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Review Article

A Critical Realist review of practice learning experiences within pre-registration nursing programmes

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Abstract: This Critical Realist review recognises the challenges facing nurse educators and practitioners if they are to help ensure the discipline remains responsive to future healthcare needs; not least the growing demand for qualified nurses. Drawing upon professional opinion, reports, quantitative, qualitative and mixed methods research, the paper thematically presents international evidence examining the factors which affect the nature of practice learning experiences for nursing students; reflecting the wide range of social, environmental, educational, intrapersonal and interpersonal variables related to the practicum as a key event within pre-registration nurse education programmes. Worryingly, the work highlights numerous examples of negative student experiences associated with nursing placements, but also outlines some features related to more positive student learning in clinical settings. In addition, and congruent with the principles of Critical Realism, the paper identifies a field of investigation associated with practice learning that appears worthy of further investigation due to an apparent paucity of published work. Finally, the author briefly highlights his own research activity currently underway to extend the body of knowledge in this area and in so doing contribute to addressing student retention and staffing issues within nursing.

Keywords: nursing, placement, practicum, practice learning experience, Critical Realism.

INTRODUCTION

High-quality pre-registration nursing [PRN] programmes are critical if the profession is to prepare nurses to confidently and effectively address contemporary healthcare challenges (Jyothi D *et al.,* 2019). Practice learning is widely identified as a fundamental component of such education (Simmons C *et al.,* 2012, El Mokadem N, *et al.,* 2017, Morley D *et al.,* 2017, Boardman G *et al.,* 2018) and exposing students to a variety of clinical environments and different patient needs may improve educational outcomes (Taylor J *et al.,* 2012, Vatansever N *et al.,* 2016). In common with many other nations, PRN programmes in the United Kingdom [UK] have half of their curriculum learning hours assigned to practice-based education (Nursing & Midwifery Council, 2018a). Inevitably, however, practice learning environments vary both in their core functions and the quality of the educational experiences they offer (Bisholt B *et al.,* 2014) but, despite such variation, these locations are always expected to provide some form of student learning opportunity (Donnelly F *et al.,* 2012). Clinical placements have been described as complex, multifaceted, socio-cultural entities that offer a range of opportunities for nursing students to either engage or disengage in practice learning (Newton J *et al.,* 2010,

Tomietto M *et al.,* 2014, Thomas J *et al.,* 2015) and concerns regarding the adequacy of clinical education within PRN programmes has escalated since such provision moved to the Higher Education sector (Aston L *et al.,* 2000, Budgen C *et al.,* 2008, Baldwin A *et al.,* 2014).

Hutchings A *et al.,* (2001, p.41) assert that *'there is widespread anecdotal and published evidence on the problems of ensuring quality learning experiences that meet the needs of patients, students, employers and academic institutions'*; whilst van der Riet P *et al.,* (2018, p.42) claim *'clinical placements are fraught with problems that are long-standing and multidimensional in nature'*. As a result, there have been calls for educational provision which prepares nursing students more effectively for actual practice (Budgen C *et al.,* 2008). A lack of sufficiently high-quality practice learning experiences (National Nursing & Nursing Education Taskforce, 2006, Gale J *et al.,* 2016, Vanson T *et al.,* 2019), an increasing nursing student population (Henderson A *et al.,* 2013, Lamont S *et al.,* 2015, Olaolorunpo, O 2019), staff shortages (Barnett T, *et al.,* 2010, Laal M *et al.,* 2010, Cooper Brathwaite A *et al.,* 2011), adverse economic conditions (Higgins A *et al.,* 2010, Papastavrou E *et al.,* 2016,

Public Health England, 2017), greater demand for healthcare services (Uys L *et al.,* 2005, Sheng L *et al.,* 2014, Quail M *et al.,* 2016) and changes in healthcare delivery systems (Spitzer A *et al.,* 2006, McClimens A *et al.,* 2013, Millar L *et al.,* 2017) necessitate detailed examination of how PRN students engage in practice learning and the development and implementation of innovative practicum models (Reimer Kirkham S *et al.,* 2007). Such activities may be particularly important given the assertion that *'negative experiences may lead to high attrition, failure to recruit and result in fewer new graduates entering the workforce'* (Chuan O *et al.,* 2012, p.193).

