



Sigma Theta Tau International 30th International Nursing Research Congress

Calgary, Alberta, Canada
2019

Disclosure

- Author:
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- There is no conflict of interest to declare
- Employer: Hunter College at the City University of New York (CUNY), NYC, NY 10010, USA
- There is no sponsorship or commercial support given to the author

Integrating a Cystic Fibrosis Simulation Scenario to Enhance Pre- Licensure Educational Genomic Understanding: A Qualitative Perspective

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Objectives

Discuss/Explore:

- Simulation and Nursing
 - Innovative and Creative Simulation Scenario Integrating Genomic Component
 - Brief overview of integrating genomics into nursing curricula
- Simulation Case Scenario with Genomic Component
 - Discussion of Cystic Fibrosis simulation scenario
- Findings of Student Perception
 - Students' perception of simulation with genomic component
 - Qualitative aspect of findings
- Future integration possibilities

Simulation Case Scenario with Genomic Component

- Brief overview of larger study:
 - Mixed method pre/post assessments with qualitative description
 - Explored integration of genetic component to a SBLE of a newly diagnosed CF patient [3 week old infant]
 - IRB approval obtained for data collection during Fall 2018
 - 10 qtn survey [based on information from the University of Rochester Medical Center Health Encyclopedia (2019)]: What Do You Know About Cystic Fibrosis?
 - Multiple-choice assessment: asks basic information regarding CF
- One senior experienced clinical educator with 3 separate clinical groups
 - All participants were 3rd yr (junior level) pre-licensure baccalaureate students
 - Simulation case scenarios written to coordinate to students' educational knowledge level and abilities
 - 24 students participated (females=21; males=3; mean age 21.5)

Purpose

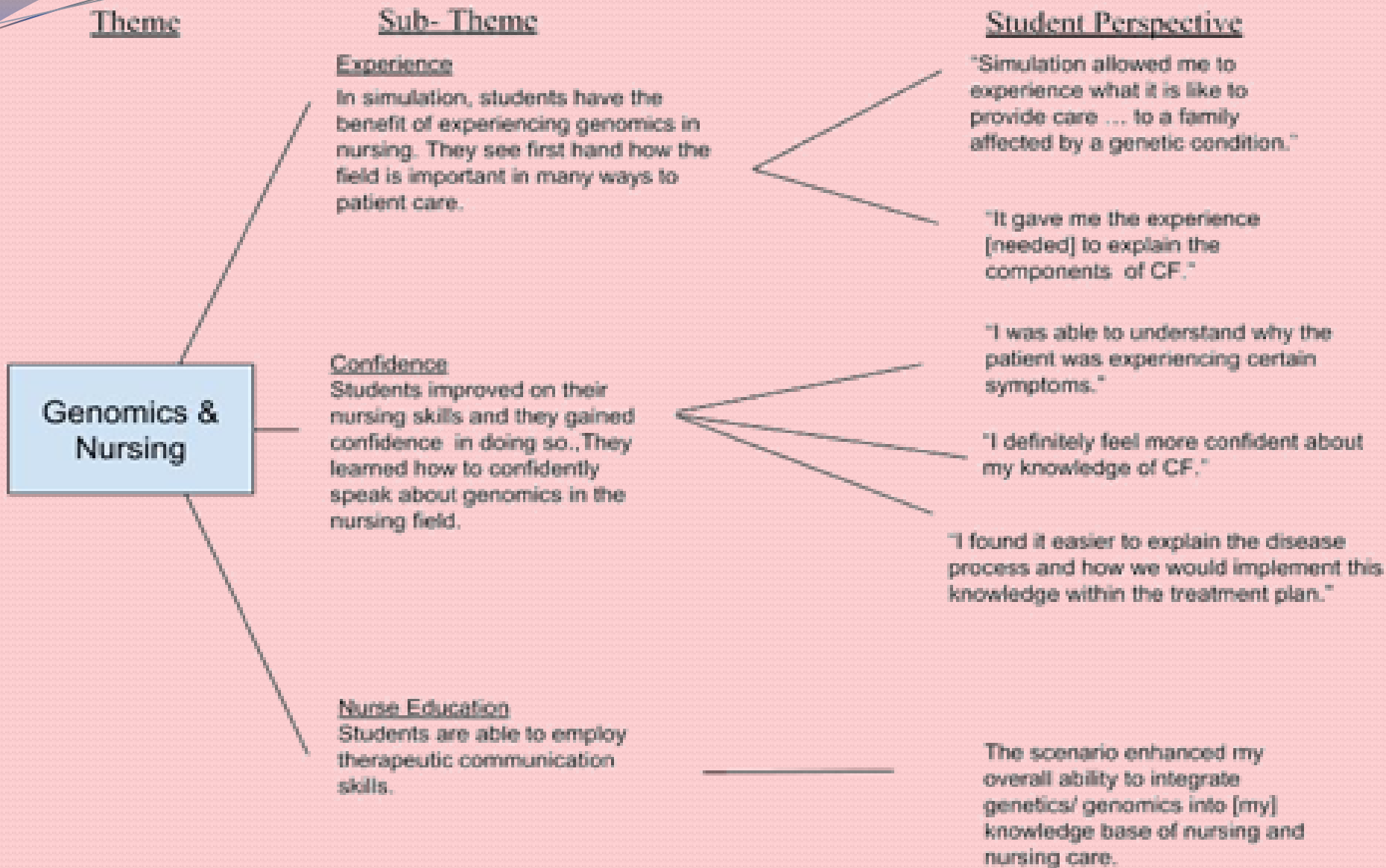
- As part of a larger study, this presentation will explore the findings of one open-ended question
 - How simulation scenario in Cystic Fibrosis (CF) enhanced pre-licensure baccalaureate nursing students' self-perceived ability to integrate genomics into their knowledge base of nursing and nursing care
- One open-ended simplified critical incident statement asked participants to explore
 - Do you feel that this scenario enhanced your overall ability to integrate genomics into your knowledge base of nursing and nursing care?

