



School of  
Nursing

# Script Concordance Model & Think Aloud Approach to Facilitate Clinical Reasoning in Baccalaureate Nursing Students

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## Literature Review

Nurses must identify salience in clinical situations to implement interventions that optimize patient outcomes. Salience, the foundation of clinical reasoning, is the ability to recognize changes in dynamic clinical situations & to act (Benner, Sutphen, Leonard, & Day, 2010).

Script Concordance Test (SCT) is an evaluation method used in disciplines such as medicine & physical therapy to assess clinical reasoning under conditions of uncertainty (Charlin, Brailovsky, Leduc, & Blouin, 1998). A SCT is a case-based scenario written examination that uses a “panel-based aggregate scoring method” to determine how closely students’ answers match with those of an expert panel (Gagnon, Lubarsky, Lambert, & Charlin, 2011, p. 601). ). For each scenario, there are three columns; (a) the **first** column is a possible plausible hypothesis based on the scenario, (b) the **second** column contains new information, and (c) the **third** column requires the student to select an option about the significance of the new information presented in the second column in relation to the hypothesis. These options are presented on a five-point Likert scale (Wilson, Pike, & Humbert, 2014). SCT with the Think Aloud (TA) approach has been described as a potential effective teaching/learning tool (Power, Lemay, & Cook, 2017). In the TA approach students verbalize the thought processes that led to their conclusion for each SCT case-based scenario (Banning, 2010; Lee & Ryan-Wenger, 1997).

The purpose of this study is to determine the effectiveness of the SCT method coupled with the TA approach as a teaching/learning strategy to facilitate clinical reasoning in first semester senior-level baccalaureate nursing students.

## Research Question

1. Does use of Script Concordance Test Model in conjunction with the Think Aloud approach as a teaching/learning strategy facilitate clinical reasoning in first semester senior-level baccalaureate nursing students enrolled in a pediatric course?
2. What are first semester senior-level baccalaureate nursing students’ perceptions of the Script Concordance Test Model in conjunction with the Think Aloud approach as a teaching/learning strategy to facilitate clinical reasoning?

## Methods

This study was a quasi-experimental design executed in the Fall 2017 semester. SCT case-based scenarios coupled with the TA approach were implemented in 6 class sessions. Ten expert pediatric nurses with  $\geq 3$  years of experience anonymously completed each the test in order to formulate the aggregate score for each option. Students completed a paper/pencil SCT & provide written rationale for answers selected. After completing the test, the TA approach was utilized. Data were analyzed to determine if student aggregate scores increased over the 6-week period. An anonymous online survey was distributed to the participants to determine perception of this SCT & TA activity.

## Results

There was no improvement in aggregate scores for students who participated in the study.

Demographics N=52	
Age (average)	22 years old
Race	100% Caucasian
Gender	8% (4) Male 92% (48) Female

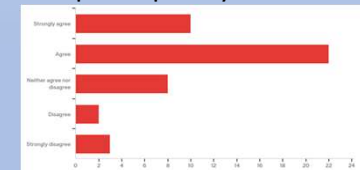
## Describe how the Script Concordance and Think Aloud Approach was most helpful to your learning? N = 45

- Helped with prioritization
- Hearing various perspectives from peers allowed consideration of different approaches
- Helped consider various rationales for nursing actions
- Increased confidence in one’s own knowledge

## What aspects of the Script Concordance and Think Aloud Approach were least helpful to your learning? N = 45

- Scoring was confusion
- Sufficient time was not allotted for the activity

### SCT & TA helped to improve my clinical reasoning skills.



### The SCT & TA helped me to more fully understand course content.

