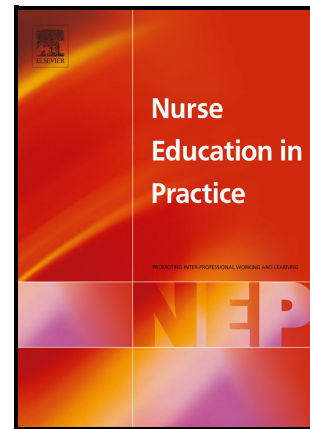


Pre-assessment judgement framework for judging nursing students' performance in clinical placements: a qualitative case study

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Pre-assessment judgement framework for judging nursing students' performance in clinical placements: a qualitative case study

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ABSTRACT**Aim:**

This study aims to better understand and articulate the pre-assessment judgement processes commonly used by experienced clinical facilitators when assessing nursing students undertaking clinical placement.

Background:

In the Australian context, clinical facilitators are registered nurses who primarily educate, monitor, support and assess groups of nursing students on clinical placement –without additional patient workload.

This role's duties and scope may differ across international and institutional contexts.

However, the core concepts of this paper may be relevant across these differences: supporting facilitators' confidence in making pre-assessment judgements of individual nursing student performance while on placement.

Nursing students on clinical placement are often assessed on safe practice, patient task-orientated outcomes and professional behaviour. Clearly articulating performance judgements prior to formal assessment is vital to ensure progressive learning of all nursing students. Literature reports that many clinical facilitators lack confidence in the art of making performance judgements and call for targeted professional training and support in the clinical assessment of nursing students. To better understand and address this problem, clinical facilitators urgently need a shared understanding of how individual nursing students' pre-assessment performance judgements are reached during placement experiences.

Design:

A qualitative case study was used, with data collected via semi-structured interviews. Fifteen Australian clinical facilitators participated, each with over six months of experience.

Methods:

Interview transcripts were analysed through an interpretive-constructivist paradigm. Thematic analysis revealed themes that were then deductively described through the application of the Cognitive Continuum Theory.

Results:

Six modes of pre-assessment judgement emerged from the data synthesis process: 1) Recognising patterns, 2) Acknowledging uncertainty, 3) Understanding key players, 4) Verifying or refuting the information, 5) Benchmarking performance and 6) Contextualising information. Each mode is validated through the deductive application of the Cognitive Continuum theory.

Conclusions:

Understanding how experienced clinical facilitators make pre-assessment performance judgements will increase facilitator confidence in performance judgement decisions. Confidence in judgements increases the clinical facilitator's capacity to give nursing students feedback that can be explained and justified. The pre-assessment judgement framework also provides a preliminary model for teaching the art of reaching accurate performance judgements to clinical educators in disciplines beyond nursing.

Keywords:

Performance

Judgement

Nursing students

Student placement

Cognitive Continuum Theory

Qualitative research

Journal Pre-proof

INTRODUCTION

Clearly articulating performance judgements prior to assessment is vital to ensure undergraduate nursing students' progressive learning while undertaking clinical placements. Performance judgements are dynamic social constructs resulting from the interaction of the cognitive functions employed by the individual making the judgement, the environment where the performance occurs and the time available (Hammond, 1988). While clinical placement practices in pre-licence nursing programs vary worldwide, these placements are considered a key component in preparing nurses for the real world of practice (Luders et al., 2021).

Student supervision practices vary between healthcare facilities and countries. Some use a one-on-one supervisor from the healthcare facility, often known as a preceptor or mentor, who is also allocated a patient workload. Other institutions use group supervision of students with no allocated patient workload. These latter types of clinical supervisors may be employed by the health care facility or the student's education provider and are often called clinical facilitators, nurse educators, or clinical instructors (El Hussein and Fast, 2020; Leighton et al., 2022; Lim et al., 2023). In some countries, such as the UK, academic staff from the education provider visit the healthcare facility to provide supervision and are often referred to as link lecturers or link educators (King, 2018).

In the Australian context, clinical facilitators are registered nurses who primarily educate, monitor, support and assess groups of nursing students on clinical placement - without additional patient workload. Education for the clinical facilitator role is not regulated and varies, with a heavy reliance on peer and experiential learning. Ryan and McAllister's study (2020) identified that only 23% of Australian clinical facilitators held a teaching and assessment qualification. It is acknowledged that role duties and scope may differ across international and institutional contexts. However, the core concepts of this paper may be

relevant across these differences: supporting facilitators' confidence in making pre-assessment judgements of individual nursing student performance while on clinical placement.

