Reaction Confidence and Perceived Learning Scale

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Background of the Problem

- Standardized patients (SP's) are being used to teach and assess competencies in psychiatric mental health nursing (Shin, Park & Jung; 2015).
- Few published studies on the effectiveness of use of simulated patients in psychiatric nursing (Goodman & Winter,, 2017).
- Evaluation methods have not been successful in evaluating psychiatric nursing education (Attoe, Lavelle, Sherwall, Rimes & Jabur; 2019)
- Kirkpatrick's model of training effectiveness is most commonly used to evaluate simulations.
- Four levels of measurement defined by Kirkpatrick's model: reaction, learning behavior results of simulated experience
- No instrument was not located to measure the four levels of Kirkpatrick's model of training

Purpose

- Review best practices and existent literature on simulations and standardized patients evaluations
- Develop a level of measurement to accurately measure reaction, confidence, and perceived learning in a simulated patient experience.
- Pilot and establish the validity and reliability of the Reaction Confidence and Perceived Learning Scale (RCPLS)

Project Significance

- According to the National League for Nursing (2018) simulations in learning are being used more in schools of nursing and is rapidly becoming a standard in teaching.
- Standardized or simulated patients are a form of simulation that is increasingly being used by schools of nursing to teach and assess mental health competencies in psychiatric mental health nursing (PMH); especially management of high-risk issues.

Reaction Confidence and Perceived Learning Scale (RCPLS)

Development Sources of the RCPLS

1. Kirkpatrick's model of simulation evaluation,
2. Measures of interest (purpose, KSAs, future behavior),
3. Rovai, Wighting, Baker & Grooms instrument (2009)
4. Chin, Yap, Lee, & Soh's (2014) questions
5. A 20-item Likert scale was developed

Content Expert Survey

Methodology

- 20-item Likert scale and content validity was established.
- The initial items were reviewed by four experts in the field
- After the review the items were updated.
- The items were scored on a 1-5 Likert scale rating not at all........very much so.
- One item question 16 was reverse scored. The instrument was piloted with 20 patient simulation participants.
- The items were added then divided by the number of items (n=20).

Results: Dimensionality of RCPLS

Factor Loading: Using Maximum Likelihood extraction method and Varimax with Kaiser Normalization rotation Method

	1	2	3
1. I am interested in learning more about the case	.	.609	.
2. My learning about the case is more effective		.792	
3. I am better able to formulate a solution about the case		.581	
4. Previous learned concepts are reinforced in a meaningful manner		.648	
5. I am satisfied with my learning experience		.686	
6. I am confident in detecting signs and symptoms of the disorder	.734		
7. I am confident in how to conduct an interview	.708		
8. I am efficient in conducting a patient interview	.737		
9. I am motivated to conduct a patient interview		.626	
10. I am efficient in asking appropriate questions	.634		
11. I am efficient in decision making skills	.732	.	
12. My confidence level in patient care has been enhanced		.544	
13. I can organize a patient interview into a logical structure	.689		
14. I can use the skills I learned outside of the simulation	.490		
15. I have changed my attitudes about the disorder	.486		
16. I have not expanded the skills I learned			.580
17. I can critically evaluate my interview performance	.462		
18. I feel more self-reliant	.642		
19. I can demonstrate to others the physical skills I learned	.712		
20. I feel I am a more sophisticated thinker	.688		
Eigenvalues	8.938	2.082	1.538
% of variance	44.692	10.410	7.692
Cumulative%	44.692	55.101	62.793

Results and Discussion

- Piloted with 20 patient simulation participants in Fall 2018 and 62 graduate and undergraduate students in Spring and Summer 2019 (n=82)
- Students' RCPLS Scores: M= 4.25 with a range of 4.1-4.9.
- Initial reliability tests indicate satisfactory reliability
- Cronbach's alpha: 0.83
- Based on eigenvalues, 3 factors were rotated, which accounted for 62.79% total variance.
- Next Steps:
  - Continue to use the tool in patient simulation and collect more data
  - Adopt and incorporate the tool in all simulation evaluations across all program levels

