

Mentor Program in a Level IV NICU to Improve Consistency in Evaluation of Clinical Skills, Job Satisfaction, and Decrease Risk for Burnout



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Introduction

Can a Neonatal Nurse Practitioner (NNP) mentor program improve job satisfaction, decrease burnout, and improve consistency in the evaluation of clinical skill in the Neonatal Intensive Care Unit (NICU) at a level IV Midwest hospital? In 2020, the National Association of Neonatal Nurse Practitioners and the National Certification Corporation conducted an online survey and concluded that NNPs are dissatisfied due to less job satisfaction, more work hours, poor work/life balance, and a less than optimal work environment (Snapp et al., 2022). Nurse practitioners (NP) new to the profession feel unprepared for practice in the first year resulting in feelings of inadequacy (Jarrell, 2016).

Advanced practice provider (APP) models suggest that competency and confidence can be built by providing additional support for the first year of practice, encouraging the transition to becoming lifelong learners (Nolan et al., 2022).

Nursing mentors provide constructive feedback and assess clinical competency (Immonen et al., 2019). Reliable clinical competency assessment is important to ensure that competency is consistently determined amongst evaluators. Mentor programs have been shown to improve job satisfaction, intent to stay, enhance performance, create a positive work environment, and improve patient outcomes (Minguez Moreno et al., 2023).

Methods

The specific aim of this quasi-experimental project was to create a NNP mentor program in the level IV NICU at a Midwest hospital.to help expert NNPs improve their mentoring skills, improve evaluation consistency of learner clinical skills, improve expert NNP's job satisfaction, and decrease risk for burnout.

The Department of Administrative Services Office of the Chief Human Resources Officer Mentoring Toolkit was used to design this project. Inperson and Zoom meeting options were recorded via Zoom. Education topics included:

- Why the expert NNP should mentor
- Qualities of a mentor and mentee
- Relationship building
- Review of mentee competencies
- Simulations where the mentors evaluated three clinical scenarios

Pre- and post-implementation evaluation was used to determine the following:

- Consistent evaluation of the novice NNP's clinical skill by the expert NNP using two components of the Evaluation for the Neonatal Nurse Practitioner/Physician Assistant following simulation
- Job satisfaction using the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS)
- Burnout using the Maslach Burnout Inventory (MBI)

Only questions found to be applicable to this research study were used from the MNPJSS and MBI. Permission was obtained to utilize the copyrighted MNPJSS and MBI. Permission was obtained to utilize the Evaluation for the Neonatal Nurse Practitioner/Physician Assistant.

Qualtrics questionnaires were disbursed prior to and following education implementation and included questions from:

- The MNPJSS
- The MBI
- Questions developed by the researchers to determine comfort surrounding mentoring and utilization of the Competency Assessment for Neonatal Nurse Practitioners and the Evaluation for Neonatal Nurse Practitioner/Physician Assistant

Institutional Review Board (IRB) approval for this project was obtained following approval by the Doctorate of Nursing Practice (DNP) chair and cochair at the University of Michigan-Flint. All data collected was deidentified.

Results

Outcomes for expert NNPs included: 1. Did the expert NNP accept participation in the mentor workshop? 2. Did the expert NNP complete the mentor workshop? 3. Did the expert NNP become a mentor in the mentor program? 4. Did the expert NNP learn to provide consistent evaluation of learner clinical skills? 5. Did job satisfaction improve for the expert NNP? 6. Did the risk of burnout decrease for the expert NNP?

Statistical analysis was performed using SPSS software. Wilcoxon signed-rank testing was used to obtain p values in comparing pre- and post-implementation data for job satisfaction and burnout data. Statistical significance was defined as p < 0.05. Interclass Correlation Coefficient was used to evaluate interrater reliability in pre- and post-evaluation of simulations.

Sixteen expert NNPs volunteered and accepted participation, 15 completed the mentorship workshop and became mentors. One expert NNP left voluntarily due to personal reasons not related to the project

