

**POPINVITED: ID# 101061**

**Title:**

Grit and Resilience: Facilitating Successful Outcomes in Progression and Retention of Associate Degree Nursing Students

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**ACCEPTED**

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**Session Title:**

Rising Stars of Research and Scholarship Invited Student Posters

**Slot:**

RS PST1: Sunday, 17 November 2019: 11:45 AM-12:15 PM

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**Applicable Category:**

Academic, Students

**Keywords:**

Grit, Persistence and Resilience

**References:**

Akos, P. & Kretchmar, J. (2017). Investigating grit as a non-cognitive predictor of college success. *Review of Higher Education*, 40(2), 163-186. doi.[10.1353/rhe.2017.0000](https://doi.org/10.1353/rhe.2017.0000). Retrieved from: <https://eric.ed.gov/?id=EJ1123143>

Bartone, P., Kelly, D., & Matthews, M. (2017). Grit and hardiness as predictors of performance among west point cadets. *Journal of Military Psychology*, (26)4, 327-342. Retrieved from: <https://psycnet.apa.org/record/2017-70125-006>

Charmaz, K. (2014). *Constructing grounded theory* (2<sup>nd</sup> ed.). Los Angeles, CA: SAGE Publications.

Creswell, J. & Creswell, J. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*, (5<sup>th</sup> ed.). Thousand Oaks, CA: SAGE Publications.

Drury, V., Francis, K. & Chapman, Y. (2008). Mature learners becoming Registered Nurses: A grounded theory model. *Nurse Educator Today*, 28(7), 783-789. Retrieved from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.499.5509&rep=rep1&type=pdf>

Duckworth, A. & Quinn, P. (2009). Development and validation of the short grit scale (Grit-S). *Journal of Personality Assessment*, 91(2), 166-174. doi: 10.1080/00223890802634290 Retrieved from: [https://globaled.gse.harvard.edu/files/geii/files/validation\\_grit\\_scale\\_duckworth\\_jpa\\_m\\_figueroa-2.pdf](https://globaled.gse.harvard.edu/files/geii/files/validation_grit_scale_duckworth_jpa_m_figueroa-2.pdf)

Duckworth, A. L., & Peterson, C. (2017). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101.

Ebrahimpour F., Esmaeili M., and Varaei, S. (2018). Photovoice: Methods of data collection in qualitative research. *Nursing Practice Today*, 5(1), 216-218.

Hwang, E. & Shin, S. (2018). Characteristics of nursing students with high levels of academic resilience: A cross-sectional study, *Nursing Education Today*, 71, 54-59. doi: 10.1016/j.nedt.2018.09.011. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/30245256>

Lee, W. (2017). Relationships among grit, academic performance, perceived academic failure, and stress in associate degree students. *Journal of Adolescence*, 60, 148-152. doi: 10.1016/j.adolescence.2017.08.006. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/28886409>

Stephens, T. (2013). Nursing student resilience: A concept clarification, *Nursing Forum*, 48,(2), 125-133. Retrieved from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/nuf.12015>

Walker, L. & Avant, K. (2014). Strategies for theory construction in nursing (5<sup>th</sup> ed.). London, England: Pearson New International Edition.

### **Abstract Summary:**

The concept of grit has not been well defined in nursing literature, including its effect on student success in persistence and retention through rigorous nursing courses. A baseline understanding of grit and resilience will be explored in the population of associate degree nursing students in a rural community college setting.

### **Content Outline:**

#### Introduction Subheadings

1. **Statement of the problem:** Pre-licensure nursing programs across the United States continue facing the dilemma of admitting qualified candidates that can persist through and meet the standards of a rigorous nursing program and pass the National Council for Licensure (NCLEX-RN) examination on the first attempt. Critical workforce needs support the significance of understanding and sustaining nursing student success once admitted to persist to successful program completion. Grit has not been well defined in the nursing literature but appears in the initial literature review in the psychological, military, educational, medical literature, and in

recent information systems literature. Related concepts identified in the nursing literature related to grit are identified in the nursing literature as resilience, persistence, and hardiness. The strategy of derivation could allow the concept of grit to be pulled from other disciplines and examined in the context of nursing as a new concept, and how frameworks and models could fit (Walker & Avant, 2014).

