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Fiscal Voors	EV 2016	Took Lost Hadata	EV 01/02/2017
Fiscal Year:	FY 2016	Task Last Updated:	F I U1/U3/2U1/
PI Name:	Burke, Shawn Ph.D.		
Project Title:	Facilitating the Synergistic Side of Cultural Diversity in LDSE: Identification of Challenges and Development of Cultural Training		
Division Name:	Human Research		
Program/Discipline:			
Program/Discipline Element/Subdiscipline:	HUMAN RESEARCHBehavior and performance		
Joint Agency Name:		TechPort:	No
Human Research Program Elements:	(1) HFBP :Human Factors & Behavioral Performance (IRP Rev H)		
Human Research Program Risks:	(1) HSIA:Risk of Adverse Outcomes Due to Inadequate Human Systems Integration Architecture (2) Team:Risk of Performance and Behavioral Health Decrements Due to Inadequate Cooperation, Coordination, Communication, and Psychosocial Adaptation within a Team		
Space Biology Element:	None		
Space Biology Cross-Element Discipline:	None		
Space Biology Special Category:	None		
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Zip Code:	32826-3281	Congressional District:	7
Comments:			
Project Type:	GROUND	Solicitation / Funding Source:	2014-15 HERO NNJ14ZSA001N-MIXEDTOPICS. Appendix E: Behavioral Health & Human Health Countermeasures Topics
Start Date:	08/22/2016	End Date:	08/21/2020
No. of Post Docs:		No. of PhD Degrees:	
No. of PhD Candidates:		No. of Master' Degrees:	
No. of Master's Candidates:		No. of Bachelor's Degrees:	
No. of Bachelor's Candidates:		Monitoring Center:	NASA JSC
Contact Monitor:	Williams, Thomas	Contact Phone:	281-483-8773
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Flight Program:			
Flight Assignment:			
Key Personnel Changes/Previous PI:			
COI Name (Institution):	Salas, Eduardo Ph.D. (Rice Uni	iversity)	
Grant/Contract No.:	NNX16AP96G		
Performance Goal No.:			

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Task Description:

Culture has been a factor for space exploration since the mid 1970s when the U.S. first partnered with Russia. Work has indicated that culturally-based differences in values, beliefs, and preferences for cognition and action can have an impact on interdependent action (Stahl et al., 2010). Cultural diversity can pose challenges for a number of transition, action, and interpersonal processes and emergent states in teams. However, almost all of this work has been conducted outside the context of spaceflight. The little work that has been conducted within spaceflight has begun to suggest that the impact of culture on teams may be different in long-duration space exploration (LDSE--see Suedfeld et al., 2013). This drives the question as to whether cultural diversity within spaceflight crews has the same impact on team performance as that reported within the wider literature on cross-cultural teams and what can be done to create synergy. We leverage prior work on cultural diversity and teams in mission critical environments and archival data on team interaction in ICE (isolated, confined environments) and pair this with experimentation in ground analog studies to better understand the critical challenges created by cultural diversity in LDSE and use this information to create and test cultural training tools that can be used pre- and in-flight. Specifically, we take a multi-pronged approach to answer the following questions: (1) what are the critical issues surround culture and team performance in LDSE, (2) from a compositional standpoint is there an 'ideal' team profile in terms of cultural orientations to facilitate team performance and adaptability in LDSE, (3) what types of cultural training can be developed for use pre-flight and in-flight, and (4) what tools can be developed to facilitate practitioners in maximizing the potential synergy in culturally diverse teams operating in LDSE (e.g., pillars, guidelines, practices, tips).

Stahl, G.K., Makela, K., Zander, L., & Maznevski, M.L. (2010 a). A look at the bright side of multicultural team diversity. Scandinavian Journal of Management, 26 (4), 439 - 447.

Stahl, G. K., Maznevski, M. L., Voigt, A., & Jonsen, K. (2010b). Unraveling the effects of cultural diversity in teams: A meta - analysis of research on multicultural work groups. Journal of international business studies , 41 (4), 690 - 709.

Suedfeld, P., Wilk, K. E., & Cassel, L. (2013). Flying with strangers: postmission reflections of multinational space crews (pp. 185-209). Springer, Berlin Heidelberg.

Rationale for HRP Directed Research:

Research Impact/Earth Benefits:

Task Progress:

New project for FY2016.

Bibliography Type:

Description: (Last Updated: 09/04/2023)