

## Learners' Perceptions Of Simulation As A Clinical Learning Approach On SimLEARN Courses (Retrospective Study)

*presented by:*

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\*\*\*Disclaimer: I have no financial relationship related to the content being presented\*\*\*

# Learning Overview

## Research Elements

- Retrospective Study-Hybrid (quantitative and qualitative)
- 11 VA National Simulation Center (SimLEARN) courses
- Period: January 2016 – December 2019
- Data
  - Participants registration information
  - Evaluation assessments (Kirkpatrick L1-L2)
  - Repository
    - VA Talent Management System (TMS) and
    - SimLEARN Tracking Activity Repository (STAR).

# Learning Overview

## VA Research Guidelines



- Submitted research request IRB Exemption through the VA Orlando Research Committees
- SimLEARN as the main site for Principal Investigator
- SimLEARN stored and safeguarded research data
- Learners are VA wide employees; some DoD employees
- Data
  - Aggregate data
  - No personal identifiable information
  - Compliant with VA research, privacy and information security guidelines

# Study Objectives











- 1) Identify learners' simulation participation satisfaction with the learning content, activities, and the learning environment to support knowledge, technical and non- technical skills development
- 2) Identify learners' simulation use immediately following their introductory to simulation learning
- 3) Assess the impact of pre-course assessment, if conducted, for those SimLEARN courses that provide the assessment.

# National SimLEARN Center (SimLEARN)


<https://myees.lrn.va.gov/SimLEARN/default.aspx>





U.S. Department of Veterans Affairs  
Veterans Health Administration  
Employee Education System



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National Simulation Center  
*Clinicians Actively Learning Through Simulation*

 **SimLEARN**  
Excellence in Veterans' Healthcare

**LATEST NEWS**



**Simulation Exchange Newsletter**

**Simulation Exchange - Your Source for Simulation News**

The latest issue of *Simulation Exchange* is brought to you by VHA's SimLEARN program. Each issue highlights stories and current initiatives in simulation-based clinical education.

Please share this publication and the stories with simulation, education, front-line clinical staff, support staff and others at your facility with an interest in

**QUICK LINKS**

- Contact the NSC
- STAR - SimChamp Use Only
- Connect With Us
- How Do I...
- Simulation Data Sheet
- SimLEARN Data Sheet
- NSC Flyover Video
- SimLEARN Community of Practice
- Certified Simulation Facilities
- OPS Manual (document library)
- SimLEARN Resources
- Point of Care Ultrasound (POCUS)



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**VA**



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# SimLEARN Courses

- 1) Fundamentals of Clinical Care Support (FCCS)
- 2) Maintenance of Certification in Anesthesiology (MOCA)
- 3) Introduction to Clinical Simulation (ICS)
- 4) Musculoskeletal Master Educator (MSK-ME)
- 5) Musculoskeletal Clinician (MSK-C)
- 6) Peripherally Inserted Central Catheter Course (PICC)
- 7) Point of Care Ultra Sound (POCUS)
- 8) Simulations for Clinical Excellence in Nursing Services (SCENS)
- 9) SimLEARN Faculty Instructor Course (SFIC)
- 10) Trauma Nursing Core Course Instructor (TNCC-I)
- 11) Trauma Nursing Core Course Clinician (TNCC-C)

# Talent Management System (TMS)



Talent  
Management  
System

## Custom Item Evaluation

Survey: RS-Musculoskeletal Clinician Training Program (EES-18.NSC.MS.TRG.MSKC.A)

Survey Mean Score 4.6

Total Surveys: 41 / 41

Date Range: 1/1/2016 - 12/31/2019

Item: Musculoskeletal Clinician (MSK C), (VA, 33865, 7/5/2017 09:45 AM America/New York)

Scheduled 8 Item Mean Score 4.6 Total Surveys: 41 / 41

Offerings:

Page: Participant Satisfaction (Standard Questions)

Resource Type: None

Section Mean Score 4.7

Question Mean Score 4.7  
Question 1: Overall, I was satisfied with this learning activity.