'Healthcare workplaces are complex learning environments for student nurses to negotiate' (Newton J *et al.,* 2009, p.634). Moreover, such settings are *'continuously changing, unpredictable and occasionally confusing for students'* (Esmaeili M *et al.,* 2014, p.461) and often healthcare organisations do not readily encourage new learning (Henderson *et al.,* 2011). Research in Hong Kong by Lee *et al.,* (2018, p.103) involving semi-structured interviews with 16 fourth-year nursing students and 4 Registered Nurses [RNs] concluded that nursing students' clinical education was affected by *'interpersonal, socio-cultural, instructional, environmental, emotional and physical factors'* and placement experiences had a profound effect on whether these students chose to continue their programme.

Critical Realism and the literature search and review

Critical Realism was developed in the late twentieth century by the British philosophers Roy Bhaskar and Rom Harré (Bhaskar R, 2008) and is *'steadily gathering support for its unique ways of categorizing, highlighting and interpreting phenomena'* (Schiller C, 2016, p.100). According to Critical Realists, reality is *'composed not only of events, states of affairs, experiences, impressions and discourses but also underlying structures, powers and tendencies'* (Patomaki H *et al.,* 2000, p.223). Much of objective reality is therefore impossible for any individual to observe (Wainwright S, 1997). Moreover, since the way humans perceive the world is unavoidably and often implicitly shaped by their social and cultural experiences, according to Critical Realists researchers can never be entirely objective (Miller K *et al.,* 2011, McGhee P *et al.,* 2017). As a result, although science must be relied upon to formulate robust theories, it is important to recognise that such theories are unlikely to be wholly comprehensive or impartial (Bergin M *et al.,* 2008, Maxwell J, 2011).

Nursing, and by implication nurse education, is *'embedded within complex social situations'* (Williams L *et al.,* 2016, p.1) and Critical Realism supports an investigative approach to exploring a topic in which a researcher can legitimately capture a diverse range of qualitative and quantitative evidence (Roberts J, 2014) to arrive at the most plausible explanations inferred from observations; a process known as 'retroduction' (Perversi P *et al.,* 2018). Ultimately, Critical Realist research should also be emancipatory (Parpio Y *et al.,* 2013); seeking to implement positive change (Collier A, 1994). Critical Realism therefore appears a particularly relevant philosophical framework on which to base investigations within socially embedded, complex, empowerment focused, practice-based fields such as nurse education.

Rather than seeking to give the impression that their work is wholly objective [which is deemed impossible to ever unequivocally demonstrate], Critical Realists instead aim to present an evidence-based case which leads the reader through their arguments and allows third-party evaluation based upon the supporting literature presented (Edgley A *et al.,* 2016). To facilitate such scrutiny, where practicable, direct quotations are drawn from the evidence presented in this paper. Unlike a Positivist systematic review, which tends to focus primarily on quantitative studies and regards randomised controlled trials as a 'gold standard'(Clegg S, 2005), a Critical Realist review has a more flexible structure that regards a much wider range of evidence as legitimate and which seeks to present ideas, theories and logic, into a coherent argument (Edgely A *et al.,* 2016) as well as highlight areas worthy of further study (O'Mahoney J *et al.,* 2014).

