

# Effective Design Characteristics of Virtual Simulation in Nursing

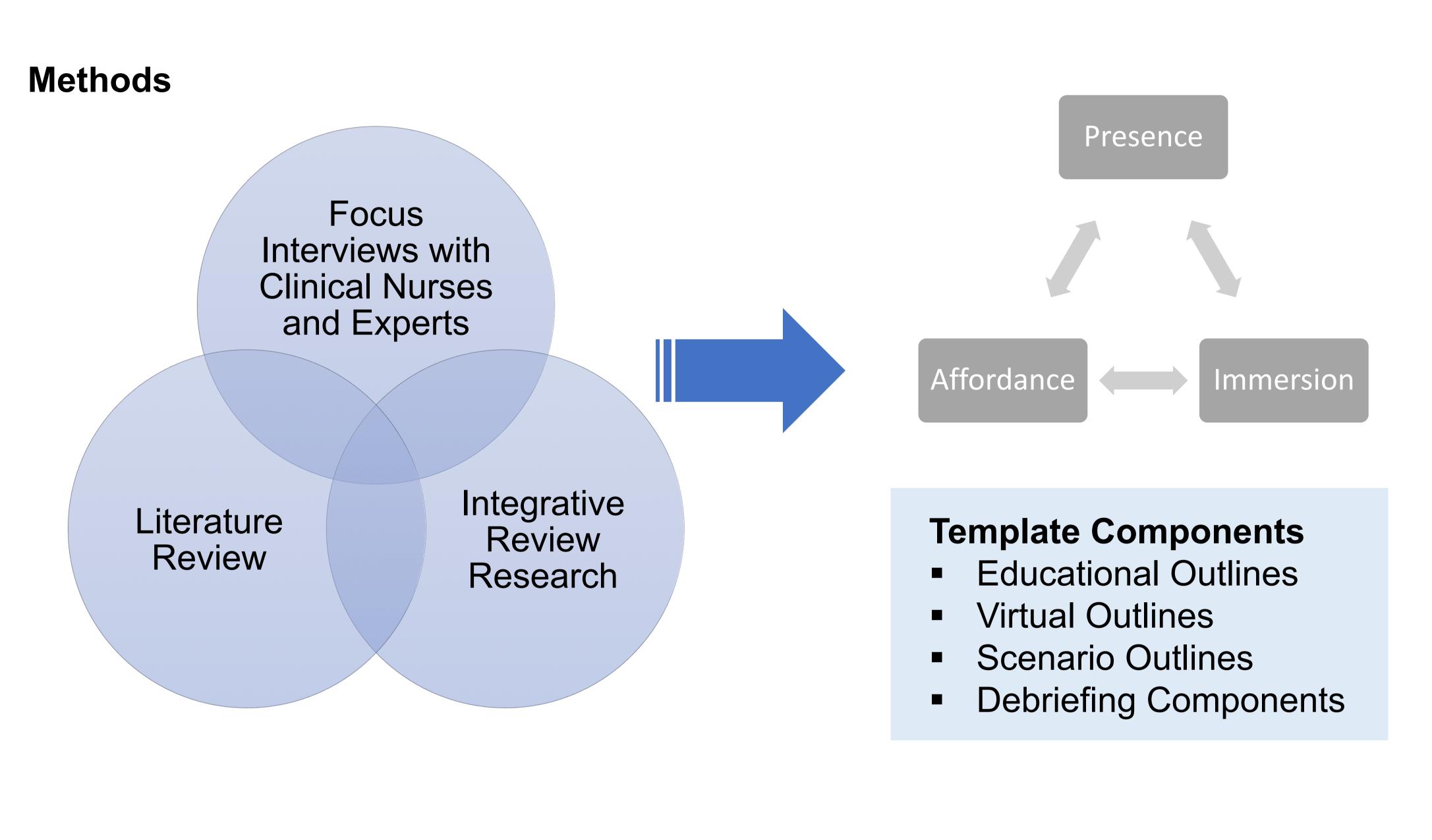
Hyunsook Shin, PhD, RN, CPNP-PC, Hyojin Kim, MSN, RN, Da Hae Rim, MSN, RN, Sojeong Park, BSN, RN College of nursing science, Kyung Hee University, Seoul, Korea, Republic of Korea

### Introduction

- An educational strategy has to be advanced as technology evolves. Virtual nursing simulation is one of the attempts for a transition of the nursing education method[1].
- Virtual simulation scenarios for nursing education should be developed based on the effective design characteristics of virtual simulation.

