



Construct Validity and Reliability of the Korean Version of the Speaking Up about Patient Safety Questionnaire Scale

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INTRODUCTION

- Speaking up is an assertive form of communication among healthcare providers, for ensuring patient safety, that has become increasingly important in healthcare.
- Facilitating nurses' willingness to speak up in clinical settings can create an environment that promotes patient safety, contributing to the prevention of patient safety incidents.
- Despite the evident benefits, little is known about the concept of speaking up and instruments related to it in the Korean context.

AIM

This study was conducted to assess the psychometric properties of the Korean-language version of Speaking Up about Patient Safety Questionnaire for nurses.

METHOD

● Study Design

This study used a cross-sectional survey design, with a convenience sample to describe psychometrics of the Korean version of the Speaking Up about Patient Safety Questionnaire (KSUPS-Q).

● Study Population

Survey data were gathered in the Republic of Korea using an online survey tool. A total of 314 nurses with more than 1 month of clinical experience participated in the survey.

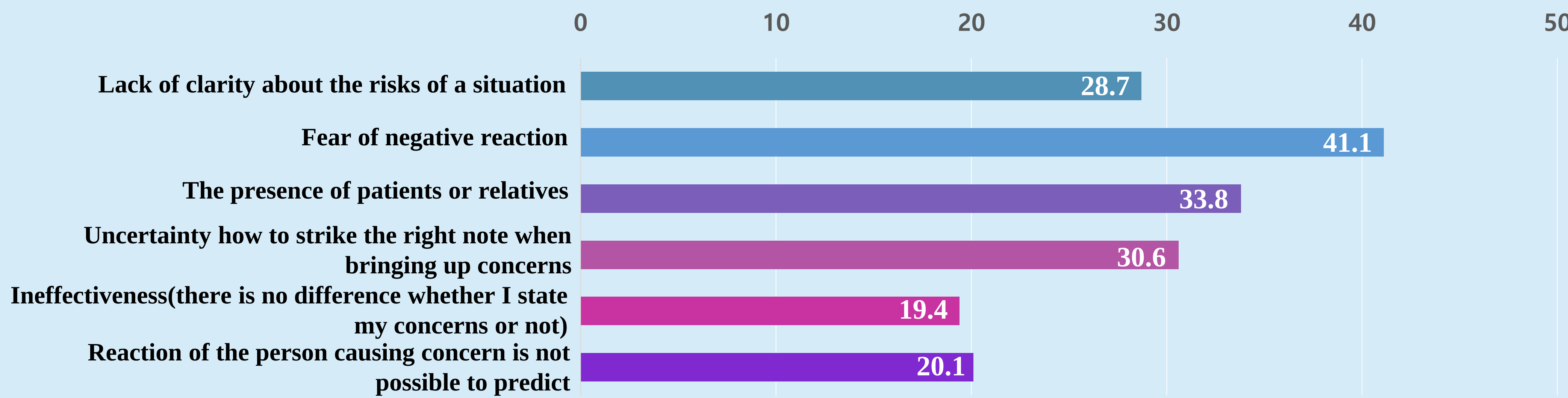
● Analysis

- Exploratory factor analysis and confirmatory factor analysis were conducted to investigate the construct validity of the instrument.
- Convergent validity was examined using Pearson correlations.
- Internal consistency was tested using Cronbach's alpha and McDonald's omega coefficient for reliability.

RESULTS

- The most frequently reported barrier to speaking up was the fear of negative reactions (n=129, 41.1%). Additionally, approximately one-third of the participants answered that it was difficult to speak up owing to the presence of the patients or relatives (n=106, 33.8%).

Figure 1. Frequencies of Reported Barriers toward Speak up



- The speaking up-related climate scale consists of 11 items with two factors ('psychological safety and encouraging environment for speaking up' and 'resignation toward speaking up').
- CFA confirmed that the two-factor model was adequate, with an acceptable fit (comparative fit index=0.971, Tucker-Lewis index=0.962, and standardised root mean-square residual=0.050).
- Convergent validity was confirmed based on the correlations with the teamwork (r=0.695) and safety (r=0.696) climate domains of the Safety Attitudes Questionnaire-Korean version (SAQ-K).
- The speaking up-related climate scale demonstrated satisfactory internal consistency reliability (Cronbach's alpha=0.897, omega=0.929).

Table 1. Means, SDs, and Factor Loadings for the Speaking Up-related Climate

Item content	Mean(SD)	Factor loading (EFA)		Corrected item-total correlation
		F1	F2	
Factor 1. Psychological safety and encouraging environment for speaking up (Cronbach`s alpha = 0.920, omega = 0.939)				
1. I can rely on my colleagues (doctors and/or nurses) whenever I encounter difficulties in my work.	4.98(1.42)	0.771	-0.022	0.696
2. I can rely on the shift supervisor (person in charge of a shift) whenever I encounter difficulties in my work.	4.92(1.44)	0.827	-0.135	0.682
3. The culture in my unit/clinical area makes it easy to speak up about patient safety concerns.	4.85(1.37)	0.769	0.040	0.730
4. My colleagues (doctors and/or nurses) react appropriately, when I speak up about my concerns about patient safety.	4.94(1.33)	0.706	0.198	0.697
5. My shift supervisors (person in charge of a shift) react appropriately, when I speak up about my patient safety concerns.	5.14(1.31)	0.824	0.066	0.778
6. In my unit/clinical area, I observe others speaking up about their patient safety concerns.	4.71(1.41)	0.774	0.050	0.740
7. I am encouraged by my colleagues (doctors and/or nurses) to speak up about patient safety concerns.	4.57(1.54)	0.860	-0.003	0.752
8. I am encouraged by my shift supervisor (person in charge during a shift) to speak up about patient safety concerns.	4.88(1.48)	0.911	-0.094	0.790
Factor 2. Resignation toward speaking up (Cronbach`s alpha = 0.670, omega = 0.767)				
9. When I have patient safety concerns it is difficult to bring them up.†	4.17(1.55)	0.372	0.219	0.305
10. Having to remind staff of the same safety rules again and again is frustrating.†	4.14(1.61)	-0.003	0.924	0.605
11. Sometimes I become discouraged because nothing changes after expressing my patient safety concerns.†	3.83(1.63)	0.191	0.661	0.561

† Reversed item; EFA=exploratory factor analysis; SD=standard deviation

F1: Psychological safety and encouraging environment for speaking up; F2: Resignation toward speaking up

CONCLUSIONS

- The Korean-language version of Speaking Up about Patient Safety Questionnaire is a valid and reliable instrument to measure the speaking up-related behaviour and climate among nurses in Republic of Korea.
- To improve patient safety in the care process, it is necessary to develop an education program with assertive communication tools to facilitate speaking up in clinical settings, which in turn can prevent medical errors.

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REFERENCES

- Okuyama A, Wagner C, Bijnen B. Speaking up for patient safety by hospital-based health care professionals: a literature review. *BMC Health Serv Res.* 2014;14:1-8
- Richard A, Pfeiffer Y, Schwappach DDL. Development and Psychometric Evaluation of the Speaking Up About Patient Safety Questionnaire. *J patient Saf.* 2021;17:e599-606

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