Resources employed within this paper are international but restricted to work published in the English language. They were acquired from a range of databases including Academic Search Complete, BioMed Central, the British Library EThOS resource, CINAHL with Full Text, the Directory of Open Access Journals, Emerald Premier, Google, Google Scholar, Internurse, OvidSP Journals, PubMed, Sage Journals Online, Taylor & Francis Journals Online and university library texts. Search terms were generated after professional discussions with academic colleagues involved in nursing programme delivery and included: *'belonging'*, *'clinical'*, *'facilitator'*, *'instructor'*, *'mentor'*, *'nursing student'*, *'placement'*, *'practice learning'*, *'practice assessor'*, *'practicum'*, *'preceptor'*, *'quality'* and *'supervisor'*. Lemmatization, field options and Boolean operators, were also employed to provide better focus. Research studies included in this paper were considered against the evaluation criteria proposed by Bonine K *et al.,* (2006). Congruent with Critical Realist philosophy, however, literary evidence is not simply restricted to research findings. Instead, professional opinion and relevant reports are also recognised and integrated. Moreover, quantitative, qualitative and mixed methods research are awarded equal status in respect of their contribution to the academic argument.

RESULTS AND DISCUSSION

1. The practice learning environment

Although *'it is essential that students are treated with equity and consistency throughout their education'* and receive *'high-quality structured learning experiences in a supportive environment'* (Hutchings A *et al.,* 2001, p.41), how to provide such experiences for PRN students is less clear. Levett-Jones T *et al.,* (2012, p.16) maintain *'there is little robust contemporary evidence to support many of the practices related to clinical placements for nursing students'* and observe that '*in the nursing literature, opinions are divided concerning the optimal duration and structure of placements as well as their impact on students' experiences'*. Indeed, it continues to be argued that *'despite a considerable body of literature exploring placement learning within health professionals' education, there is limited evidence available on what exactly makes a good placement'* (Jack K *et al.,* 2018, p.930). Perhaps of equal concern, however, is that an integrative literature review of 22 studies addressing practicum satisfaction found most concluded that nursing students wanted more positive placements than they reported experiencing (Phillips K *et al.,* 2017, p.212).

A survey of 150 final-year PRN students in Australia by Doyle K *et al.,* (2017) found that learners regarded working with welcoming staff who were favourably disposed towards providing learning opportunities was the most positive influence on their level of placement satisfaction. Quantitative research in Egypt drawing on the experiences of 127 third and fourth grade PRN students by Mostafa A (2017, p.379) suggests that a positive practice learning environment is characterised by *'trust, open communication and shared learning experiences'* and is never the product of chance but instead created by nurse educators who fully appreciate the varied needs of adult learners; a view supported by other researchers (Chuan O *et al.,* 2012, Bisholt B *et al.,* 2014). Using focus groups involving 14 third-year nursing students in Australia, van der Riet P *et al.,* (2018) concluded that positive student evaluation of placements could be attributed to these learners being expected, welcomed and familiar with the setting, staff, policies and procedures.

Appropriate preparation of those RNs involved in supporting PRN students is central to creating such a welcoming atmosphere (Hutchings A *et al.,* 2001); not least because such clinicians have power over these learners (Hemberg J *et al.,* 2018) and are likely to have '*the greatest influence on students' learning experiences during clinical placements'* (Levett-Jones T *et al.,* 2012, p.16). Experimental research in South Korea by Kim C *et al.,* (2013, p.149) involving 52 junior nursing students found that '*a collaborative clinical practicum including preceptorship'* which involved greater integrated educational provision from academics and clinicians was the most effective means by which to '*increase clinical practice ability and*

teaching effectiveness'. Similarly, Henderson A *et al.,* (2011, p.200) assert that *'learning in practice is reliant on good partnerships with academic institutions and health service organizations'*; whilst Hemberg J *et al.,* (2018) stress that academics must continue to be involved during the student's clinical placement to ensure a continued integration of theory and practice.