The Scree Plot
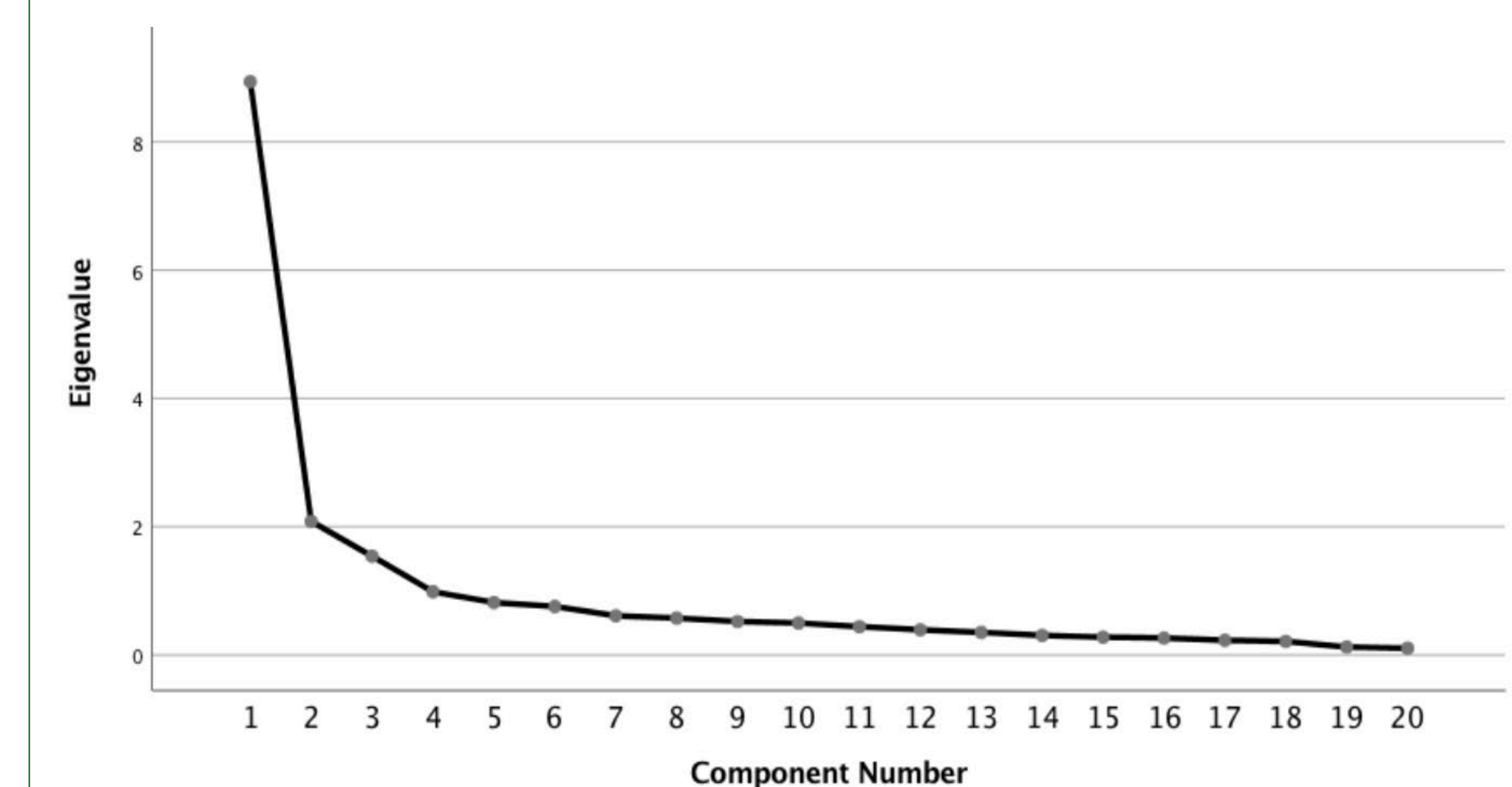
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