

Human Movement and Rhythmical Reasoning: An Unconventional Approach to Researching Resilience

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Research Disclaimer



(Source: Jeschke, E. *Field Observation*. Nellis Air Force Base [AFB], 4 August 2021.)

Objectives

Explain

Research Methodology

Define

Conventional and Unconventional Resilience

Explore

Infrastructure of Human Performance Research
Using Movement and Rhythm Theory

Highlight

Implications for Performance Training

Explain



(Source: Jeschke, E. Field Observation. Nellis AFB, 20 January and 4 August 2021.)

Ethnographic Research Approach

- Bottom-up Empirical Observations of Common Activities in a Natural Performance Setting
- Data Collected Through Field Notes and Interview (individual and group)

Study Population: Special Operations Surgical Team (SOST)

Six-Person Team Composed of the Following Health Care Professions:

1. General Surgeon
2. Emergency Physician
3. Anesthesia Provider (advanced practice registered nurse or doctor of medicine)
4. Registered Nurse (emergency or critical care)
5. Respiratory Therapist
6. Surgical Technician

Study Population: SOST (continued)

Mobile Surgical Specialists Who Support Special Operations Forces Missions

- Advanced Trauma Resuscitation
- Damage Control Surgery
- Postoperative Critical Care
- Critical Care Evacuation

Interpretive Phenomenological Method

- Uncover Meaning in Everyday Practices
- Skill Development Predicated on Tactile Engagement
- Death Gives Rise to Meaning-Making
- Ambiguity Essential to the Interpretive Process

Interpretive Phenomenological Method (continued)

Phenomenon of Research Focus

Catastrophic Injury Exposure

Define



(Source: Jeschke, E. Field Observation SOST Detachment 1. Birmingham, AL, 15 April 2021.)

Conventional Resilience

- Focuses on Direct Action Combatant's Experience of Killing
- Teaches Endurance of Adversity Through Positive Thinking
- Explores Force of Will as a Means of Building Mental Toughness

Challenges With Conventional Resilience

- Hyper-Focused on Individual Cognitive Performance
- Decontextualized From Broader Performance Space
- Disconnected From Kinetic Reality of Battlefield
- Narrows Combat Performance to the Avoidance of Trauma
- Assumes the Right Mindset Is an Inoculation Against the Hardships of War

Diagram of Conventional Resilience

Individual
Cognitive Performance

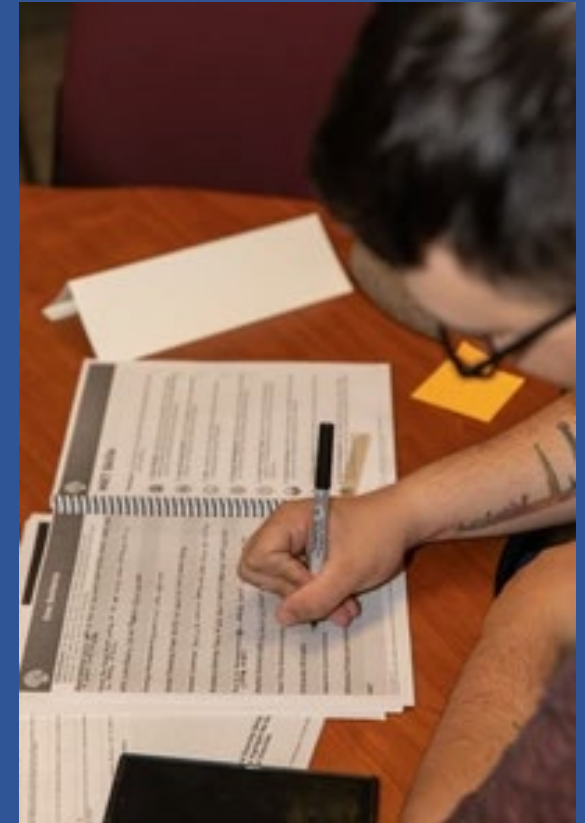


(Source: Jeschke, E., and S. L. Huffman.)

Qualitative Experience of Conventional Resilience



(Source: Smith, D. "Master Resilience Training." DVIDS, 19th Public Affairs Detachment, Fort Riley, KS, 28 July 2023.)