### Answer

5 - Strongly Agree 31 75.6%

3 - Neither Disagree nor Agree 1 2.4%

4 - Agree 9 22%

Total Respondents: 41



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# SimLEARN Tracking Activity Report (STAR)

Item ID	Item Type	Offering	Item Title	Survey ID	NAME	User ID	User Name	Email	Ac	Supervisor	VA Org	VA Org (Domain)	Domain	Parent C	Parent C	Job Loc	Job Pos	Job Pos	Item Completion Date	Survey C Required	Item Completion	Survey C Request	Learning Driver	EEES-BIS	Sunset Date
23779	VA		Musculoskeletal Training	*****		*****					ORL.820	AMBUL ORL	Orlando	V08	VA Sunz	VA Med	60258	PHYSIC	2/11/2015 15:58		VA-Complete				
27842	VA		Musculoskeletal Instructor	*****		*****					AUG.820	PRIMA AUG	Augusta	V07	The Sou	OPC Au	60258	PHYSIC	2/18/2016 12:30		VA-Complete				####
27842	VA		Musculoskeletal Instructor	*****		*****					BIR.820	PRIMA BIR	Birmingham	V07	The Sou	VA Med	60258	PHYSIC	2/18/2016 12:39		VA-Complete				####
27842	VA		Musculoskeletal Instructor	*****		*****					CLL.820	PATIENT CLL	Chillico	V10	VA Heal	Chillico	60350	PHYSIC	2/18/2016 12:45		VA-Complete				####
28150	VA		Musculoskeletal Instructor	*****		*****					CHA.820	ADMIN CHA	Ralph H.	V07	The Sou	Ralph H.	61050	NURSE	5/12/2016 15:55		VA-Complete				####
28150	VA		Musculoskeletal Instructor	*****		*****					CHA.820	ADMIN CHA	Ralph H.	V07	The Sou	Ralph H.	60258	PHYSIC	5/12/2016 16:10		VA-Complete				####

Name      Email      Organization      Location      Department      Occupation      Etc.