2. **Purpose of the study:** This mixed methods study will provide a baseline understanding of the concept of grit (as defined by this researcher as passion, resilience, and tenacity) that supports student persistence through rigorous nursing courses and retention to graduation. An explanatory, sequential two-phase design will be used where quantitative data collection and analysis is completed first, then qualitative data collection/analysis is completed with interpretation of results to demonstrate how qualitative explains quantitative (Creswell and Creswell, 2018).
1. **Research questions:** a. Question 1: Is there a correlation between grit and resilience in student persistence? b. Question 2: What is the student perspective on what grit looks like using the visual medium of Photovoice to enhance understanding of this concept? (Ebrahimpour, Esmaeili, and Varaei, 2018)
2. **Theoretical perspective:** Orem's Self-Care Deficit Nursing Theory (SCDNT)
3. **Review of the Literature**
4. **Methods**
  1. Type of research design
    1. Mixed methods using grounded theory approach using constructivist perspective and pragmatist approach (Charmaz, 2014)
    2. Explanatory sequential, two-phase design
  2. Population
    1. Associate degree nursing students at Northeastern Oklahoma A&M College
    2. Randomized sample, volunteer basis
  3. Data collection instruments
    1. Eight-item Grit-S Scale (Duckworth and Quinn, 2009)
    2. Resilience scale to be determined
    3. Open-ended focus group and or intensive interview questions to be determined
    4. Potential use of Photovoice (Ebrahimpour, Esmaeili, and Varaei, 2018)
  4. Variables
    1. Independent variables: interest, persistence (grit), and resilience
    2. Moderating variables: Age, gender, level in nursing program

3. Dependent variables: admission, progression, and retention in nursing program
5. Anticipated ethical questions
  1. Potential issues in using sample from work environment
  2. Additional validation strategies needed, IRB approval
5. **Preliminary studies or pilot test:** Not planned at this time
6. **Appendices:**
  1. Sample Grit-S Scale and resilience tools
  2. Timeline: Spring 2020 to begin dissertation study
  3. Proposed budget: pending, reviewing grant options

**Topic Selection:**

Rising Stars of Research and Scholarship Invited Student Posters (25201)

**Abstract Text:**

**ABSTRACT**

**Objective**

Pre-licensure nursing programs across the United States continue facing the dilemma of admitting qualified candidates that can persist through and meet the standards of a rigorous nursing program and pass the National Council for Licensure (NCLEX-RN) examination on the first attempt. This requirement is mandated by the State Boards of Nursing (and voluntary national nursing accreditation agencies that many programs maintain) that determine the final pass percentage rate upon which nursing programs maintain ranking. Preparing students to take the national licensure examination will become even more imperative in 2022 when the Next Generation (NGN) NCLEX is likely launched. The National Council of State Boards of Nursing (NCSBN) began research in 2012 with the intent to capture and increase the precision of measurement of clinical judgment, critical thinking, and problem-solving in this significant testing change. Strengthening admission criteria and supporting student success throughout pre-licensure undergraduate programs will be more critical than ever in order to maintain licensure pass rates at the defined national standard of 80% or higher on first attempt (Presentation by Phil Dickson, Ph.D., RN, Chief Officer, Operations and Examinations, NCSBN on 9-28-18).

Critical workforce needs support the significance of understanding and sustaining nursing student success once admitted to persist to successful program completion. Grit has not been well defined in the nursing literature but appears in the initial literature review in the psychological, military, educational, medical literature, and in recent information systems literature. Related concepts identified in the nursing literature related to grit are identified in the nursing literature as resilience, persistence, and hardiness. The strategy of derivation could allow the concept of grit to be pulled from other disciplines and examined in the context of nursing as a new concept, and how frameworks and models could fit (Walker & Avant, 2014). The purpose of the study will provide a baseline understanding of the concept

of grit (as defined by this researcher as passion, resilience, and tenacity) and resilience that supports student persistence through rigorous nursing courses and retention to graduation.

## **Methodology**

This study will utilize a constructivist grounded theory mixed methods approach using data collection and analysis, coding, memoing, and development of categories (Charmaz, 2014). An explanatory, sequential two-phase design in which quantitative data collection and analysis will be initially completed using the Grit-S Scale (Duckworth and Quinn, 2009) and a resilience scale to be determined. Qualitative data collection and analysis will then be completed using semi-structured intensive interviews and or focus groups with associate degree nursing students with interpretation of results to demonstrate how qualitative explains quantitative (Creswell and Creswell, 2018). The use of Photovoice may be explored to understand the concept of grit from the visual perspective of the participants (Ebrahimipour, Esmaeili, and Varaei (2018).

## **Setting**

As an open-admission, rural community college in the Midwestern United States, the mission of the college dedicates itself to providing opportunities that promote excellence in learning, service, and leadership in a global society. No college applicant is turned away as a general rule, thus providing a diverse range of pre-nursing students who present from those meeting all requirements, to those needing remediation with developmental education for college readiness, and support for success in their academic endeavors in the form of tutoring, counseling, advisement, study skills, and time management.