The rationale for this study was the frequent communication between the first author (Academic) and working clinical facilitators who questioned their performance judgements of students, especially those in the pre-assessment phase. Many felt their judgements were subjective and questioned their validity, even though they could justify these opinions and provide examples when asked to explain their concerns. Literature confirmed this anomaly reporting that clinical facilitators lack confidence and training in making performance judgements and call for further research and support in this area (El Hussein and Fast, 2020; Ryan and McAllister, 2020). This uncertainty by facilitators led to this project and its research question:

How do clinical facilitators make pre-assessment judgements about a student nurse's performance in clinical placement?

This paper describes the cognitive performance judgement modes that clinical facilitators use to reach varying pre-assessment performance judgements about students' cognitive/psychomotor/affective abilities. This study is essential as these previously invisible, unexplained cognitive modes of thinking are made visible. These modes provide language to explain and justify pre-assessment judgement and enable increased sharing of constructive performance feedback to students, necessary for improving student performance and competency.

BACKGROUND

Literature reports the importance of understanding student knowledge and skill ability through the acts of observing, questioning and measuring outcomes. Facilitator observation

of a student's behaviour plays a vital role when making judgements about performance (Dickson et al., 2006; El Hussein and Fast, 2020; Grealish et al., 2018). In their 2006 phenomenological study, Dickson et al. identified times when facilitators "step back" from direct student interaction, hand over control of patient care and observe a student's performance ability (Dickson et al., 2006, p. 419). However, the facilitator's ability to observe students' practice decreased as student numbers increased and supervision models changed (Grealish et al., 2018).

Facilitators used questioning to assist in their appraisal of the student's critical thinking ability (Brown & Crookes, 2017; Hunter & Arthur, 2016; Phillips et al., 2017). In a study with 133 Australian facilitators, Phillips et al. (2017) found that 73% of questions they would ask students were low-level questions requiring simple recall of knowledge and comprehension, while 27% were higher cognitive level questions. Facilitators who had undertaken education-related training asked higher cognitive questions.

Understanding student knowledge and skills occurs through measuring patient task-orientated outcomes and professional behaviour. Brown et al. (2017) describes measuring patient outcomes as the "ability to complete allocated work", "discharges a patient on time with paperwork and medication" and "accurately records communication and client/patient interaction" (p.223). Huang et al. (2018) include determinants of prioritisation, hypothetical scenario action and proposed solutions to patient problems as measurable outcomes. A 2019 study by Anderson et al. discussed behavioural outcomes that facilitators perceived as unprofessional. These included: being late, absent from placement, untidy appearance, tired, uninterested, complaining about shift work, changing shift allocation, not accepting feedback, overstepping role boundaries and incivility.

The use of subjective information by clinical facilitators is discussed in the literature as gut feeling and subjective labelling of the student. Dobbs (2017) stated that gut feeling was a

subjective response that inexperienced facilitators use to make decisions about student competence. More recently, literature has emerged validating the role of gut feelings. In the El Hussein and Fast (2020) study, gut feeling was defined as “vague/ difficult to articulate and unsettled sensations” that occurred when the student's actions did not fit a “specific pattern that clinical instructor perceived as the standard of competent and safe practice” (p. 79). Participants described gut feeling as an alarming sensation that acts as the “gate keeper in the decision-making process” (El Hussein & Fast, 2020, p. 79), thereby triggering the instructor to gather further observations and unpack their thinking.

Using English proficiency as a lens, San Miguel and Rogan's (2012) paper discussed the subjective labelling of students. A good student is characterised as having personality traits such as communicating well, having a suitable bedside manner, being happy and enthusiastic to learn and being assertive with the confidence to ask questions. Their study also found that factors regarding a student's personality rather than their clinical ability served in judgements about student performance, but the extent to which personality traits had an impact on the overall judgement of the student was unclear (San Miguel & Rogan, 2012).

Understanding student knowledge and skills is assisted by tools, feedback and advice. The use of formal assessment tools and guidelines increased objectivity and transparency in the facilitator's decision-making process (El Hussein & Fast, 2020). Andrew and Ford (2013, p. 415) found tools such as the scope of practice and assessment guidelines provided by the education provider “to be very helpful” to facilitators new to the role. Such tools provided a common language for facilitators to communicate performance judgements (San Miguel & Rogan, 2015). However, facilitators also expressed confusion and lack of understanding around the proper use of these tools (Brown & Crookes, 2017). The ongoing development of

tools indicates a need for further understanding of clinical facilitators' performance judgements.

How a student responds to facilitator feedback was also a key performance indicator. El Hussein and Fast (2020) identify that a student requiring “frequent or the same constructive feedback” could indicate a failure to progress or “develop independent thought processes” (p. 80). Students’ incivil reactions to facilitator feedback indicates unprofessional performance (Anderson et al., 2019).

