**Nursing Education Research Conference 2020**
**Mindsets and Nursing Student Approaches to Learning: The Williams Inventory of Learning Strategies Tool**

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**Purpose:** Much attention in education today is directed toward exploring fixed and growth mindsets and their impact on teaching and learning. Learners can take one of two directions when approaching learning. They can either believe their scholastic aptitude is innate (fixed mindset) and no amount of effort will improve their ability, or they can perceive their ability is modifiable (growth mindset). Fixed mindset learners fear failure, avoid challenge, and do not remediate; threatening academic success. The growth mindset model is an academic success model and has been cultivated in many post-secondary schools and disciplines. However, no research exists examining mindset endorsement in nursing students and how it affects learning.

**Methods:** Therefore, we developed an instrument based upon an extensive review of the literature from disciplines other than nursing. The Williams Inventory of Learning Strategies (WILS) is a 33 item tool with four subscales. The first 3-item mindset assessment subscale was modified for nursing (with permission) from Dweck's (2006) original tool (reliability $\alpha= 0.93$). The second subscale is a 13-item learning inventory of study strategies drawn from the literature. Lastly, subscales three and four (8-item willingness to remediate and a 9- item fear of failure and avoidance of challenge) are strategies characterized by growth and fixed mindset learners. Face validity was obtained from an expert panel of nurse educators. Content validity of the WILS was assured by a robust review of the literature surrounding Dweck's (2006) mindset model and student learning strategies. Individual and scale content validity indices (CVI) of subscale items 2-4 were assessed by a convenience sample of three expert nursing faculty; individual item CVI= 50% of items were very relevant; 43% were relevant, and only 1 item was not deemed relevant. Scale CVI=0.830. Reliability for the WILS instrument was assessed through pad and paper test/retest and split half correlations utilizing IBM Statistical Package for Social Science (SPSS) Version 23. Test/retest reliability was $\alpha= 0.844$.

**Results:** In an unpublished pilot of 187 undergraduate nursing students, the subscale reliabilities using SPSS were: mindset: $\alpha= 0.703$; learning strategies inventory: $\alpha = 0.735$; willingness to remediate and review: $\alpha=0.807$; and fear of failure and avoidance of challenge: $\alpha=0.693$. The WILS tool was successful at identifying nursing students' endorsement of a fixed or growth mindset. Associations of fixed and growth mindset endorsement of learning strategies by nursing students emerged. For instance, the WILS tool showed a small correlation between fixed mindset students who failed an exam looking for excuses other than themselves for their failure and "getting by without reviewing content" as discussed in the literature.

**Conclusion:** As a new tool, the WILS tool shows promise identifying students at risk for academic failure and provided an additional learning resource since the growth mindset model, as an academic success model, is easily cultivated. This original research

abstract presentation will elaborate on the WILS tool's methodology, express the need to examine nursing students' mindsets, and finally, offer a first in nursing education; a nursing education case study presentation of the mindset model in action.

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**Title:**
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**Keywords:**
Fixed and growth mindsets, nursing student learning and tool development

**Abstract Summary:**
This presentation will introduce nurse educators to the academic success model; the growth mindset model. We will detail a new mindset assessment tool for student learning, and, for the first time in nursing education, present a case study in the utilization of the mindset model in nursing education.

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