 75%)	88/114 (77)	54/65 (83)	
Attended TLD previously (*n* = 60, 25%)	8/9 (89)	43/51 (84)	
Operational exposure (*n* = 241)			$\chi^2 = 3.85$, df = 1, $P = 0.05$
High operational exposure (*n* = 58, 24%)	20/21 (95)	33/37 (89)	
Low combat exposure (*n* = 183, 76%)	76/102 (75)	66/81 (81)	
Service arm (*n* = 233)			$\chi^2 = 32.44$, df = 1, $P \leq 0.001$
Combat arm (*n* = 40, 17%)	2/3 (67)	31/37 (84)	
Non-combat arm (*n* = 193, 83%)	94/120 (78)	61/73 (84)	
Rank (*n* = 235)			$\chi^2 = 10.7$, df = 1, $P < 0.01$
Junior rank (*n* = 68, 29%)	20/24 (83)	41/44 (93)	
Senior ranks (JNCO, SNCO and Officer) (*n* = 167, 71.1%)	75/98 (77)	54/69 (78)	
Desire to participate (*n* = 240)			$\chi^2 = 33.0$, df = 2, $P \leq 0.001$
Wanted to participate in TLD (*n* = 41, 17%)	5/5 (100)	35/36 (97)	
No strong feelings either way (*n* = 68, 28%)	29/33 (88)	32/35 (91)	
Did not want to participate (131, 55%)	62/85 (73)	31/46 (67)	
Gender (*n* = 241)			NS
Male (*n* = 225, 93%)	88/113 (78)	93/112 (83)	
Female (*n* = 16, 7%)	8/10 (80)	6/6 (100)	
*Adjustment concerns (*n* = 241)			NS
Higher adjustment concerns (*n* = 21, 9%)	7/7 (100)	14/14 (100)	
Lower adjustment concerns (*n* = 220, 91%)	89/116 (77)	85/104 (82)	
Stigma (*n* = 241)			NS
Higher stigmatization (*n* = 54, 22%)	19/22 (86)	26/32 (81)	
Lower stigmatization (*n* = 187, 78%)	77/101 (76)	73/86 (86)	
*Possible PTSD (*n* = 241)			$\chi^2 = 7.52$, df = 1, $P < 0.01$
Case (*n* = 11, 5%)	1/1 (100)	10/10 (100)	
Non-case (*n* = 230, 95%)	95/122 (78)	89/108 (82)	

*Numbers may not add up to sample *n* due to missing data.

Overall, IA helpfulness ratings were not significantly different to those of FU personnel; however, significantly more FU personnel rated the social event as useful. It could be that FU personnel were more likely to have worked together prior to deployment and may have developed supportive social networks, whereas IAs will only have been integrated into the unit as the tour progressed.

Many IA personnel were informed later on during their operational tour that they were required to take part in TLD and this may have influenced their desire to participate as it may have been perceived as simply a homecoming delay with no tangible individual advantage. Also, the individual nature of their deployment may have reduced the possibility of group interaction and the associated social support [5,14]. The recent introduction of mandatory TLD attendance may help to influence the social supporting aspects of TLD.

FU personnel reported more substantial stigma compared to the IAs suggesting that social integration in FU may be associated with the development of stigma about having a mental health problem [7,15]. This figure may be comparable to that found in non-deployed and non-military personnel [16]. Also, mental health symptoms are known to be associated with greater self-stigmatization and the burden of symptoms was greater in the FU group [17]. Although we can only speculate, it may be that FU personnel may be more reluctant to come forward for help if they have a mental health problem for fear that it may damage their social standing in an established group. Overall, stigma was not associated with a reduction in perceived usefulness in our study.

Greater levels of operational exposure, stigma and possible PTSD were all significantly more frequent in FU personnel and we therefore suggest that TLD for IAs may require adaptation to ensure that their differing needs are accounted for. This is of course subject to confirmation in a larger sample. Although both groups found TLD briefings equally useful, the coming home brief, which advises about successful adjustment, could be modified as IAs may find the transition from operations less problematic as a consequence of a lower psychological burden [12]. Both the mental health and coming home briefs must be carefully delivered to ensure that a false expectation of substantial

Table 4. The effect of demographic, operational and psychological factors on IAs and FU personnel perceived helpfulness ratings, ORs and 95% CIs

	OR (95% CI)
First or subsequent TLD attendance (n = 239)	
First TLD attendance (n = 179, 75%)	0.68 (0.31–1.50)
Attended TLD previously (n = 60, 25%)	1.00
Operational exposure (n = 241)	
High operational exposure (n = 58, 26%)	**3.06 (1.15–8.16)**[a]
Low combat exposure (n = 183, 76%)	1.00
Service arm (n = 233)	
Combat arm (n = 40, 17%)	1.16 (0.48–2.81)
Non-combat arm (n = 193, 83%)	1.00
Rank (n = 235)	
Junior rank (n = 68, 29%)	**2.57 (1.08–6.08)**[b]
Senior ranks (JNCO, SNCO and Officer) (n = 167, 72%)	1.00
Desire to participate (n = 240)	
Wanted to participate in TLD (n = 41, 24%)	**2.17 (2.17–123.19)**[c]
No strong feelings either way (n = 68, 76%)	**3.56 (1.49–8.49)**[c]
Did not want to participate (131)	1.00
Gender (n = 241)	
Male (n = 225, 93%)	0.59 (0.13–2.68)
Female (n = 16, 7%)	1.00
[d]Adjustment concerns (n = 241)	
Higher adjustment concerns (n = 21, 9%)	
Lower adjustment concerns (n = 220, 91%)	
Stigma (n = 241)	
Higher stigmatization (n = 54, 22%)	1.23 (0.55–2.75)
Lower stigmatization (n = 187, 78%)	1.00
[d]Possible PTSD (n = 241)	
Case (n = 11, 5%)	
Non-case (n = 230, 95%)	

Numbers may not add up to sample n due to missing data (significant ORs shown in bold).