Facilitators often turned to other facilitators for advice with performance judgements. One facilitator in Andrews and Ford (2013) study stated that “it would be a much harder role without the mentor and other...experienced facilitators” (p. 416). This view was confirmed in Needham et al. (2016) study, indicating that the primary sources of knowledge for the role were experience and networking with other facilitators.

The main challenges to understanding students' knowledge and skill are time, culture, gaining feedback and student behaviour. The difficulty of time was multi-faceted. Hughes et al. (2019) reported that 44% of facilitators ($n=66$ out of 149 participants) described having inadequate time to assess students in practice. Difficult students were seen as requiring more time in an already time-poor situation (Andrews & Ford, 2013). Hari et al. (2021) and Lin et al. (2021) also identified that culturally diverse students often needed extra time to process information and demonstrate performance ability.

Henderson et al. (2016) identified four categories of intercultural communication challenges: “1) prejudice based on cultural diversity; 2) unfamiliarity with cultural boundaries; 3) stereotyping cultural behaviours; and 4) difficulty understanding English” (p. 73). Further research to upskill facilitators in supporting students from diverse cultural backgrounds was called for by Lin et al. (2021) and San Miguel and Rogan (2015).

Gaining feedback from nurses working with students was identified as vital but challenging. Dahlke and Hannesson (2016) stated that facilitators often made a conscious effort to develop relationships with the nurses working directly with students so that they could be considered a part of the team rather than an “outsider” (p. 93). Facilitators hoped that such camaraderie would increase sharing of student performance information (Dahlke & Hannesson, 2016). However, this study also identified that developing rapport with the nurses working alongside the student took time. The difficulty in gaining feedback was also compounded by nurses not understanding the information needed to judge a student’s performance (Grealish et al., 2018).

Anderson et al. (2019) also reported that difficult student behaviour included rudeness, with a staggering 92.8% of facilitators ($n=66$ out of 71 participants) experiencing some level of incivility from students within the placement environment. A similar finding was also reported by Hughes et al. (2019).

Individual factors that assist or hinder a facilitator in reaching a performance judgement were identified in this literature review. The gap that emerged from this literature review is that the process that clinical facilitators engage in to reach a pre-assessment performance judgement about undergraduate student nurse performance in clinical placement has been neither described nor reported in research findings. The objective of this study is to provide insight into how clinical facilitators make pre- assessment performance judgements.

THEORETICAL FRAMEWORK

Theoretically, judgement is a context-specific cognitive process that requires consideration of a range of different modes of inquiry. These cognitive modes of inquiry incorporate both knowledge and an understanding of contextually dependent tasks associated with that knowledge. The cognitive continuum theory explains first how knowledge ranges from

intuition (tacit knowledge) to analysis (explicit knowledge). (Hammond, 1988; Dunwoody et al., 2000). Table 1 provides characteristics of these knowledges at either end of the cognitive continuum.

Similarly, the contextually dependent task properties range from ill-structured to well-structured tasks (Hammond, 1988). Information about the task, its contextual properties and time available determine the task location in the structure continuum (Hammond, 2000).

Table 2 provides descriptors of both ill- structured and well- structured tasks.

The cognitive continuum theoretical relational matrix framework describes the relationship between types of cognition and task properties. As such, it is useful for this investigation because it enables the identification and interpretation of pre-assessment judgement processes provided by clinical facilitators who participated in this study.

METHODS

The qualitative case study design selected for this study was informed by Stake (1995), who stated that a case is “a specific, a complex, functioning thing” within “an integrated system” which “has a boundary and working parts” (p. 2). The functioning thing or unit of analysis for this study was the individual clinical facilitator within the bounded system of placement.

The inclusion criteria for participation in this study included facilitators who: were not assigned direct patient care, supervised six or more students at one time and had a minimum of six months of experience in this role. Of 182 facilitators contacted via email through the host university’s clinical facilitator database, 22 volunteered to be interviewed.

Braun and Clarke’s (2021) guidelines suggest a desired samples of 10 to 20 interviews for a medium qualitative research study to ensure participant perspectives are captured and the data obtained is manageable for analysis. Fifteen participants undertook 35-to-60-minute

semi-structured interviews with the primary researcher via Zoom from July to November 2018. Table 3 provides participant demographic details.