Clearly, the receptiveness of the clinical service to the prospect of acting as a learning environment for nursing students is therefore a key cultural variable which affects placement quality. Moreover, evidence suggests that well-organised collaborative working between this clinical service and the academic institution responsible for the PRN programme, not least in the form of the support given to practitioners who will be expected to advise, guide and support nursing students, is an important determinant in the coherence and value of the learning experience. Equally, student preparedness for the practicum may significantly impact upon its educational value. It seems, however, that the learning experience desired by many PRN students is not matched by the reality of practicum encounters.

2. Belonging

The student's sense of belonging as a team member within a clinical learning experience has long been recognised as inextricably linked to their receptiveness to new learning. Aitkenhead S *et al.,* (2015, p.23) stress that within a practicum *'a balanced relationship between staff and students is needed'*, but Roxburgh C (2014) claims that many students report feeling like they are no more than visitors to their clinical placement and do not 'belong' there. A survey involving a convenience sample of 310 undergraduate nursing students in Oman suggested that *'being recognized as part of the nursing team and participation in patient care created positive student learning'* (D'Souza M *et al.,* 2015, p.838), whilst the results of a survey involving 147 PRN students in Northern Ireland confirmed '*the importance of personalisation and sense of belonging and acceptance for nursing students to be a key factor in the clinical learning environment'* (Shivers E *et al.,* 2017, p.63).

Interviewing 10 final-year nursing students in England regarding their practice learning experiences, Phillips J (2017, p.75) identified that '*every participant expressed a strong desire to be accepted by the team within which they found themselves working'* and made *'every effort to place themselves in the best position to be accepted as a valued team member'*. Data from focus groups comprised of 12 final-year PRN students in Australia also *'highlighted the importance to their learning of belonging to a team where their skills and knowledge could be constructively improved'* (Nash R *et al.,* 2009, p.55). Focus group responses from 17 undergraduate midwifery students, also in Australia, similarly highlighted the importance of acquiring a

sense of belonging in the clinical team, but noted that the respondents efforts to 'fit in' sometimes required them to set aside their learning needs for fear that asserting them would jeopardise their positive working relationships (Gilmour C *et al.,* 2013).

In Iran, focus groups comprised of 90 baccalaureate nursing students reported that the initial period of a practicum was the most anxiety-inducing element of each clinical experience; partly due to a fear of their making mistakes in the delivery of nursing care. Participants in this study also suggested there were tensions between themselves and RNs regarding the work they were assigned; since this often involved very basic nursing tasks which they believed would have been better delegated to non-registrant healthcare staff (Sharif F *et al.,* 2005). Such accounts do not therefore appear to reflect the need, articulated by several writers, for nursing practice placements to be flexible, varied and provide individualised student learning opportunities (Hutchings A *et al.,* 2001, Thomas M *et al.,* 2016). Semi-structured interviews of 7 second and third-year adult PRN students commencing an Emergency Department placement in Scotland also indicated that most felt terrified and were concerned at being ill-prepared and unable to meet the expectations of clinicians in the setting but ultimately felt they became a member of the team (Hunter D, 2010).

Interviews, surveys and fieldwork observations involving 29 second and third-year PRN students in Australia by Newton J *et al.,* (2009, p.632) suggested that it was only by *'gradually gaining acceptance and making a contribution to the ward team'* that students moved beyond their initial status as a peripheral team member. Earlier work in the same nation by Nolan C (1998) using semi-structured interviews with a purposive sample of 6 second-year PRN students found that, until these learners felt accepted within their placement, learning could not proceed. More recently, research involving the completion of a qualitative questionnaire by 77 nursing students in Finland concluded that an invitation to participate in care delivery is the cornerstone of effective student supervision and that being excluded from mainstream staff activity in a practicum can cause the learner to acquire a permanent negative professional self-image which they take into their future RN role (Hemberg J *et al.,* 2018).