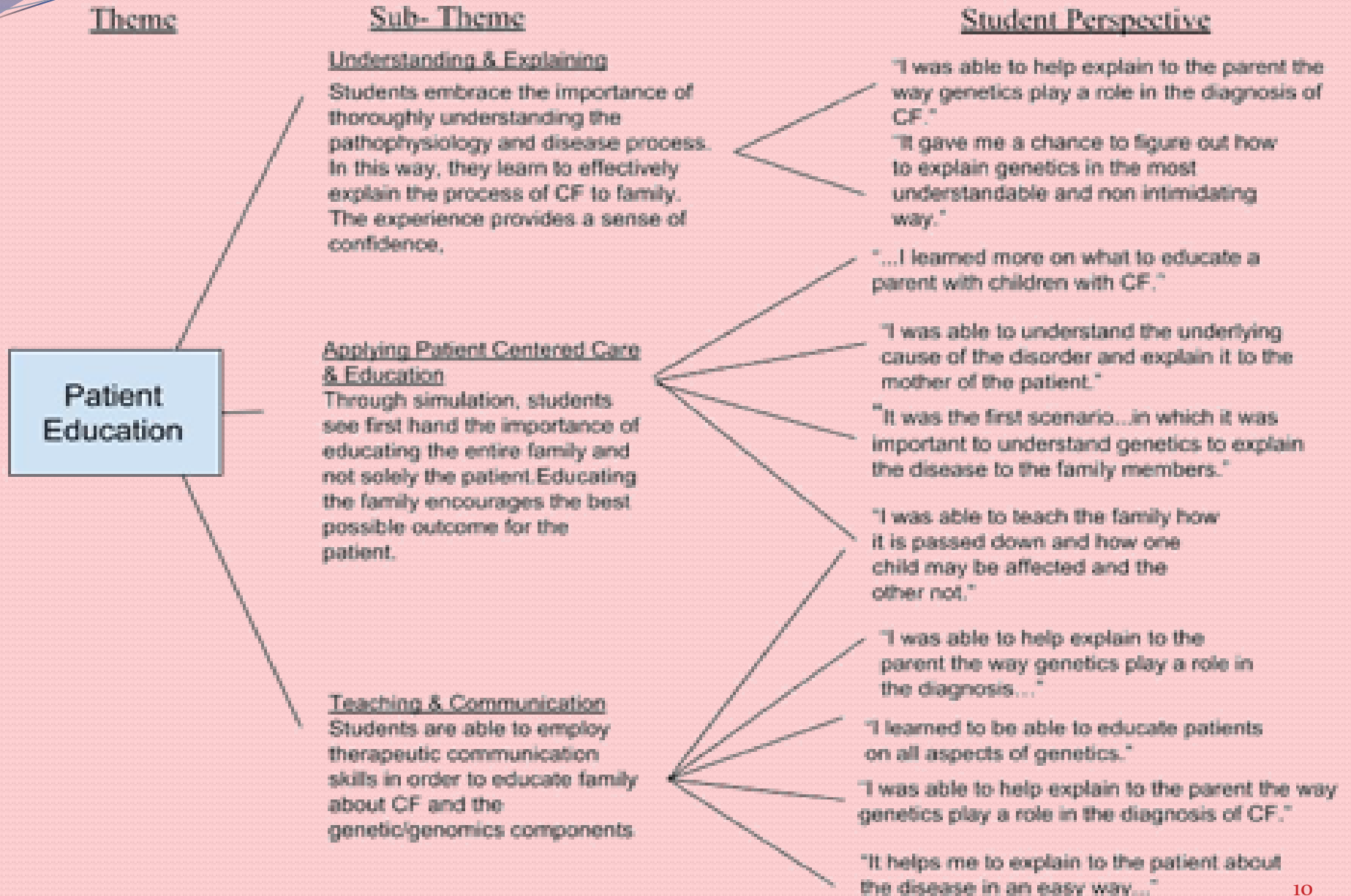
Methodology

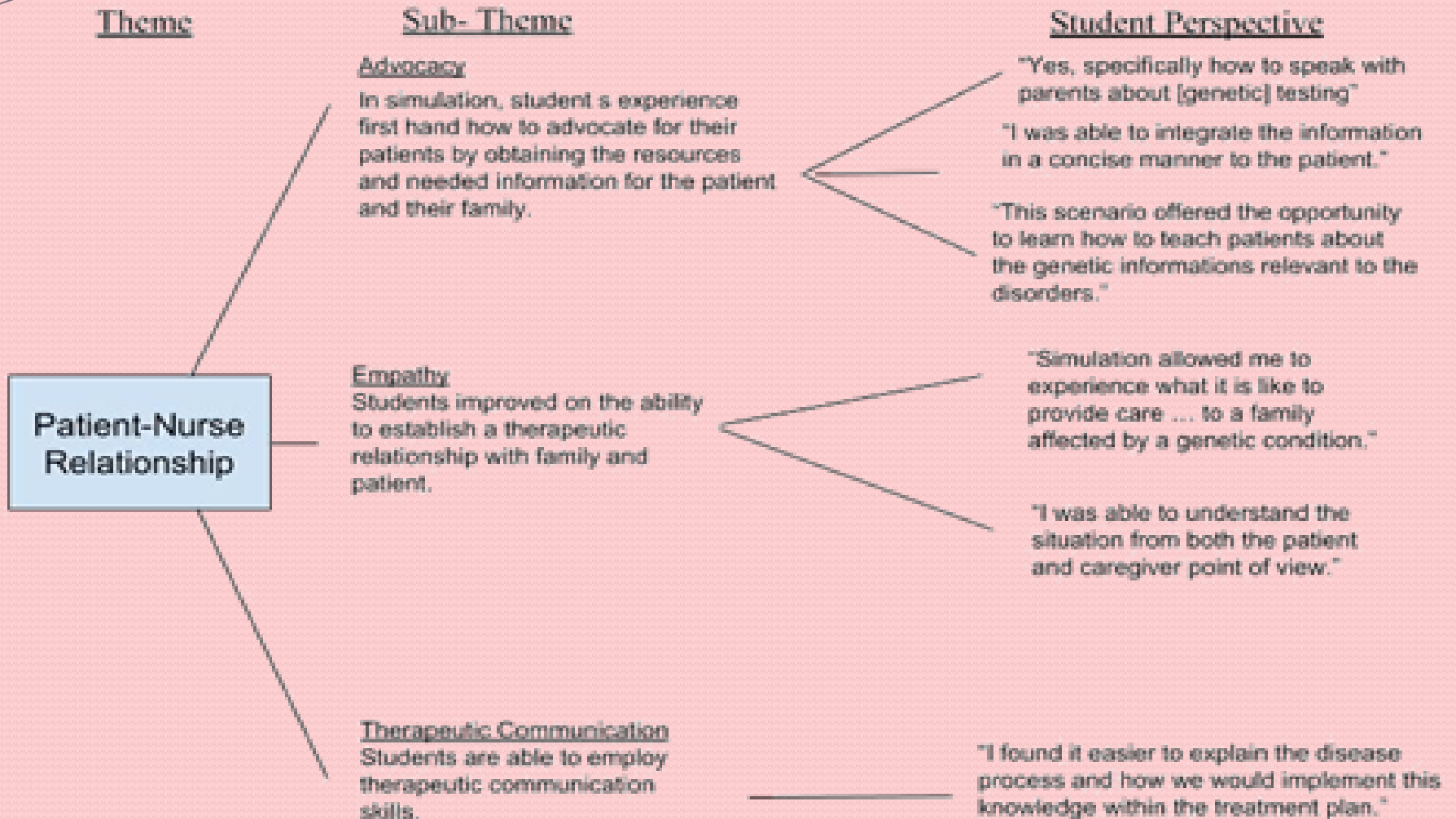
- Data analyzed with thematic interpretation of commonalities
 - emerged with theme clustering according to conceptual similarities from this self-perception survey
- Data managed in an objective and systematic approach
 - leading to construction of correlating suppositions
- Initially, several clusters identified
 - eventually collapsed into the four expounding themes