Data sufficiency was achieved through the analysis of these 15 interviews. Interview transcripts were thematically analysed using Braun and Clarke's (2021) six-step process:

- 1) The primary researcher became familiar with the data by reading and re reading transcripts, reviewing interviewer notes and listening to interview recordings.
- 2) Codes with data examples were generated, reviewed and challenged by all members of the research team.
- 3) Constructing sub- themes occurred through the clarification and reorganisation of code similarities.
- 4) Reviewing sub- themes and cross checking of coded data to ensure intercoder reliability was undertaken by the three members of the research team.
- 5) Defining and naming themes occurred as subthemes were developed into the themes. Each were peer reviewed among the team.
- 6) A manuscript (this paper) constructed the themes as modes of inquiry that were interpreted through the cognitive continuum theory's relational matrix.

In the interviews, participants reflected on past students they had facilitated during two to six-week placement periods. The semi-structured interview questions were as follows:

1. How do you judge a student's performance?
2. Are there any other methods used to collect and process performance information?
3. Has there ever been a time that you had trouble making a decision about a student's performance?

If yes, why?

If not, why not?

4. Are there any factors that affect your ability to make decisions?

Trustworthiness in this qualitative case study was achieved through investigator, theoretical and environmental triangulation (Stahl & King, 2020). Investigator triangulation occurred during steps two, three and four of Braun and Clarke's (2021) thematic analysis process set out above. Theoretical triangulation occurred through the lens of an interpretive–constructivist data analysis approach and the application of the cognitive continuum theory to describe facilitators' practice of making pre- assessment performance judgements (Stahl & King, 2020). Facilitators from both private and public student placements in different healthcare facility settings across Australia were purposively sampled to ensure environmental triangulation.

The study was approved by the University Human Research Ethics Committee (HREC 0000020831). The consolidated criteria for reporting qualitative research (COREQ) checklist guided this study's reflexivity, design, analysis and reporting (Tong et al., 2007). Non-gender-specific pseudonyms were used in data analysis and the reporting of findings to ensure participant anonymity.

RESULTS

Six pre-assessment performance judgement modes of inquiry that participants used were constructed from the thematic analysis of the interview data. They reveal the complexity of these modes of inquiry and are summarised in Table 4.

1. Recognising patterns

Recognising patterns was intuitive and described as “*a gut feeling*” (Riley) “*a red flag*” (Jessie), “*sixth sense*” (Bailey), “*vibe*” (Kerry), “*knowing*” (Dakota). Patterns recognised were student engagement, initiative, confidence, communication. For instance, engagement was recognised as “*enthusiastic, demonstrating accountability for their learning*” (Jo).

Alternatively, lack of engagement was recognised as “*a reluctance to participate and they stand back a lot more than somebody that’s performing well*” (Bailey). Initiative was recognised as students “*take that lead into being the primary carer for the patient... stepping up*” (Jessie) and being “*responsible for own practice, knowledge-building*” (Blake). Confidence was described as “*straight out there, she knew the answers and was confident*” (Jamie).

However, patterns of underconfidence and overconfidence were both concerns.

Underconfidence was described as “*not asking for help and they’re not asking questions [...] they try to avoid certain tasks and avoid taking a patient load [...] because they don’t feel confident in their practice*” (Alex) .

Casey identified that the overconfident student would often “*fly straight into it [the task] without going through that preparation and evaluating the process*”, creating safety concerns. Bailey felt that “*overconfidence is just as bad as being underconfident*”.

Facilitators identified that they use verbal, nonverbal and written communication patterns when forming a performance judgement. The gathering of communication patterns for individual students began at orientation and continued through placement. Jordan stated: “*some words will strike something in me that I think, I’m not quite sure about that one*”. In contrast, Blake said the student “*may say a few words, but that would be enough for me to go, okay, they do know.*”

2. Acknowledging uncertainty

Acknowledging uncertainty occurs when a facilitator is unsure about a student’s performance ability. The acknowledgement of uncertainty was actions aimed at creating certainty. These actions included providing space, seeking guidance and obtaining a second opinion. When uncertain, facilitators created space for student practice. Blake explained,

“letting the student take the lead within their scope ...don't keep asking questions, don't tell them what to do. Let them run the interaction.” Standing back allowed facilitators to gain insight into *“a student's knowledge and ability to reflect and critically think”* (Riley) through the questions they asked. Space also includes the organisation of practice opportunities. *“Sometimes it's a matter of ...saying, “Oh, can they take some of the patients today?”* (Jamie).

Guidance from other sources was also sought. These sources include the education provider, facility manager or educator, published literature and other facilitators. Jo felt that it was essential to:

“seek support for myself from universities and/or my peers about what other strategies that I could try, because I might have exhausted my toolkit.”

