



Research article

Evaluation of call volume and negative emotions in emergency response system telecommunicators: a prospective, intensive longitudinal investigation

Matthew Hoang¹, Elizabeth Hillier², Chris Conger³, Devan N. Gengler², Cody W. Welty², Candace Mayer² and Patricia L. Haynes^{2*}

¹ Department of Physiology, College of Medicine, University of Arizona, Tucson, AZ, USA

² Health Promotion Sciences, Mel and Enid Zuckerman College of Public Health, University of Arizona, Tucson, AZ, USA

³ Tucson Fire Department, City of Tucson, Tucson, AZ, USA

* **Correspondence:** Email: thaynes@arizona.edu; Tel: +5206261855.

Supplementary Tables

Supplementary Table 1. Within-person centered correlations of shift-level study variables.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1 No. days on-shift													
2 Shift duration, hrs	0.02												
3 Night-shift	-0.07	-0.06											
4 No. CAD calls / hr	-0.06	0.28**	0.14*										
5 No. CAD calls / hr, acute	0.01	0.06	0.02	0.25**									
6 No. CAD calls / hr, chronic	-0.02	0.26**	-0.01	0.46**	0.10								
7 Irritated, pre-shift	0.10	0.02	0.10	0.05	-0.05	0.07							
8 Irritated, post-shift	-0.01	0.14*	0.01	0.06	-0.02	-0.02	0.04						
9 Stressed, pre-shift	0.14*	0.03	0.01	0.10	-0.05	0.09	0.46**	-0.03					
10 Stressed, post-shift	-0.03	0.16**	0.01	-0.01	-0.06	-0.01	0.05	0.65**	0.04				
11 Worried, pre-shift	0.18**	0.00	0.07	0.02	-0.05	-0.02	0.41**	-0.04	0.65**	0.11			
12 Worried, post-shift	0.05	0.13*	0.01	-0.02	-0.04	-0.02	0.06	0.61**	0.14*	0.76**	0.15*		
13 Fatigued, pre-shift	0.21**	0.09	0.07	-0.08	-0.09	0.07	0.42**	0.07	0.27**	0.09	0.29**	0.10	
14 Fatigued, post-shift	-0.03	0.12*	0.10	-0.07	0.00	0.03	0.08	0.40**	0.05	0.31**	0.08	0.26**	0.17**

*Note: CAD = Computer-Assisted Dispatch system. All emotion ratings were conducted by Visual Analogue Scale ranging from 0 to 100. Post-shift emotion ratings and night-shift (coded 1 if began shift 10pm-2am, otherwise coded 0) were not centered within person. $n = 281$ for all correlations, except those involving pre-shift emotion variables ($n = 269$). * $p < 0.05$. ** $p < 0.01$.

Supplementary Table 2. Variance decomposition for within-person variables.

Variable	Within-person variance	Between-person variance	ICC
Irritable	334.00	298.65	0.47
Stressed	256.03	304.38	0.54
Worried	216.60	250.07	0.54
Fatigued	310.14	229.38	0.43

*Note: ICC = intraclass correlation coefficient (between-person/total variance). Estimates are based on the total Level 1 sample size (n = 281 cases)

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