The Accreditation Commission for Education in Nursing (ACEN) 2017 Report to Constituents lists the completion rates for accredited nursing programs. The six-year range for accredited Associate Degree Nursing Programs from 2011-2012 through 2016-2017 is 74.17% compared to 79.54% for Baccalaureate Nursing Programs. The community college setting to be studied is accredited by ACEN, has a completion rate of 83.73% for the six-year same period. Though that exceeds the national standards for completion rates, the licensure pass rates on first attempt have not met national standards consistently. Identifying the baseline grit and resilience potential in this associate degree nursing student population, then working towards the development of strategies to enhance that potential to address the gap in the nursing literature on this concept is critical.

## **Literature Review**

Duckworth and Peterson (2017) defined grit as the perseverance and passion to achieving long-term goals based on their research and use of the Grit Scale, a self-report questionnaire developed by the authors. The only stand-alone measure of perseverance that it noted according to the author was the Perseverance Scale for Children, not valid for use with adults. Across six studies that have completed from 2004 to 2006, the authors found that individual differences in grit were shown to have significant variance in successful outcomes. Bartone & Matthews (2017) found that the predictive validity of grit and hardiness on retention and performance of West Point cadets and found that while both grit interest and hardiness commitment were sole predictors of why cadets failed basic training, only grit effort predicted persistence across the remaining 4-year period. Limited studies have been noted in the nursing literature in the form of recent dissertations.

Akos and Kretchmar (2017) provided a historical perspective on cognitive (high school grades and standardized test scores) and non-cognitive factors (essays, letters of recommendation). Use of the Short Grit Scale (Grit-S) has been shown to predict a variety of outcomes beyond traditional measures of IQ and SAT. Three research questions were studied: predictive validity of self-reported grit, informant-reported grit on college outcomes, and the relationship between self-informant scales. Findings indicated the Grit-S score was predictive of first-year GPA, but provided some corroborating evidence that consistency of interest (engagement over time) in the presence of perseverance of effort provided no additional information in explaining first-year GPAs (as did Duckworth). Effort alone was not enough to explain the variance in outcome. A person may be more gritty in one domain-specific outcome (music as an example), but less gritty in another. Additional research on grit and non-cognitive factors is needed with the prediction of college success.

Lee (2017) examined the relationships among grit, academic performance, perceived academic failure and stress levels associate degree students. The 8-item brief version of the Grit Scale was used to measure interest and perseverance plus a 10-item global psychological stress scale. Participants also provided their actual academic performance and evaluated their perceived academic performance as a success or failure. Findings indicated that subjective appraisal of an event is more related to stress than the actual adverse event, and that grit makes students less prone to stress.

(Hwang and Shin, 2018) examined the characteristics of nursing students with high levels of academic resilience in a cross-sectional study using four different tools to assess academic resilience, to measure clinical practice stress and satisfaction, and the social-affective capability. The authors concluded that among the subscales of academic resilience measure, respondents scored highest in self-control and had fewer subjects with low satisfaction and with family and interpersonal relations. This result was consistent with a previous study showing individuals with better communication skills had a higher level of academic resilience (and those relationships could be a protective factor), had a lower proportion of respondents with grade point average below 3.0, and had higher scores on socio-affective capability essential for student success.

A concept clarification of nursing student resilience was developed by Stephens (2013) using the Norris Model of Concept Clarification as a guiding framework for analysis. Four concept analyses were used to describe the phenomenon of resilience, and systemize observations with the author concluding that all nursing students are vulnerable to episodes of perceived adversity and stress, and specific protective factors can be identified, enhanced, or developed in nursing students to increase their resilience. A proposed operational definition and Nursing Student Resilience Model was created that depicts the concept as a process that combines perceived adversities with individual protective factors to effectively cope and adapt. The author defined resilience as a state of recovery after a time of stressful transition or rebounding from an adverse event and that those that are resilient were found to possess various protective factors that minimized stress.

Drury, Francis, and Chapman (2008) used constructivist grounded theory to describe how mature learners (non-traditional students) reconstruct themselves as nursing students. This transitional journey was described as having three phases called: taking the first step, keeping going, and letting go and moving forward. Their grounded theory model of becoming a Registered Nurse (RN) began with the central idea of wanting to be a nurse with the first phase of desire, and pre-existing skills, the second

phase involving intrinsic motivation and self-awareness, and the third phase of confidence in being an RN.

The initial literature review demonstrates a lack of research with the concept of grit in the undergraduate nursing student population. The importance of gaining an understanding of how grit and resilience support student persistence through rigorous nursing courses and retention to graduation is of critical importance. The practical purpose of this research will to be the continual quality improvement of the NCLEX-RN pass rate results that are used by state and national accreditation standards to measure the effectiveness of the program.