Obtaining a second opinion was a deliberate act of asking an expert, can *“you do me a favour, can you go and spend some time with this one? I just need your opinion”* (Jessie).

3. Understanding key players

Key players included: students, registered nurses (RN's), education providers and the facilitator themselves.

Facilitators described understanding a student by knowing individual personal characteristics such as *“shy”* (Alex), *“a flat affect”* (Leslie), *“enthusiastic”* (Kerry), *“fun and happy”* (Ashley).

Understanding cultural difficulties was highlighted for students for whom English is not their first language:

She doesn't necessarily structure her sentences the same as we would... she's struggling for the patients to understand her.”

Facilitators stressed the importance of understanding that students have “*so many other things going on in their lives outside*” (Casey). These things included: “*living away from home*” (Ashley), [family] “*expectations*” (Blake), “*anxiety, depression,*” (Jo), “*exams*” [...] “*lectures*” [...] “*coursework*” (Bailey).

The personality and behaviour of the RN the student is working with often influenced the student interaction with others. Some preceptors are “*caring ... empathetic*” (Jo), while “*others can be abrupt*” (Jamie) and “*don’t make them feel welcome*” (Dakota). Whilst others “*are really good at handling students*” (Bailey). It was acknowledged that RN behaviour was often influenced by stressors such as “*working long hours and extra shifts*” (Ashley), “*burnt out ...because they’ve constantly got students*” (Jessie) and “*their own [personal] concerns*” (Jamie).

The importance of understanding the education providers’ performance expectations and curriculum structure was discussed. Education providers included universities as well as Technical and Further Education (TAFE) organisations. Jessie stated that this was important as “*every university, every TAFE comes with a scope of practice and they don’t all align.*”

Facilitators understanding factors about themselves that affected how they made judgements included their own personal characteristics, nursing knowledge and experience and facilitation experience. Jo reflected on personal factors that they considered when making a judgement:

“I’m a reactive person, so I’ve had to learn to put some strategies in place for myself not to overreact”

For Bailey, nursing knowledge informed situation awareness:

“You know what they should be doing and you know how they should be doing it”.

Facilitators own life experiences also had an impact on their judgements. For example, Jamie acknowledged empathy for students who lack confidence as Jamie “*lack[ed] confidence whilst growing up*”.

4. Verifying or refuting information

Verifying or refuting information was important as facilitators don't like to make a judgement “*on somebody else's opinion*” (Jordan), nor do they judge a student by “*just their own opinion*” (Cameron). Facilitators verified or refuted information by clarifying feedback, listening to the student, seeking feedback from others and spending time with the student. On receipt of “*negative or positive*” [feedback], facilitators “*use open-ended questions...to clarify*” (Riley) information and ascertain “*why [feedback provider] has come to that decision*” (Jo).

It was vital “*to have a good relationship with nurses on the ward*” to receive feedback of value (Jordan). Nurses need to feel that they “*trust you ...They [need to] feel comfortable in telling you if there are any issues*” (Kerry). It was also essential to listen to “*what is going on as there's always two sides to a story*” (Jamie). Additionally, facilitators verified or refuted information by “*spend[ing] more time working with the student to get more evidence*” (Jo). Kerry stated that s/he spends time “*question[ing] them more. Get them to critically think – why they're doing certain things*”.

5. Benchmarking performance

Facilitators developed benchmarking criteria through a combination of nursing “*standards for practice*” (Jo), “*behavioural cues*” (Leslie) from assessment tools, “*facility standards*” (Alex), “*organisational values*” (Ashley), education providers' information about the “*student's scope of practice*” (Casey) and facilitator's own knowledge. Benchmarks included safe practice, insight, performance progression and professional behaviour.

Safe practice was defined by the student's critical thinking ability and knowledge to complete skills safely. When benchmarking a student performance, Jo asks, "*are they safe or are they not safe?*" Kim believed that students with "*good insight are much safer practitioners because they're aware of what they know, but they're also acutely aware of what they don't know*". Insight influences performance progression as "*students that demonstrate insight go on and change their practice*" (Riley). Dakota described progression within placement as when "*you can see the first day where they are and then at the end, how they've just bloomed*".

Professionalism included the student's physical presentation, communication style, ability to show respect towards others and accept feedback. The professional student was described as:

"Keen, proactive, punctual, organised, responsible" (Kim)

"Communication was excellent [...] lovely with the residents [...] very good at reporting to RN [...] really good at handing over [...] very professional" (Kerry)

In contrast, the unprofessional student was described as:

"Turn up late, they look untidy" (Riley)

"A lot of oversharing in terms of their personal life" (Kim)

6. Contextualising information

Contextualising was described as analysing the interplay of factors that have the potential to affect a student's performance. It required critical thinking about personality, cultural, generational, biases and time factors. Jo stated:

"I have to go through this [mental] checklist. There can be personality clashes between the facilitator and student, preceptor and student, student and different student,

everybody. I have to determine is it a language conversion issue? Is it a comprehension issue? Is it a knowledge issue? Is it cultural?"