Newton J *et al.,* (2009, p.632) recognise that nursing students may have '*to negotiate the cliques and affiliations in unfamiliar and uncertain clinical environments.*' Evidence does indeed suggest that many nursing students encounter social and interpersonal complexities within their placements. Doyle K *et al.,* (2017) indicated that the culture within the practice learning environment, most notably how clinicians acted towards their colleagues, was regarded by students as the best indicator of their likely success in a placement. A case study, also undertaken in Australia, involving 7 nursing students at different stages of their programme all of whom were assigned to a rural clinical practicum, noted that *'professional relationships in this rural setting crossed into participants personal worlds'* (Pront L *et al.,* 2013, p.284).

The PRN student acquiring a sense of purpose, value and identity within the clinical team is, therefore, central to optimising student learning. Indeed, it seems much learner behaviour during the practicum is directed towards gaining acceptance within the clinical team and thereby acquiring a sense of belonging. Nevertheless, navigating the interpersonal complexities of a nursing team is a challenging task for students and one which can lead them to prioritise demonstrating their effectiveness as a team member above fulfilment of their learning needs. Furthermore, exposure to significant negative emotional responses may adversely affect placement learning if not satisfactorily addressed in the early stages of the practicum.

3. The Supporting Nurse

Internationally, different terms are used to describe an RN who is formally responsible for supporting a nursing student in a practicum. Such practitioners are variously referred to as facilitators (Ford K *et al.,* 2016), instructors (Flott E *et al.,* 2016), mentors (Papastavrou E *et al.,* 2010), practice assessors (Nursing & Midwifery Council 2018b), preceptors (Happell B *et al.,* 2015) and supervisors (Prescott-Carter K *et al.,* 2016). Mentoring has been described as enabling novice student nurses to both work with and emulate senior qualified nurses and in so doing develop their clinical competence and help them link theory to practice. The mentor role is also regarded as central to making nursing students feel a valued member of the clinical team and may be one of the most important influences upon the socialisation process in nursing (Baldwin A *et al.,* 2014, Vinales J, 2015).

A survey by Carlson E *et al.,* (2014, p.1130) involving 260 nursing students in Sweden found that *'the supervisory relationship had the greatest impact on how student nurses experienced the clinical learning environment.'* Correspondingly, a survey of 175 paediatric nursing students in Greece indicated that respondents who had a well-established working relationship with their clinical teacher tended to have more positive practice learning experiences (Dafogianni C *et al.,* 2015). Henderson A *et al.,* (2011), however, argue that nurses feel they often have insufficient time to interact with students and research in Sweden by Carlson E *et al.,* (2010, p.437) involving observation of 13 RNs and focus groups attended by 16 nurses, all of whom were involved in supporting PRN students, reported that '*feelings of stress and inadequacy were often felt by preceptors as a result of their experiences of time shortage'.*

Further research has also highlighted that RNs providing placement education have the most influential effect on nursing student learning but are often too busy to engage in any clinical teaching (Madhavanpraphakaran G *et al.,* 2014, Lee J *et al.,* 2018). In Australia, a questionnaire completed by 178 nursing undergraduates, 22 clinical facilitators and 163 supervising ward nurses indicated that '*relationships between supervising ward nurses and undergraduates were important influences on the placement experience*' and affected how confident learners felt in seeking advice and support. Indeed, on those occasions when a nurse made it clear they were unwilling to help any students, respondents reported feeling '*nervous and incompetent*' (Courtney-Pratt H *et al.,* 2012, p.1386).

Similarly, in Cyprus, quantitative research involving 463 nursing undergraduates found that '*the supervisory relationship was evaluated by the students as the most influential factor in their satisfaction with the clinical learning environment*', that '*students who had a named mentor reported being more satisfied*' but that satisfaction levels decreased as these learners progressed within the programme (Papastavrou E *et al.,* 2016, p.1). A comparative study of two models of supervision in Australia involving 159 PRN students also found that respondents overwhelmingly regarded the quality of supervisory support they received as the most important influence on their practice learning experience (Walker S *et al.,* 2013); whilst in Canada, interviews with 26 preceptors and 23 nursing students located in rural settings found that '*a positive preceptorship experience for both the student and the preceptor could significantly impact recruitment*' to vacancies in rural services (Yonge O *et al.,* 2006, p.5).