# Evaluation: Rating Scale

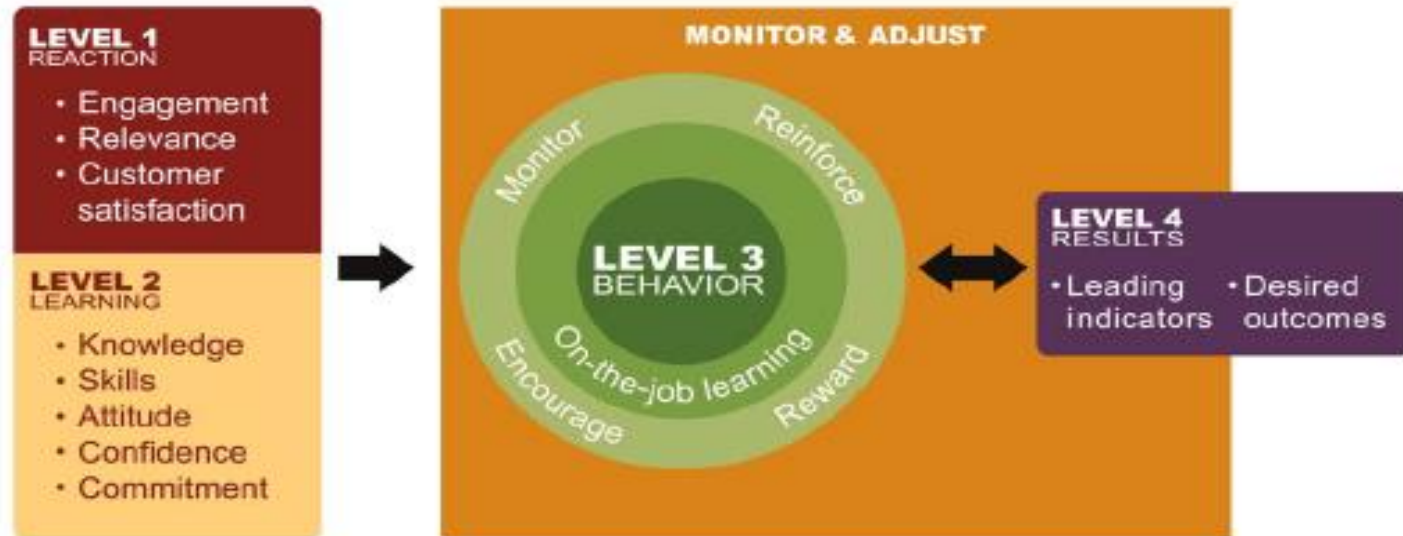
## A) NUMERICAL

Strongly Disagree	Agree	Neither Disagree nor Agree	Agree	Strongly Agree
1	2	3	4	5

## B) Yes, No, N/A

# Kirkpatrick Model

## THE NEW WORLD KIRKPATRICK MODEL



### LEVEL 1: REACTION

The degree to which participants find the training favorable, engaging and relevant to their jobs

### LEVEL 2: LEARNING

The degree to which participants acquire the intended knowledge, skills, attitude, confidence and commitment based on their participation in the training

### LEVEL 3: BEHAVIOR

The degree to which participants apply what they learned during training when they are back on the job

### LEVEL 4: RESULTS

The degree to which targeted outcomes occur as a result of the training and the support and accountability package



**KIRKPATRICK PARTNERS**  
The One and Only Kirkpatrick®

# Evaluation Questions: Participant Satisfaction

- 1) Overall, I was satisfied with this learning activity.
- 2) I learned new knowledge and skills from this learning activity.
- 3) I will be able to apply the knowledge and skills learned to improve my job performance.
- 4) The scope of the learning activity was appropriate to my professional needs.
- 5) The training environment (face to face, video conference, web-based training) was effective for my learning.

# Evaluation Questions: Participant Satisfaction

- 6) I would recommend this training course to others
- 7) The learning activities and / or materials were effective in helping me learn the content (i.e., handouts, assessment tools, etc.).
- 8) The content presented in a manner that was fair and unbiased.
- 9) Was the content presented in a manner that was fair and unbiased; and if not, please explain.
- 10) What about this learning activity was most useful to you?
- 11) What about this learning activity was least useful to you?

# Evaluation Questions: Program Specific (examples)

- 1) manage common musculoskeletal conditions which present to primary care, enhancing stewardship of limited resources and increasing access to appropriate care
- 2) conduct a detailed and efficient examination of the shoulder, distinguishing between arthritis, bicipital tendonitis, adhesive capsulitis, and rotator cuff tendinopathies as per stated guidelines
- 3) conduct a detailed and efficient examination of the knee, determining the presence of effusions, and identifying findings suggestive of meniscal tear, ligamentous injury, tendinopathy, bursitis, and patellofemoral disease as per stated guidelines
- 4) demonstrate the procedural skill on task-trainers of joint aspiration and joint and soft tissue injection to diagnose and manage these conditions appropriately

# Evaluation Questions: Faculty

- 1) The instructor was effective in conveying subject matter knowledge using this learning method.
- 2) The instructor was knowledgeable about the subject.
- 3) The instructor was responsive and kept me actively engaged.
- 4) Session/Faculty Comments

# STUDY RESULTS

## Preliminary

- Most learners did not complete evaluation.
- Sample size consideration for statistical significance
- Pre-test is not provided for all courses.
  - Lack validity on learners' knowledge prior to course when compared to post-test
  - Pre-test and post-test questions the same, potential bias; may not accurately measure post knowledge
- Course contents challenged with several revisions over time
  - Did the revisions significantly impact learning or no impact
  - If impact is identified, correlation between revised/unrevised contents with simulation (*other confounding factors-faculty, learners' prior knowledge, etc.*)

TBD



# THANK YOU

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