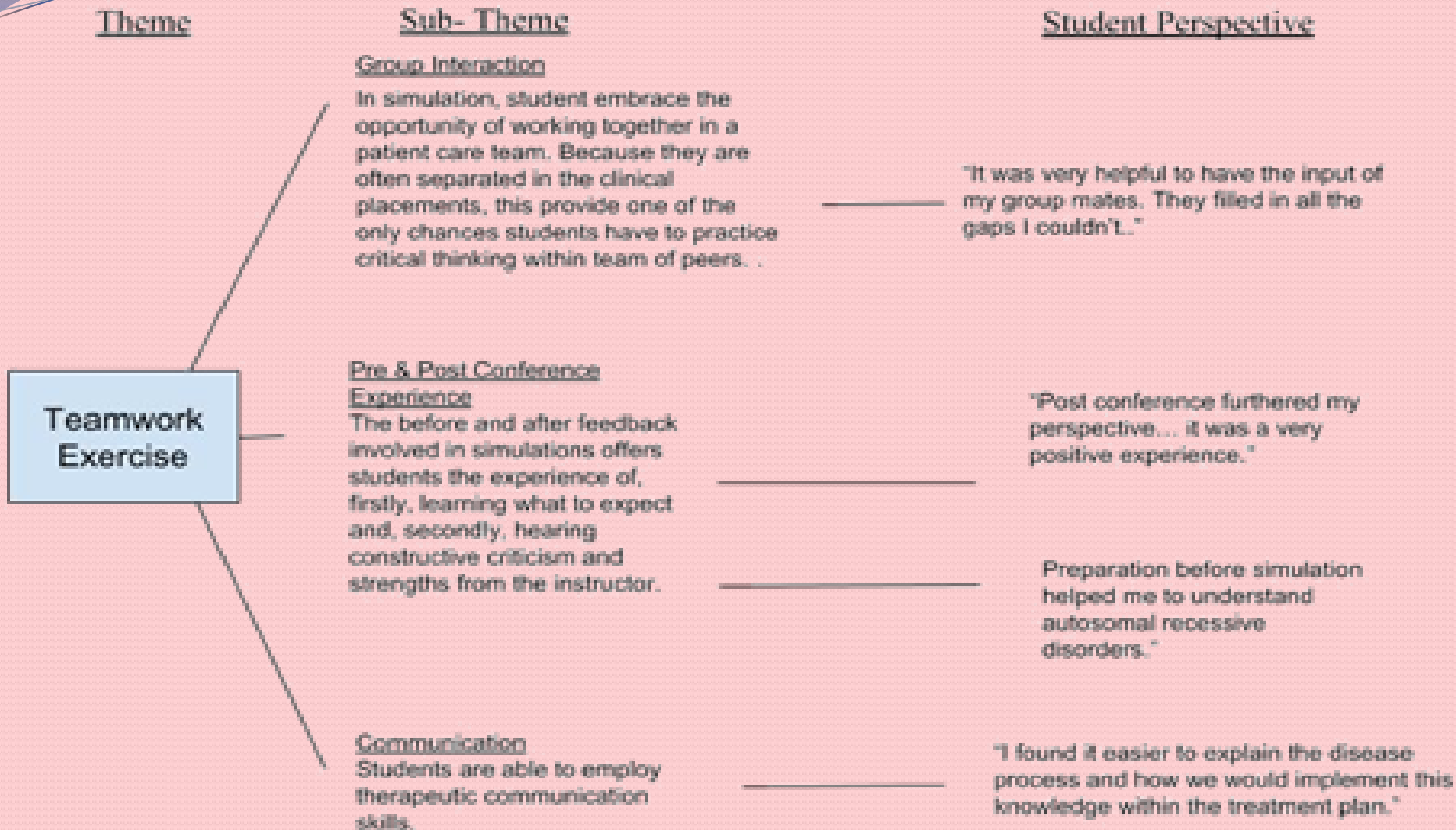
Results

- Four major themes emerged, each with 3 sub-themes identified
 - Genomics and nursing [n=12]
 - Experience, confidence, nurse education
 - Patient education [n=9]
 - understanding and explaining, applying patient-centered care and education teaching and teaching & communication
 - Patient-nurse relationship [n=5]
 - Advocacy, empathy and therapeutic communication
 - Teamwork exercise [n=3]
 - group interaction, pre & post conference experience and communication









Conclusions

- Simulation has proven to be an effective educational methodology
 - enhancing student learning outcomes
 - development of critical thinking
 - skill performance
 - medical condition comprehension
- Integrating a genetically-based condition into a simulation
 - students expected to research the condition
 - engage in patient education
 - facilitate effective and appropriate nursing care
 - enriches their confidence, skills and knowledge acquisition
- Professional confidence and experience, clinical reasoning and judgement and reflective practice coalesces into a nurse who can fully engage in the healing-caring process of their patients and family

Future Exploration of Genomic Integration

- This pilot study demonstrated that genomic education can be successfully integrated into a simulation
 - positive student learning outcomes
- Based on the success of this study, the researcher developed 3 additional evolving sim scenarios pertaining to this fictitious patient, implemented in Spring 2019
 - 6 yr old; 21 yr old & 47 yr old
- As genetically-based health care continues to expand how nurses participate in patient care, nurse educator needs to
 - stay current and competent to prepare the 21st Century student as they become the future of the nursing workforce

- Thank you for your time
 - If anyone has any questions, please do not hesitate to contact me
- I would like to thank all those who participated, Ms. Cait McDonough (RA), Mr. Marvin Sanon, Ms. Cynthia Reyes and Professor Marge Cocozza for their assistance in this study

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