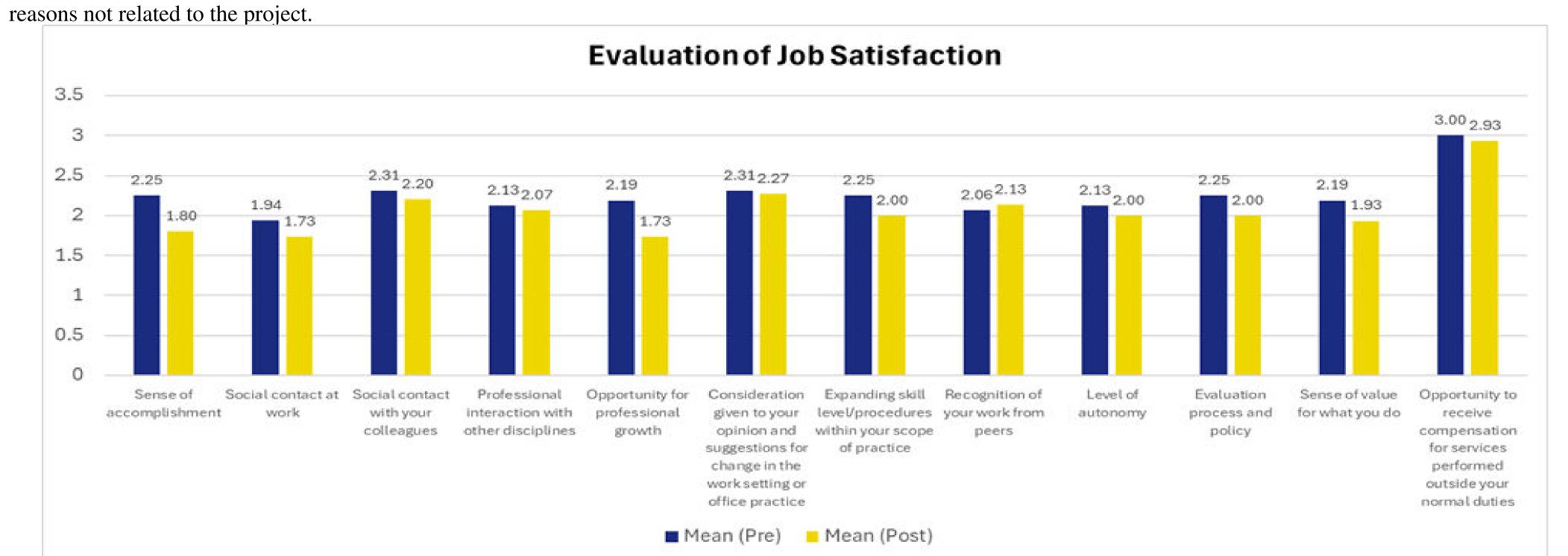


Figure 1. Pre- and post-evaluation means in questions from the MNPJSS in evaluation of job satisfaction

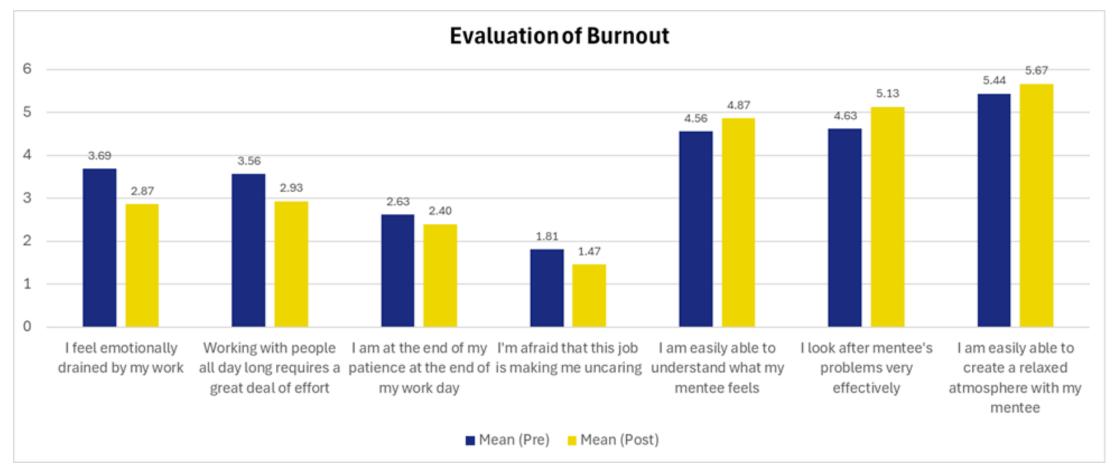


Figure 2. Pre- and post-evaluation means in questions from the MBI in evaluation of burnout

