

# The Impact of an Inter-Professional Simulation Experience on Nurse Practitioner Student Anxiety and Confidence in Conducting Adolescent History and Physical Exams



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## Introduction

Multiple health risks including accident and injury, suicide, homicide, motor vehicle accidents, substance use and abuse, unwanted pregnancy, sexually transmitted infections and homelessness threaten the safety of the adolescent population. Identification of these health threats by nurse practitioners can be a challenge due to the sensitive nature of the questions required to investigate these risks.

## Methods

### Design

We conducted a quasi-experimental study investigating the impact of a simulation education experience on anxiety and confidence levels of nurse practitioner students performing adolescent history and physical exams (H&P) at three time points: baseline, immediate post-intervention and four months post-intervention while on clinical rotation

### Sample

Thirty Doctor of Nursing Practice family and psychiatric nurse practitioner students enrolled in the Child and Adolescent Health Assessment class were recruited and completed the surveys

### Intervention

- Didactic training session on adolescent assessment by an expert pediatric nurse practitioners specializing in adolescent medicine
- Standardized patient simulation experience using scripts written by expert PNP faculty.

### Instrument

- STAI Form Y-1
- Confidence questionnaire

Years as RN	n	Percent
0-5	11	36.7
5-10	10	33.3
10-15	3	10
15-20	2	6.7
20+	4	13.3
<b>Total</b>	<b>30</b>	<b>100</b>

Initial RN Training	n	Percent
Diploma	5	16.7
Associate's Degree	7	23.3
Bachelor's Degree	18	60

## Results

There was a significant decrease in anxiety from baseline to immediate post-intervention and from immediate post-intervention to four months post intervention

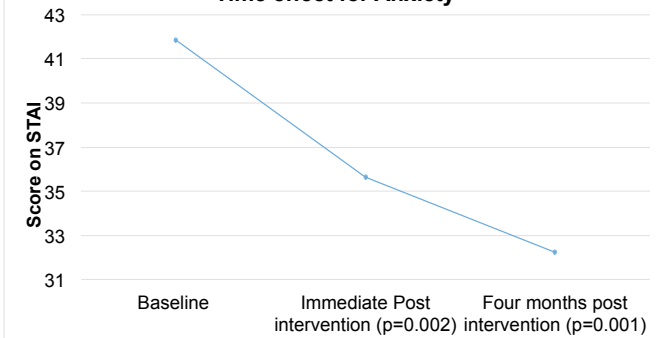
- Mean anxiety score baseline=41.83
- Mean anxiety score immediate post-intervention= 35.63 ( $p=0.002$ )
- Mean anxiety score four months post intervention=32.23 ( $p=0.001$ )

There was a corresponding and significant increase in confidence across the three time points:

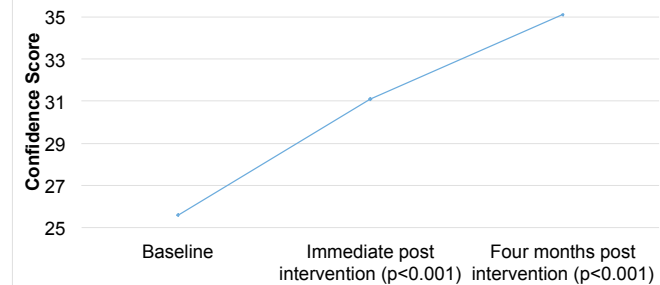
- Mean confidence score baseline=25.59
- Mean confidence score immediate post-intervention= 31.10 ( $p<0.001$ )
- Mean confidence score four months post intervention= 35.10 ( $p<0.001$ )

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**Time effect for Anxiety**



**Time effect for Confidence**



## Discussion

In addition to demonstrating reduced anxiety and increased confidence in nurse practitioner students the results of this study support the transfer of learning in the simulation lab into the clinical setting. Anxiety and lack of confidence in NP students and novice NPs can be improved through standardized patient simulation training. Equipping nurse practitioner students with higher confidence and decreasing their anxiety may improve poor health outcomes associated with adolescent health risk behavior. Standardized patient simulation training may be effective for other health professions working with adolescent patients.