# Examining the Relationship of Accurate ESI® Triage Scores to Emergency Department Nursing Attitudes and Experience

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## Research Questions:

- Is there a relationship between ED nurses' years of experience and accurate assignment of ESI triage scores?
- Is there a relationship between ED nurses' attitudes towards triage and accurate assignment of ESI triage scores?



## Literature Review:

- Lack of consensus regarding the amount of knowledge required.
- Lack of consensus regarding the type of necessary attitude attributes.
- Lack of consensus regarding the amount of experience necessary.

## Methods:

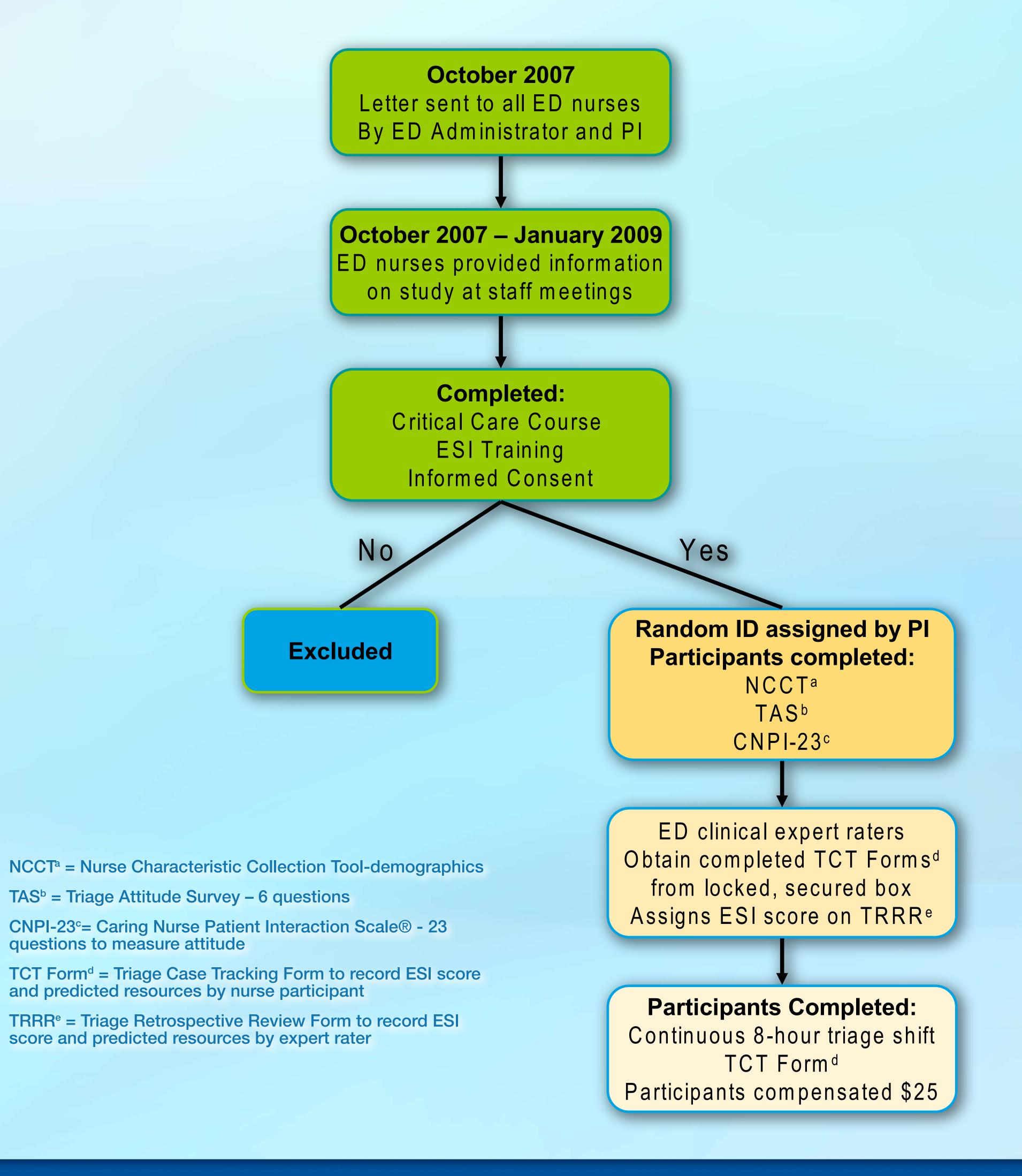
- A descriptive, correlational study design was used. Data from 77 nurses and 1957 triage events at 3 emergency departments was collected.
- Participants completed demographic, attitude surveys, and data collection instruments. Expert raters retrospectively reviewed the charts identifying the actual ESI score and number of resources.

## Statistical Analysis:

- The statistical methods employed to analyze and interpret the data included descriptive statistics, independent t-test and Pearson's correlations.
- The ESI score assigned by nurses (M = 3.15, SD = .83) was significantly correlated (r = .75, p < .001) with the expert raters actual ESI score (M = 3.30, SD = .93). The number of resources predicted by the nurses (M = 2.55, SD = .63) was significantly correlated (r = .64, p < .001) with expert raters actual number of resources (M = 2.40, SD = .76). Registered Nurse overall or triage experience did not correlate with accuracy of ESI score or prediction of the number of resources. RN education level also

failed to show significant correlation with accuracy of ESI score. The CNPI-23 total score and mean sub-scale scores did not correlate with accuracy of ESI score or prediction of the number of resources.

#### Participant Enrollment Process



## Discussion:

- An accurate ESI score was positively correlated with the CNPI-23 subscale, relational care.
- Total RN ED experience was negatively correlated with relational care.
- Experience, education or attitude did not correlate with an accurate ESI score.

\*\* It is important to note that research is a generalization of data over a period of time. Triage conversely should be viewed in a case by case scenario. In essence a participant could triage someone with a sudden onset of back pain and if warning signs are missed, the oversight of the leaking abdominal aortic aneurism, can lead to not only devastating, but fatal outcomes.\*\*

## Conclusions:

Even though this study has failed to quantify the number of years of experience recommended to triage, the results are clinically significant. Through the use of a professional nurse, valid and reliable triage tool and appropriate triage education one can feel comfortable in their ability to triage competently and accurately regardless of past experience.

This study has positive implications for assisting in identifying the traits and characteristics one would seek in a competent triage nurse. Aiding in the selection of the staff one could confidently assign to the triage area to all EDs that implement the ESI triage algorithm. Because this study uses the actual clinical setting for conducting the study, and incorporates ED practices at multiple EDs with varying patient populations and levels of care, the potential to generalize this program is greater than if the project was implemented at one type of ED.

#### References:

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