Bailey shared that s/he *"had a student that was quite young and you have to be aware of generational differences"* when analysing information. Facilitators were conscious that information is *"very subjective and there are lots of areas where people's personal prejudices could come into it"* (Jordan).

Contextualising time included student time with the facilitator as *"you might not have had enough time with them"* (Alex). Kim acknowledged contextualising time factors:

"If it's their first time in a hospital placement and their first few days of caring for patients, then [...] it might be satisfactory [...] but if it's their last week of their final placement then obviously we would have different expectations."

DISCUSSION

Clinical facilitators make pre-assessment performance judgements about a nursing students' performance in clinical placement using six modes of inquiry, each of which has both particular task properties related to a continuum of cognition.

Dobbs (2017) and El Hussein and Fast (2000) acknowledge clinical educators' use of pattern recognition, describing these patterns as subjective responses or gut feelings. This finding was confirmed in this study through the words of *"a gut feeling"* (Riley) *"a red flag"* (Jessie), *"sixth sense"* (Bailey), *"vibe"* (Kerry), *"knowing"* (Dakota). Recognising performance patterns were described as ill-structured, measured perceptually, often unorganised with a low level of situation awareness. The recognition of patterns often occurred quickly and was difficult to explain. Facilitators attributed their ability to intuitively recognise patterns in student performance to tacit knowledge developed through their nursing, facilitation and life experience.

Facilitators identified acknowledging uncertainty as a mode of inquiry that used a high level of tacit knowledge, often accompanied by a small amount of explicit knowledge. While explicit knowledge was used to identify if performance cues were present or absent, cues were difficult to measure and not always able to be coherently explained. The facilitators' acknowledgement of uncertainty was described by their actions of the provision of space for the student to demonstrate performance, seeking guidance and obtaining a second opinion. Although individual actions of having time to assess the student (Hughes et al., 2019), seeking guidance and second opinions from other facilitators (Andrews & Ford., 2013; Needham et al., 2016) are reported in the literature these actions have not been viewed as a cognitive mode of inquiry used during the pre-assessment judgement of performance in clinical placement.

Understanding key players mode of inquiry required a higher level of explicit knowledge than Acknowledging Uncertainty. To employ this higher level of explicit knowledge about key players, the facilitators needed a higher percentage of situational awareness regarding the environment, students, preceptors, education providers and themselves. The task of understanding key players was deliberate, requiring both subjective and objective measurement of key player cues that began to form an organised knowledge template.

Verifying or refuting performance information mode of inquiry involved working with others to seek and clarify feedback about a student's performance. Facilitators achieved this mode by listening to the student and spending more time with student and the relevant stakeholders. Facilitators employed equal parts of tacit and explicit knowledge to determine what performance information needed to be verified or refuted, placing this in the centre of the cognitive continuum. Behaviours such as observing (El Hussein and Fast, 2020; Grealish et al., 2018), questioning (Brown and Crookes, 2017; Hunter and Arthur, 2016; and Phillips

et al., 2017) and measuring outcomes (Brown et al., 2017; Huang et al., 2018) supported the verification or refutation of performance information.

Facilitators discussed a variety of tools when benchmarking a student's performance. Tools for benchmarking included templates such as professional standards, published assessment tools, facility and education provider policies and guidelines. While the use of assessment tools is heavily reported in the literature (El Hussein and Fast, 2020), confusion and lack of understanding about how these tools are used remains (Brown & Crookes, 2017). This study identified that once the tool was understood it assisted facilitators in the decomposition of task structure enabling performance cues and task outcomes to be easily measured.

Benchmarking required a large amount of explicit knowledge and a smaller amount of tacit knowledge of the facilitator's personal preferences and beliefs.

The contextualising information mode of inquiry is described as a critical thinking process used to evaluate patterns, uncertainty, key players and benchmarking performance.

Contextualising this information required a high level of explicit cognition, task decomposition, variable manipulation and situational awareness. Performance cues were weighted and organised in importance in a process that required time to achieve. San Miguel and Rogan (2012) reference to subjective labelling of students could be seen as a form of contextualising performance information. It cannot be mapped on the cognitive continuum matrix as pure analysis as facilitators describe the use of a small amount of tacit knowledge when contextualising a student performance.

