Resilience Equine Assisted Learning with Nursing Students; A Randomized Controlled Trial

Shannon Burleson, PhD, RN, CCRN, University of Nevada, Reno

Co-Author(s): Jessica Rainbow, PhD, RN, University of Arizona; Ruth Taylor-Piliae, PhD, RN, FAHA, FAAN, University of Arizona; Helena Morrison, PhD, RN, University of Arizona

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Abstract

Background/Introduction
For many undergraduate nursing students (64%), burnout begins during education. Resilience is a known protective factor to buffer against stress exposure that leads to burnout, but a lack of formal resilience training for undergraduate nursing students persists. Equine-assisted learning interventions promote resilience and decrease stress and burnout in a diversity of populations.

Purpose
To determine the feasibility of the Resilience Equine Assisted Learning (REAL) intervention as an extra-curricular activity and to explore within-group changes in stress, burnout, and resilience among undergraduate nursing students.

Methods or Processes/Procedures
This study utilized a three-group randomized control trial design. University of Nevada Reno nursing students were randomized to groups for the intervention duration (6 weeks): REAL intervention, unstructured horse interaction (UHI) control group, and treatment-as-usual (TAU) control group. Feasibility measures were compared to benchmarks. Self-report measurement tools quantified stress, burnout, and resilience. Descriptive statistics and non-parametric statistical testing were used to summarize and analyze data.

Results
Seventeen nursing students (38% of benchmark) were recruited, and all participants completed all data collection aspects. Intervention adherence in the REAL and UHI groups was poor (average < 53%); reasons for non-adherence were schedule conflicts (100%) and winter weather conditions (30%). Students in REAL and UHI groups reported high treatment acceptability, appropriateness, and feasibility scores (>15). REAL intervention fidelity was high (>90%), and no adverse events were reported during the interventions. In the REAL group only, post-intervention burnout-cynicism was decreased from baseline ($p=0.04$). In post-intervention data, resilience was negatively correlated to burnout-exhaustion scores ($r=-0.57$, $p=0.01$) and perceived stress scores ($r=-0.60$, $p=0.01$).

Limitations
Small sample size and poor intervention adherence due to schedules and adverse weather during the intervention.

Conclusions/Implications for Practice
This study was feasible, appropriate, and acceptable. The REAL intervention reduced within-group burnout scores, and burnout and stress decreased as resilience increased. Burnout interventions must be incorporated into the nursing curriculum to overcome student participation barriers.

Biography

Shannon Burleson received a B.S. in Biology (2008), BSN (2012), MSN in nursing education (2019), and PhD in nursing with an integrative health and education focus (2023). Shannon has worked in critical care settings as an ICU RN, a flight RN, a cardiovascular catheterization lab RN, and a chest pain coordinator. With over 25 years of horse experience, Shannon also founded Sage Patch Ranch, a 501c3 equine rescue and equine-assisted activity center. She currently teaches at the Orvis School of Nursing with a primary research interest in studying a resilience equine-assisted learning program to reduce nursing student burnout.

Contact Information

Shannon Burleson, RN
Assistant Professor
University of Nevada, Reno
sburleson86@gmail.com
(408) 706-6457