### **Purpose**

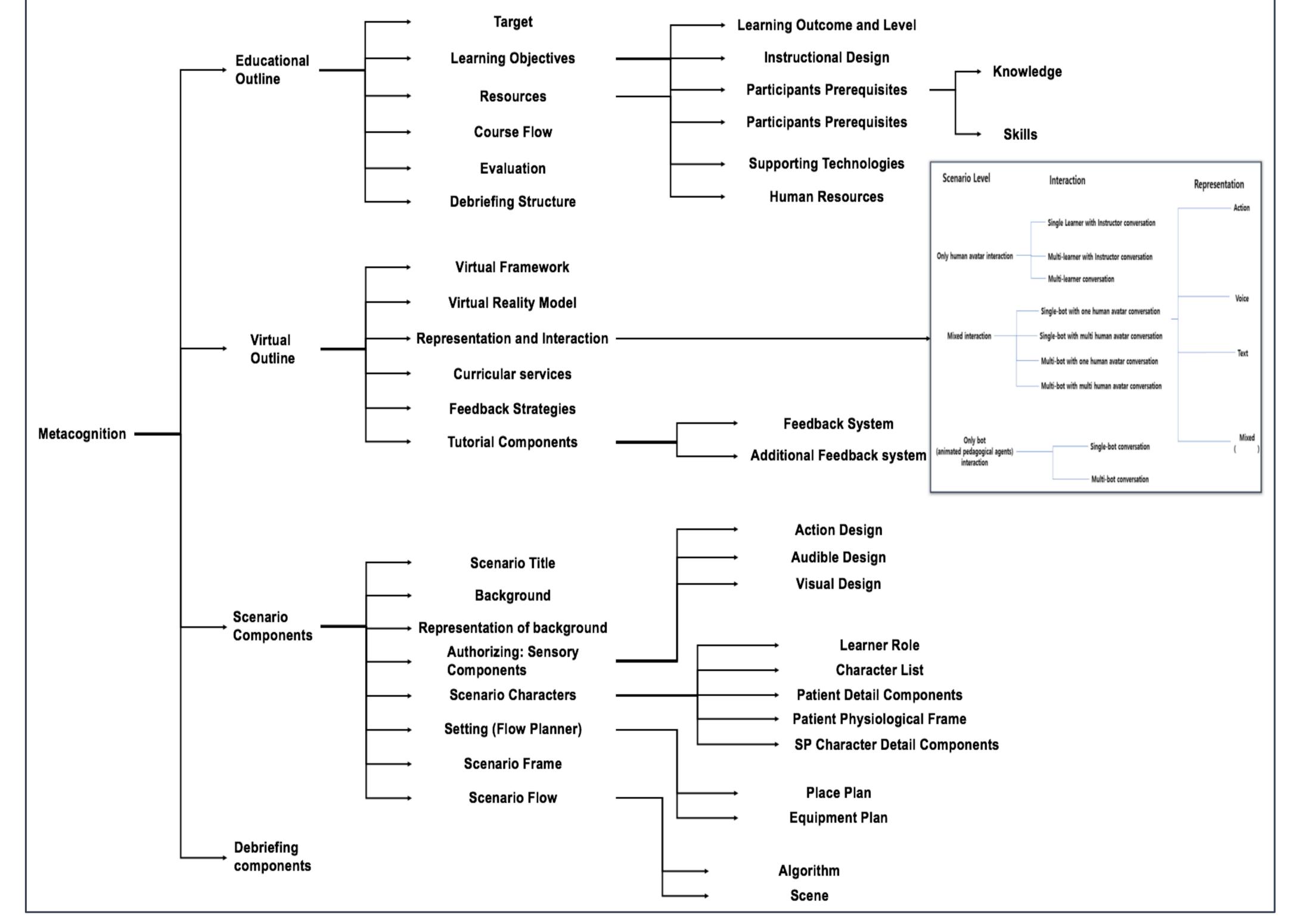
- To develop a template with design characteristics for virtual simulation.
- To build a sample scenario of virtual simulation using the developed template.
- To test the validity of the virtual simulation using the developed scenario in a multi-user virtual environment.



# Pediatric Unit NICU Exam Room Debriefing Room

Nursing Multi-User Virtual Environments Sample Scenarios

### Results



Final Nursing Multi-User Virtual Environments Simulation Template

## Conclusions

- Effective design characteristics for virtual simulation include virtual specific components such as presence, immersion, and affordance.
- The findings of this study showed the design characteristics of the developed template could allow nurse educators to build more structured virtual simulation strategies for nursing education.
- Further study focused on evaluating the effectiveness of the virtual simulation is warranted.

### Acknowledgement

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### Reference

[1] Farra, S., Miller, E. T., Hodgson, E., Cosgrove, E., Brady, W., Gneuhs, M., Baute, B.
 Storyboard Development for Virtual Reality Simulation. Clinical Simulation in Nursing. 2016
 June 13;12(9): 392-399.