

**INVESTIGATING THE USE OF SIMULATIONS IN  
ENHANCING CLINICAL JUDGEMENT OF STUDENTS TO  
PRACTICE AS REGISTERED NURSES**

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PhD

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## **Certificate of Authorship / Originality**

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Signature of Candidate

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### Other publications

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Symposium on Nursing Simulation, (May, Pittsburgh, USA)

2010

*“Transformation in simulation reflecting current practice and practice environments”*, 8th

International Conference for Emergency Nurses, (October, Canberra, Australia)

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## **Abstract**

On entry to the workforce nursing graduates are expected to respond to a range of clinical situations they may not have experienced during their program. The social aspects of practice such as professional behaviours are equally important for transitioning to the registered nurse role. Contemporary simulation strategies can provide students with experiences of how Registered Nurses would respond in a guaranteed range of patient care situations.

The exponential rise of healthcare simulation over the last 15 years is reflected in the prolific number of publications about its use, participant evaluation and satisfaction, or improvements in skills technique. Few of these evaluations capture the impact of the simulation learning experiences beyond the immediate timeframe of the activity. Similarly, there is little research about how simulations may contribute to the 'thinking' aspects and holistic nature of professional practice and the pedagogy of simulation practices. This research explored the contribution of simulation for final year nursing students' learning and clinical judgement capabilities; and the effect of simulations on students' subsequent practice as new Registered Nurses in the year following graduation.

## **Methods**

A multi-phase mixed methods approach was used in the research which comprised two studies. In Study 1, 108 final year nursing students responded to a pre- post-simulation survey. Opinion was sought about self-rated skills, knowledge and dimensions of practice prior to and following the simulation. The post-survey asked students to rate 11 components of the designated simulation to the application of clinical judgment. Study 2 comprised group interviews with nine students at degree completion, and 1:1 interviews during the first three months of registered nurse practice.

Standard statistical analysis was applied to quantitative data and word clouds were created from the survey free text responses. Data from group and individual interviews produced a number of themes following iterative analyses. Students from three study streams were represented in both studies: 3-year program, 2-year accelerated graduate entry program; and 2-year accelerated enrolled nurse program.

### **Key findings**

Prior to the simulation students felt least able about: caring for *patients*, their *knowledge* and *clinical* abilities. Following the simulation there was greater importance on the *patient*, *communication* and *assessment*. The top three simulation components which assisted students with clinical judgements were: *post-simulation reflection*, *facilitated debriefing* and *guidance by the academic*.

At course completion students reported the simulations provided them with greater insight into the professional traits required for registered nurse practice as the activities presented opportunities to *glue things together*, draw on *tacit knowledge* and appreciate the *holism of practice*. Learning within simulation was *situated*, *experiential* and *contextual* but also elicited *affective elements* of learning, that is: emotions, behavioural norms and professional attitudes. Immediate effects on practice were greater attention to noticing patient cues and a willingness to inquire further and respond in meaningful ways.

In the early months of practice, participants recalled the simulation experiences during sequent patient care situations of *similar* or *contrasting* contexts. Each new graduate nurse cited at least one instance where they were able to anticipate what may happen next in the patient care trajectory and responded by making judgements and decisions relative to the urgency of a situation. Clear connections were made between the simulations and their contributions to clinical practice.

## **Conclusion**

Unlike other educational strategies, simulations provided unique learning opportunities for nursing students which contributed in meaningful ways as preparation for independent practice. In addition to improving confidence for practice, these new graduate nurses were able to make appropriate clinical judgements often within challenging situations, which influenced patient outcomes in positive ways.

## Terminology

Bachelor of Nursing (BN)	a university degree of 3 years duration (standard program) which provides students with the qualification to practice as a Registered Nurse in Australia
Course	An alternate descriptor of the Bachelor of Nursing and it's many streams
Debriefing	The defined time set aside after a simulation for facilitated discussion about the events which occurred in the learning activity
Enrolled Nurse (EN)	A healthcare worker who has a minimum Diploma of Nursing qualification usually received through a Vocational Education and Training (VET) sector or private education provider. ENs practice under the supervision of Registered Nurses.
Graduate Entry (GE)	Students within the 2-year GE program possess a Bachelor Degree in another discipline, more latterly a health related field
New Graduate (NG) nurse	Newly graduated nurses who generally undertake a 12 month employment contract with hospitals or other health services. During the NG year educational and clinical support are provided in the form of orientation and other study days and mentoring in the clinical areas by staff and clinical educators.
Program	An alternate descriptor of the Bachelor of Nursing and it's many streams
Rapid Response	A team of experienced doctors and nurses who respond to a call by other clinical staff to assist with acute episodes of patient deterioration



Simulation	A learning activity which usually occurs in a dedicated space (simulation laboratory or centre) and replicates clinical practices and situations to rehearse responses and improve performance
Simulation experience	The participant's personal experience of the simulation learning activity; or a collection of units of 'simulation' which together form a total experience
Simulation learning activity	Activities that are usually planned and scheduled into (undergraduate) curricula; also - simulation
Subject	A unit of study within a course or program. Comprises 6 credit points towards the required 72 credit points for a university Bachelor degree. Full time students usually undertake 4 subjects per semester
Team-based simulation	A simulation comprising 2 or more participants who may be present in the simulation 'space' or another location but contactable by telephone or other communication device
Team Leader (TL)	A person taking charge of a shift; usually the most experienced nurse who is employed by the facility (hospital) rather than a casual or temporary employee
Tutor	Teaching staff who are usually academics of the respective Faculty or School of Nursing. Some tutors may be employed on a contract basis as needed per semester
Tutorial	A more informal occasion for learning which is either conducted in laboratories or classrooms with a duration of 2-3 hours