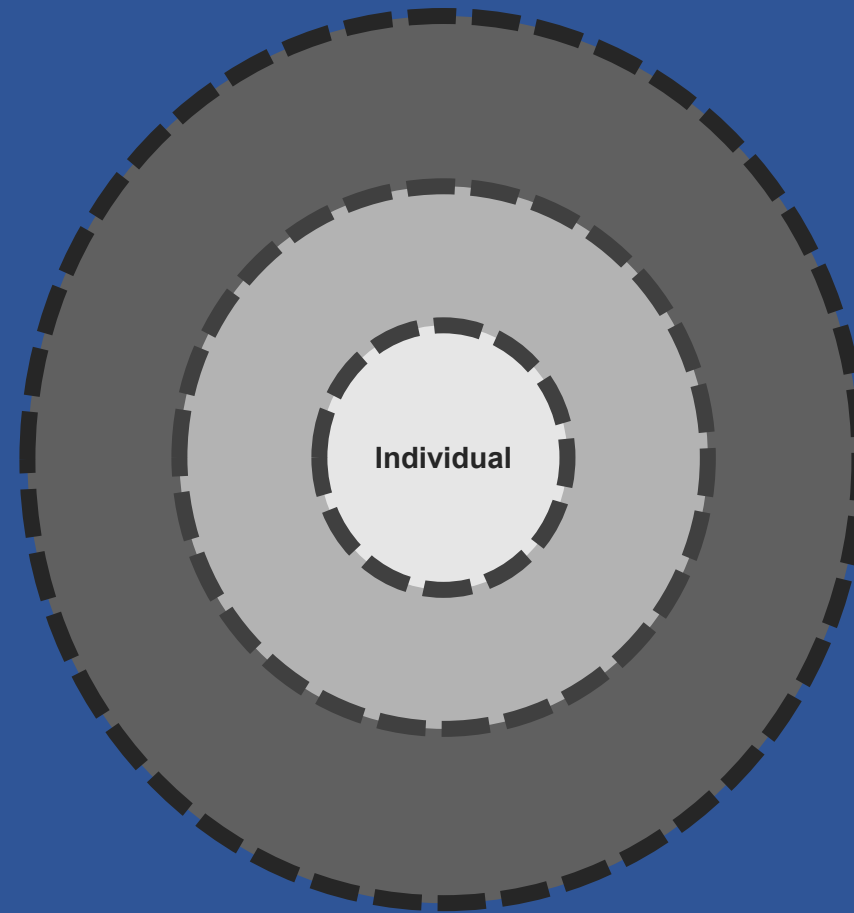
Unconventional Resilience

- Focuses on Integrated Transformational Process
- Promotes Change-Agency Through Expansion of Experience
- Explores the Force of Movement as Foundation of Performance

Advantages of Unconventional Resilience

- Enables Adaptive Performance in Adversity
- Capitalizes on Diverse Human Experiences
- Develops a Holistic Relationship to Hardship
- Focuses Performance on Practical Daily Activities
- Evaluates Hardship Born Across Multiple Levels of Inter-Relationships

Diagram of Unconventional Resilience



(Source: Jeschke, E., and S. L. Huffman.)

Qualitative Experience of Unconventional Resilience



(Source: Anonymous participant. Open-Ended Interview to Provide Visual Context for SOST Performance Space.)

Explore



(Source: Jeschke, E. Field Observation. Nellis AFB, 4 August 2021.)

Infrastructure of Human Performance Research

Relies on a Holistic Worldview

Movement Theory

- Exists in All Organic Matter as a Source of Vitality
- Acts as the Integrative Force in Existence, Even in Human Experience
- Animates a Natural World Composed of Interdependent Relationships

Rhythm Theory

- Ground
- Orient
- Activate
- Attune
- Synergize



*(Source: Reimold, C. "Staff Sgt. Juan Parada Checks for a Pulse."
DVIDS, Fort McCoy, WI, 16 August 2023.)*

Highlight



(Source: Jeschke, E. Field Observation. Nellis AFB, 4 August 2021.)

Movement Analysis

Kinetography Laban

- Body
- Effort
- Shape
- Space

Movement Analysis Kinetography

Laban: Effort

- Space (direct or indirect)
- Weight (heavy or light)
- Time (fast or slow)
- Flow (free or bound)

Movement Analysis Kinetography

Laban: Effort (continued)

- Float
- Punch
- Glide
- Slash
- Dab
- Wring
- Flick
- Press

Neuroscience of Rhythm Perception



(Source: Dela Torre, J. C. "Quantico Marine Corps Band Performs at the South Boston St. Patrick's Day Parade 2024." DVIDS, Marine Corps Base, Quantico, VA, 17 March 2024.)

(Source: Redding, D. "Latin-Jazz Rhythm Rocks Marines, Sailors and Soldiers in Iraq." DVIDS, 1st Marine Logistics Group, Taqaddum, Iraq, 28 August 2006.)



(Source: Klestinski, S. "13th Army Band Salsa Group Helps Marathon Runners Find Their Rhythm." DVIDS, 50th Regional Support Group, Miami, FL, 9 February 2020.)

Questions

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