A review by Henderson A *et al.,* (2012, p.301) of six studies from three different nations that employed the same clinical learning environment survey indicated that although PRN students generally reported feeling a sense of affiliation within their placements, their '*opportunities to interact with staff on an individual basis*' were much more limited. In Iran, semi-structured interviews with 17 nursing students by Esmaeili M *et al.,* (2014) identified that instructor friendliness and expertise were key components of a positive student learning experience, that delegation of tasks increased learners' self-confidence and sense of accountability but that negative mentor behaviours, such as criticism of a student in the presence of patients, adversely affected learner self-confidence and motivation. A more recent literature review by Atakro C *et al.,* (2019, p.3) suggests the benefits of a supervisory relationship in a clinical setting may also be limited; concluding that '*there is no evidence to support the notion that preceptorship provides students with the opportunity to develop critical thinking*'.

Arguably, several studies may provide an explanation for this limitation. In Israel, a questionnaire completed by 200 RNs working as preceptors in both community and hospital settings found that '*a considerable proportion of the preceptors feel inadequately prepared for their role*' (Natan M *et al.,* 2014, p.1429). Nurses working within rural settings in Canada were also concerned as to whether the currency of their nursing knowledge was adequate for them to be an effective preceptor and those holding lower academic qualifications than the students whom they would be supporting were less willing to undertake such a role. Moreover, those who were already preceptors expressed concern about a lack of engagement with, and support from, the university providing the PRN programme (Yonge O *et al.,* 2006). Correspondingly, a survey involving 34 RNs in Australia indicated that some nurses did not hold the qualification they were supporting students to obtain, '*that university involvement in preparation of preceptors is scant*' and that '*resource provision and communication from universities to preceptors is considered problematic*' (Broadbent M *et al.,* 2014, p.403).

In the West Indies, a semi-structured questionnaire completed by 103 nursing students reflected concerns that supervisors use them as '*an extra pair of hands*', '*get tired of helping when they have to do other things*' and some were '*ignoring students when they come on the ward*' (Prescott-Carter K *et al.,* 2016, p.1046). In an online survey completed by 159 undergraduate nursing students in Australia, '*many participants commented on what they perceived to be a lack of interest from staff to which they were assigned and this made them feel like they were a burden*'; hence these researchers concluded that such negative experiences may adversely affect both the participants' view of nursing and the construction of their nursing identity (Walker S *et al.,* 2014, p.106). More recent research in England involving a survey of 1,425 PRN students and follow-up unstructured interviews with 22 learners generated similar findings. Although respondents were eager to acquire a sense of belonging, in some placements they felt unsupported, ignored, treated merely as unpaid help and even bullied (Jack K *et al.,* 2018). Perhaps such evidence also helps to explain the results of a survey in Saudi Arabia by Omer T *et al.,* (2013) who identified a strong preference amongst 110 nursing students for a model of preceptorship that involved a Clinical Teaching Assistant from the College of Nursing rather than a hospital-employed RN.

The role of the nurse formally assigned to help, teach, advise and guide the student during the practicum is, arguably, the most critical influence upon the clinical learning experience. Nevertheless, evidence suggests such nurses may often lack time for meaningful interaction with learners, feel they are inadequately prepared and supported for these

responsibilities or are not suitably qualified for the role. Furthermore, research from various nations suggests that the conduct of some supporting nurses may itself have serious adverse consequences for the student learning experience.