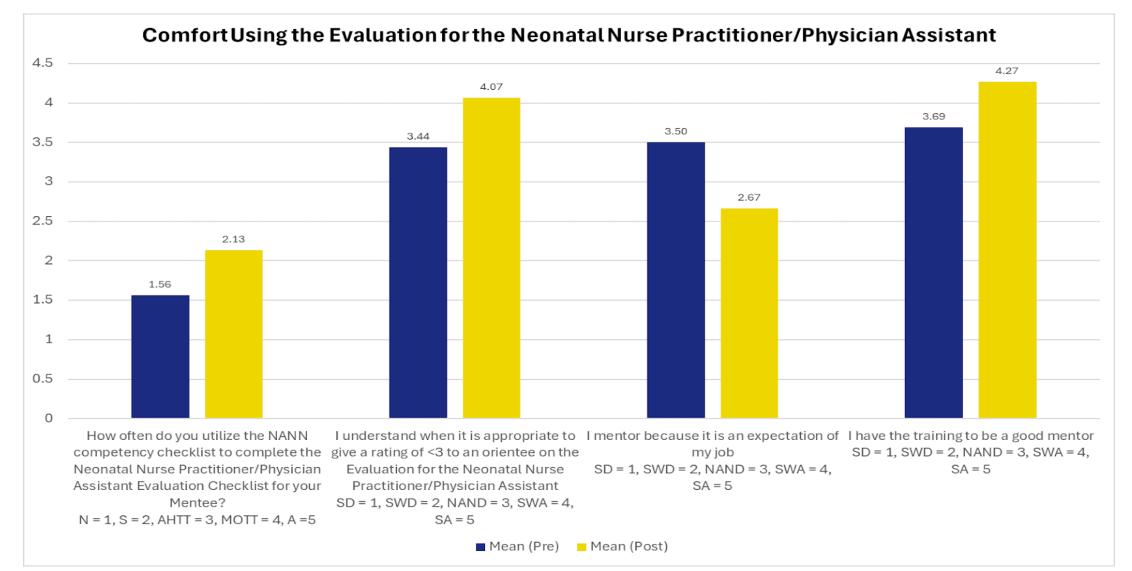


Figure 3. Pre- and post-evaluation means in questions developed by translational researchers in evaluation of comfort using the Evaluation for the Neonatal Nurse Practitioner/Physician Assistant

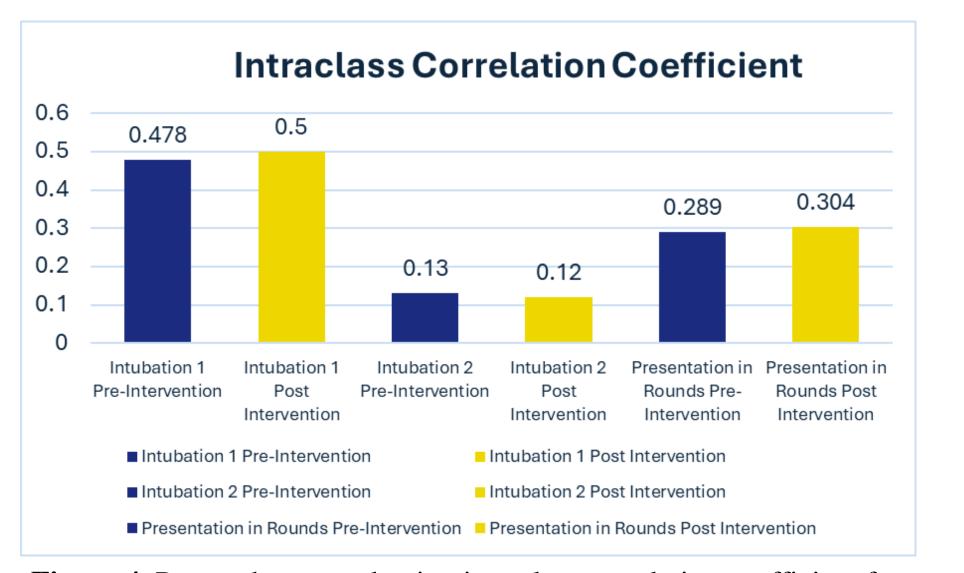


Figure 4. Pre- and post-evaluation intraclass correlation coefficient for simulations (intubation and presentation on rounds)



Figure 5. Pre- and post-evaluation expert NNP rank order of importance

Summary

Statistical significance was found for the following:

- MNPJSS questions: sense of accomplishment, social contact at work, and opportunity for professional growth. Responses for these questions were found to be consistent with improved job satisfaction when comparing mean responses.
- Comparing total values for questions used from the MNPJSS.
- MBI questions: I feel emotionally drained by my work and I'm afraid that this job is making me uncaring. Responses for these questions were found to be consistent with decreased risk for burnout when comparing mean responses.
- Questions developed by the researchers: I have given a rating of < 3 to an orientee on the Evaluation for the Neonatal Nurse Practitioner/Physician Assistant in the last 6 months, I understand when it is appropriate to give a rating < 3 to an orientee on the Evaluation for the Neonatal Nurse Practitioner/Physician Assistant, and I have the training to be a good mentor. Responses for these questions were found to be consistent with improved comfort using Evaluation for the Neonatal Nurse Practitioner/Physician Assistant when comparing mean responses for preand post-implementation.

Near statistical significance was found with the following:

• Questions developed by the researchers: how often do you utilize the NANN competency checklist to complete the Neonatal Nurse Practitioner/Physician Assistant Evaluation Checklist for your mentee and I mentor because it is an expectation of my job.

For both intubations and presentation in rounds simulations, the ICC was less than or equal to 0.5 indicating poor to moderate interrater reliability.

Conclusion

This research supports the literature that mentor programs have a positive correlation with increasing job satisfaction and decreasing burnout for mentors (Djiovanis, 2023; Ghosh & Reio, 2013; Horner, 2022; Jordan et al., 2019; Louis, 2022). Consistent evaluation of novice NNP clinical skills will strengthen the quality and validity of the mentorship program. This consistency in evaluation will improve the overall level of competency of novice NNPs following their orientation period. Mentorship programs will also help to improve relationships between expert and novice NNPs. This model could be easily transferred to other clinical sites. Once mentors are educated, their role in novice NNP development will continue to result in a positive return on investment for the institution. If mentor programs are found to improve time to competency and decrease cost of NNP orientation, medical centers will need to invest in formal programs to ensure their success and sustainability.

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