[a]The effect of operational exposure was non-significant when adjusted for wanting to participate and rank (OR 2.24 95% CI 0.80–6.23).

[b]The effect of rank was non-significant when adjusted for wanting to participate and operational exposure (OR 2.08 95% CI 0.84–5.14).

[c]The effect of wanting to participate remained significant when adjusted for rank and operational exposure (OR 4.39 95% CI 2.03–9.51).

[d]$\chi^2 = 4.92$, df = 1, $P < 0.05$.

problems with post-deployment adjustment IA personnel is not promoted.

Overall, junior ranks were significantly more likely to find TLD useful than command ranks. This confirms findings in our previous study of TLD [1]. However, there were more senior ranks and officers in the IA group and as they were more likely to be technical trades, they may therefore have been less likely to manage subordinates than FU commanders. We speculated previously that commanders may have been busy ensuring that their subordinates were being properly supervised [1] and may therefore have been less engaged with the TLD process; this may not be the case in the current IA sample. It may simply be that overall, TLD is more suited to junior ranks.

Those attending TLD for the second or subsequent time found the process more useful than the first-time attendees, whereas in our last study, usefulness ratings were lower in serial attendees. However, the overall perceived usefulness ratings dropped from 91% in our previous study to between 78 and 84% in this study. A lack of novelty may explain the decline in perceived usefulness in the FU group for the greater proportion of previous attendees. However, the majority of IAs were attending for the first time and so the lower utility ratings in this group may be a function of engaging individuals in a process that was constructed primarily for groups. That said, overall, the utility ratings given by the FU group remained substantial.

This study surveyed only a small number of IA personnel, which potentially limits the accuracy and generalizability of the results. As in previous TLD surveys, the questionnaire was brief and did not enquire about many of the important variables known to influence mental health outcomes such as leadership, morale and unit cohesion. Also, some of the scales included small number of items to ensure that the survey was brief. The IA study group contained a substantial proportion of Royal Air Force, smaller numbers of Army personnel and minimal numbers of Royal Navy personnel. The sample is therefore not representative of the three services where the Army would normally be the largest contingent as seen in the FU group. Furthermore, IAs reported less operational exposure, which holds a strong association with adverse mental health consequences and it may be that TLD is therefore less relevant to this group. As noted in our previous study, perceived usefulness, although an important outcome measure in this trial, is not necessarily associated with a positive mental health outcome that can only be accurately assessed in a randomized controlled trial.

Despite the limitations stated above, there were no substantial differences in the perceived helpfulness of the TLD process between IAs and FU personnel. While many IAs reported less operational exposure, lower adjustment concerns and fewer PTSS (all issues specifically targeted by TLD), nearly 80% were satisfied with the TLD process. Our data suggest that both IAs and FU personnel should have access to the TLD process and that troops should be encouraged to view TLD positively by their leaders. However, since TLD is likely to be a resource heavy initiative, it may be appropriate to focus the main TLD effort upon those at risk personnel whether or not they are IAs or FU personnel. Furthermore, since commanders appear to find TLD less useful than juniors, a separate or parallel TLD process could be designed to meet their particular needs. A TLD-like process might also be suitable for non-military organizations that send personnel to high threat areas; this study suggests that such a process could be useful for groups of singleton returnees as well as more formal groupings.

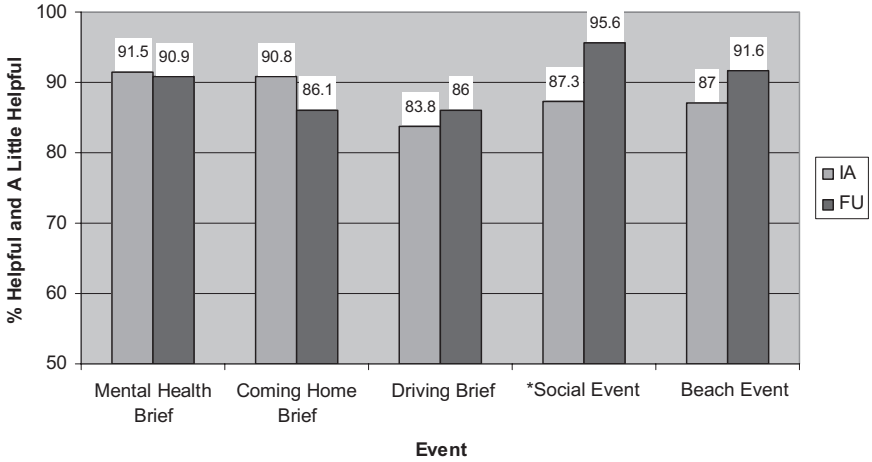

Figure 1. Combined IAs and FU personnel helpfulness ratings for the TLD elements.

Key points

- Individual augmentees are as likely as formed unit personnel to report that third location decompression is useful.
- Focusing third location decompression on those individual augmentees with higher levels of operational exposure and longer tour lengths may prove more resource effective and beneficial to individuals.
- Wanting to participate remains the key predictor of outcome and we recommend the active incorporation of third location decompression into post-deployment transition back to the home base at the end of operations.

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Conflicts of interest

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