These findings shed new light on how clinical facilitators' make judgements of nursing student performance. Six modes of inquiry used by facilitators when reaching a performance judgement have been described and theorised through the cognitive continuum theory.

Limitations

Limitations of the research design included the data collection and analysis time frame, which was conducted as part of a formal Masters by research program by the first-named author. The data are accordingly now five years old at the time of writing this paper, however from the most current literature reviewed and reported earlier, the gap in knowledge of the pre-assessment phase of performance judgement remains pertinent to issues encountered in the facilitation of clinical placements today. The construction of a qualitative case study is also limited by the sensitivity and integrity of the first-named author, an insider-researcher with experience in clinical facilitation and nursing education (Lincoln & Guba, 2016). To mitigate this limitation, the first-named author undertook interview training and recorded three pilot interviews for critique by experienced researcher co-authors.

CONCLUSION

This paper identified six judgement modes that clinical facilitators use when making pre-assessment judgements about student nurse performance in clinical placement. Through the application of the cognitive continuum theory, a range of tacit and explicit knowledge has been described, explained and named. This research has made a previously invisible cognitive process visible to others, thus potentially increasing clinical facilitator confidence in their judgements about a student nurse's pre-assessment performance. Facilitator confidence in judgements can increase their capacity to give nursing students feedback that can be explained and justified. The pre-assessment judgement modes of inquiry can also be shared with other clinical supervisors and has the potential to inform facilitation practices in other healthcare contexts and professions.

Conflict of interest

None

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| Intuition (Tacit Knowledge) | ← Analysis → | Analysis (Explicit Knowledge) |
|--------------------------------|--------------|----------------------------------|
| Unconscious data processing | | Conscious data processing |
| Non-retraceable | | Retraceable |
| Undefinable | | Definable |
| Low cognitive control | | High cognitive control |
| Cues perceptually evaluated | | Cues objectively evaluated |
| Fast | | Slow |
| Normal distribution of errors | | Low number of errors |
| Low confidence in method | | High confidence in method |
| High confidence in outcome | | Low confidence in outcome |
| Low process consistency | | High process consistency |

Note. Adapted from “Cognitive adaptation and its consequences: A test of cognitive continuum theory”, by P.

T. Dunwoody et al., 2000, *Journal of Behavioural Decision Making*, 13(1), p. 36.

Table 1: Characteristics of Intuition and Analysis

| | More ill-structured | More well-structured |
|-----------------------|---|---|
| Task | Cues perceptually measured | Cues objectively measured |
| Information | High cue redundancy or interdependency No organising template available Cues difficult to see Equal weight of cues | Low cue redundancy or interdependency Organising template available Cues easily seen Unequal weighting of cues |
| Contextual properties | Low level of task decomposition Task outcome often unavailable Knowledge of patterns Low ability for variable manipulation Low level of situational awareness | High level of task decomposition Task outcome available No knowledge of patterns High ability for variable manipulation High level of situational awareness |
| Time | Little time | Sufficient time |

Note. Adapted from “On the relevance of Cognitive Continuum Theory and quasirationality for understanding management judgement and decision making” by M. Dhami and M. Thompson, 2012, *European Management Journal*, 30, p. 321; “Cognitive adaptation and its consequences: A test of cognitive continuum theory”, by P. T. Dunwoody et al., 2000, *Journal of Behavioural Decision Making*, 13(1), p.36; “Judgement and decision making in dynamic tasks”, by K. Hammond, 1988, University of Colorado, US Army, Research Institute for Behavioural and Social Sciences, ARI research note 88-81, p. 36.

Table 2: Task Properties.

| Demographics | | N =15 (%) |
|----------------------------------|---------------------------------------|-----------|
| Gender | Female | 14 (93%) |
| | Male | 1 (7%) |
| Age | 30-39 | 3 (20%) |
| | 40-49 | 4 (27%) |
| | 50-59 | 6 (40%) |
| | 60-64 | 2 (13%) |
| Employment source | Health care facility | 9 (61%) |
| | University | 5 (33%) |
| | Both healthcare facility & University | 1 (7%) |
| Years of nursing experience | 4 to 5 yrs. | 1 (7%) |
| | 7 to 8 yrs. | 1 (7%) |
| | Greater than 10 yrs. | 13 (86) |
| Years of facilitation experience | 6 months to 1 yr. | 2 (13%) |
| | 1 year to 2 yrs. | 1 (7%) |
| | 2 years to 3 yrs. | 4 (27%) |
| | 4 years to 5 yrs. | 3 (20%) |
| | Greater than 5 yrs. | 5 (33%) |

| | | |
|----------------|---------------------------------------|---------|
| Qualifications | Additional educational qualifications | 7 (47%) |
|----------------|---------------------------------------|---------|