4. The Placement Type And Duration

In terms of both learning and student satisfaction, the clinical service provided by a placement may be less important than its educational culture. A survey of 150 PRN students in Australia by Doyle K *et al.,* (2017) found that whether students had been assigned a specialist or generalist practicum had no effect on reported levels of satisfaction with their experience. In Sweden, quantitative research by Bisholt B *et al.,* (2014, p.308) involving a questionnaire completed by a convenience sample of 185 third-year nursing students undertaking their last programme placement in either a hospital, nursing home, community nursing team, primary healthcare setting or mental health service '*showed that they experienced more meaningful and multi-dimensional learning situations in hospitals than in other clinical settings'*. It was suggested, however, that this difference may have been the result of the leadership style of service managers, the level of co-operation between nurse teachers and clinicians and varying levels of patient contact affecting opportunities for practice learning, rather than the nature of service provided. Using a multiple case study to explore practice learning for nursing students in four units of an urban health centre in Canada, Hegenbarth M *et al.,* (2015, p.307) identified that 'u*nits develop a culture related to hosting nursing students'* which shapes the motivation and strategies for learner support and that the ideal learning environment is characterized by openness, taking students 'under their wing' and structuring learning experiences to meet their goals.

Several studies suggest the amount of PRN student time in a placement may also affect practice learning, although the most desirable model is a matter of greater debate. Hudson *et al.,* (2014) comment that healthcare student placements have historically involved short-term experiences which provide little scope for students to develop relationships with patients and prevent learners from fully appreciating the continuity of care. In contrast, Newton J *et al.,* (2009, p.633) conclude that offering a structure where PRN students return to the same organisation for placements in the second and third years of their programme enables learners to acquire '*a sense of attachment and familiarity with the workplace, including knowledge of the hospital sites, and relevant policies and procedures'*. Mixed methods research in Australia and England involving 362 third-year PRN students in three universities concluded that longer placements involving '*a consolidated period of practice for students to 'settle in' and establish collegial relationships is an important influence on their experience of belonging and a*

necessary precursor to their active and participative learning' (Levett-Jones *et al.,* 2008, p.8). Similarly, work by Lee J *et al.,* (2018, p.108) concluded that longer practice learning experiences could enable students to establish a better rapport with clinicians in the setting, but cautioned that '*a longer clinical placement guarantees neither positive interpersonal relationships between nurses and nursing students, nor the students' positive learning experiences'*.

There is also some evidence to suggest that unexpected benefits may arise from shorter practice learning periods. For example, a longitudinal study in Australia involving 429 graduates from 12 health disciplines, including nursing, found that students given rural placements of four weeks or less in their training were more likely to take up professional employment in rural settings on achieving their qualification. The researchers attributed this finding to shorter placements minimising problems that were not directly practicum-related but could adversely affect the impression students gained in respect of rural practice learning experiences, such as additional travel and social dislocation (Playford D *et al.,* 2006). It should be noted, however, that these findings differ to those of several comparable studies in medical education, which have indicated the value of extended placements ultimately encouraging students to take up rural practice as physicians (McDonnel Smedts A *et al.,* 2008, Poncelet A *et al.,* 2015, Hudson J *et al.,* 2017).

It appears, therefore, that the length of the practicum and the practice learning opportunities it provides may be more important than the specific nature of the clinical service in which it occurs. Longer placements may enhance the student's ability to make a more meaningful contribution to nursing provision within the setting, or at least feel that this is the case, but may not necessarily lead a student to be more inclined to consider a career within that service area. Moreover, a longer practicum is not enough on its own to ensure a positive student learning experience.

5. Student Responsiveness To Learning

In seeking to determine the effectiveness of the practicum, one should not overlook the influence of individual and student group characteristics on the learning experience. In Oman, a survey involving 76 nurse preceptors highlighted problems with a lack of student motivation and commitment (Madhavanpraphakaran G *et al.,* 2014); whilst in Australia, supervising ward nurses similarly identified difficulties when learners appeared to lack enthusiasm or motivation (Courtney-Pratt H *et al.,* 2012). Research by D'Souza M *et al.,* (2015), also in Oman, found that receptiveness to learning opportunities was affected by the PRN student's socio-economic status, culture, customs and values and that older learners and those with a history of higher academic performance were

more likely to report satisfaction with their clinical learning experiences.