Table 3: Participant demographic profile

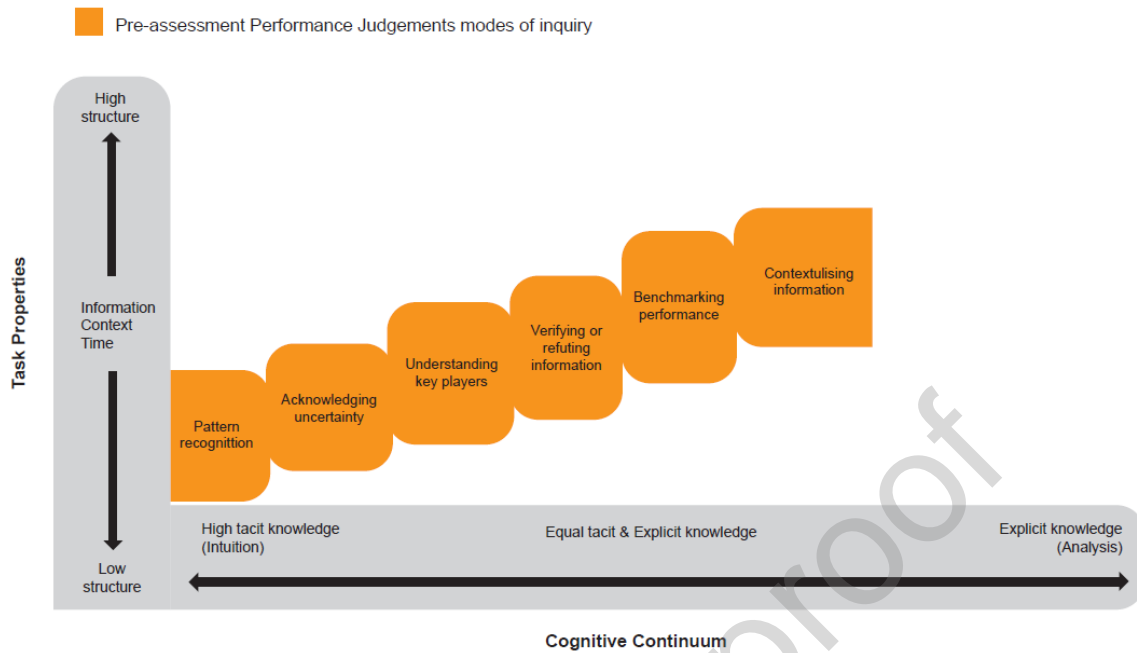
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| Judgement Modes of inquiry (Themes) | Subthemes |
|--|---|
| Recognising patterns | <ol style="list-style-type: none"> 1. Recognising student engagement 2. Recognising initiative 3. Recognising confidence, 4. Recognising communication |
| Acknowledging uncertainty | <ol style="list-style-type: none"> 1. Providing space 2. Seeking guidance 3. Obtaining a second opinion |
| Understanding key players | <ol style="list-style-type: none"> 1. Understanding students 2. Understanding registered nurses working with students 3. Understanding the education provider's expectations 4. Understanding themselves (Facilitators) |
| Verifying or refuting information | <ol style="list-style-type: none"> 1. Clarifying feedback 2. Listening to the student 3. Seeking feedback from others 4. Spending time with the student |
| Benchmarking performance | <ol style="list-style-type: none"> 1. Safe practice 2. Insight 3. Performance progression 1. Professional behaviour |
| Contextualising information | <ol style="list-style-type: none"> 2. Critical thinking about personalities 3. Critical thinking about cultural factors 4. Critical thinking about generational factors |

| | |
|--|---|
| | <ol style="list-style-type: none">5. Critical thinking about biases6. Critical thinking about time factors |
|--|---|

Table 4: Summary of Themes and subthemes

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Note. Adapted from “Clinical judgement and decision-making in nursing – Nine modes of practice in a revised cognitive continuum”, by M. Standing, 2008, *Journal of Advanced Nursing*, 62(1), 124–134.

Figure 1: Performance judgement Modes of inquiry

CRedit author statement:

Tracey Simes: Conceptualisation, Methodology, Investigation, Data Curation, Writing – Original draft, Writing – Review & editing, Visualisation **Tracy Levett-Jones:** Conceptualisation, Methodology, Supervision, Writing – Review & editing. **Bobby Harreveld:** Conceptualisation, Methodology, Investigation, Formal analysis, Data curation, Writing – Original draft, Review & editing, supervision

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Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

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