In Australia, an evaluative study of an innovative model of PRN student support, teaching and learning identified that learners valued working with their peers in the practice setting, since doing so generated a sense of camaraderie, provided mutual support, allowed workload to be shared and afforded better opportunities to discuss clinical experiences. Nevertheless, students also noted that such working arrangements created competition between learners for more limited practice opportunities (Bourgeois S *et al.,* 2011). A survey in Malaysia involving 142 student nurses also found that interaction with peers during a placement was regarded as a valuable resource since it provided informal help and emotional support and thereby contributed to better conditions for clinical learning. The researchers concluded, however, that *'students, as learners, also need to have a positive attitude towards their own learning in order to make best use of the learning opportunities available to them whilst on placement'* (Chuan O *et al.,* 2012, p.196).

Hodgson P *et al.,* (2012) argue that most undergraduates are, unfortunately, assessment-driven in their study behaviour. Moreover, the use of traditional practice learning assessment methods, for example portfolios, have been accused of exacerbating such student behaviour within PRN education (Tanner J, 1999, McMullan M, 2008). A study in Hong Kong by Tiwari A *et al.,* (2005, p.304) using focus groups attended by a purposive sample of 38 second, third and fourth-year PRN students and RNs found that what students *'gained from their clinical learning appeared to be limited to the knowledge and skills directly related to the assessment tasks'* stipulated within the current part of their programme. It seems, therefore, that just as educators may risk 'teaching to the test' in order to enhance academic outcomes for a group of learners (Popham W, 2001), so nursing students may be inclined to simply 'learn for the test' with the same personal goal in mind.

To summarise, it seems therefore that even the most well-organised and supportive clinical practicum inevitably cannot guarantee an effective learning experience if the student is not well-motivated and favourably disposed to the placement or their PRN programme. Moreover, it may even be that learner maturity, academic ability and the availability of peer group support are correlated with the likelihood of a positive placement experience. Finally, one cannot overlook the tendency for both teaching staff and students to limit the breadth of learning experience which may be acquired within the practice setting as a result of an excessive emphasis upon fulfilling formal assessment requirements.

CONCLUSION

The evidence captured within this Critical Realist review suggests that providing effective PRN clinical placements is an enduring, multi-faceted, worldwide challenge for nurse educators. Practice learning experiences are affected by a range of social, environmental, educational, intrapersonal and interpersonal variables. Specifically, such variables include student preparedness for the practicum, the emphasis assigned to achieving programme assessment tasks, the learning culture of a service, the quality of support and guidance offered to placement providers by the academic institution delivering the nursing programme, the student's contribution to [and sense of belonging within] the nursing team, the time a supporting nurse can devote to learner support, mentor expertise, the relationship between the preceptor and student, the nature and availability of peer support amongst learners and the impact of individual student characteristics on the practice learning experience. Given the wide range of international evidence indicating negative PRN student experiences during placements it appears, therefore, that nursing still has much to do if it is to create the clinical learning conditions necessary to improve retention on PRN programmes, enhance student satisfaction, ensure practicum experiences help to create confident and skilled nurses and in so doing more effectively tackle staffing shortages.

This review also suggests that little attention has so far been given to the effect of different models of practice learning on the PRN student's educational experiences. The paucity of specific research in this area is therefore part of the reason why the author is currently undertaking mixed methods research, driven by the principles of Critical Realism, to examine the impact of two practicum models on the learning experiences of mature PRN students at a university in the UK. This researcher therefore looks forward to developing the body of knowledge within this field, recommending changes to future nursing curricula congruent with Critical Realist philosophy and thereby contribute to improving the practice learning experiences of PRN students.

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