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Mental Health Student Nurse's Satisfaction with Problem Based Learning. A qualitative study.

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Abstract:

Purpose

To investigate undergraduate pre-registration mental health nurse's satisfaction with problem based learning, in light of the dearth of such studies and to influence future teaching and learning strategies.

Method

This is a qualitative research study. Sixteen students from three cohorts were interviewed in two focus groups. Data analysis was consistent with Seidel & Kelle (1995) which involved noticing relevant phenomena, collecting examples of these phenomena and subsequently analysing these to find commonalities, differences, patterns and structures.

Findings

Student experiences were categorised in five themes indicating that they perceived PBL as a novel, flexible approach to adult learning, which fostered decision making and critical thinking. Student engagement with the process was heavily influenced by the contribution of the end product to their degree classification. They also expressed concerns about working in groups and whether the depth of learning was comparable with traditional methods. However, they presented well considered recommendations for future practice to address the perceived deficits of PBL.

Originality/value

This study adds to the body of research relating to the application of problem-based learning in mental health nurse education. Well considered, student generated recommendations are presented which can enhance student motivation, engagement and learning. These are arguably of value to other educationists interested in this approach to teaching and learning.

Comment [K1]: I have revised the abstract to reflect the revision to the themes.

Key words: Problem based learning, nurse education, mental health nursing, qualitative research, focus groups.

Introduction

Problem based learning (PBL) is considered to be a student centred approach to teaching and learning which originated in Canada for the purpose of educating medical students (Cooper and Carver 2012). Clinical problems are employed as a framework for students to acquire problem-solving skills and knowledge about clinical conditions and related issues, (Albanese & Mitchell 1993). Early models (Maastricht and McMaster) incorporated PBL as the central component of the curriculum, (Barrows 1995).

PBL explores clinical issues or questions via four specific stages, (Barrows 1995). Firstly, students interpret the problem and determine what they need to study as a group. Secondly, they undertake a process of discovery via self-directed study. In the third phase, group development occurs, during which each individual synthesises the information acquired and applies this fresh perspective to the problem; while the group as a whole appraises their earlier work. The fourth phase entails précis and assimilation.

At ….. University PBL has been intrinsic to the mental health pre - registration nursing curriculum since 2008. However in 2012, following the introduction of the Nursing and Midwifery (NMC) (2010) 'Standards for pre - registration nursing education' an integrated pre-registration programme was introduced, grounded on the constructivist model of Bruner (1977); which blended learning across the curriculum. PBL therefore appeared to suit this philosophy, as arguably it facilitates critical thinking, helps develop higher order clinical skills and enhances interpersonal skills; thus addressing the requirements of professional and United Kingdom government policies (Smith and Coleman 2008, Tully 2010).

As PBL had never previously featured in the adult and child nursing curriculum and given that the module evaluations completed by mental health students had never questioned them specifically about PBL, it felt timely to investigate student satisfaction of this distinct approach to learning.

Background Literature

The merits of PBL have been debated since its introduction, with medical and nursing educationalists alike attributing PBL with positive characteristics. Most notably, PBL is considered to be more enjoyable and satisfying than traditional approaches due to the environment in which learning takes place and that it enhances student's attitudes to learning. It is also credited with helping develop cognitive, affective and psychomotor skills, integrating theory and practice more effectively and encouraging in depth, as opposed to

Comment [K2]: Bracket abbreviation added. I have also made some revisions to the introduction.

Comment [K3]: Revised from a direct quote, thus removing the requirement for a page number.

Comment [K4]: Identifier removed.

Comment [K5]: Apologies, I should have made it clear that when I stated no evaluation of PBL for mental health students had taken place, I wasn't referring to research. I was referring to within university evaluation. Up to the point of the study we had used PBL consistently throughout the mental health programme but child and adult Fields had not used PBL at all. I hope this is presented more clearly.

superficial learning (Johnson & Finucane 2000, Shin & Kim 2013). A systematic review and meta-analysis of randomised control trials (Kong et al 2014), compared PBL with traditional lectures on developing student nurses critical thinking skills. Results indicated that although there were limitations to the review (small number of RCT's which used a variety of tests to measure critical thinking), students undertaking the PBL programme had significantly higher overall critical thinking scores on completion of their course. These results were supported by Hung et al (2015) who evaluated nurses' critical thinking skills. The findings of the quasi-experimental study of a continuing education program, suggested that there was significant improvement after PBL in the dimensions of systematic analysis and curiosity, which are implicit in the development of critical thinking.

However, Johnson & Finucane (2000) also highlight that the evidence to support claims that PBL nurtures clinical reasoning and problem-solving skills, helps students to retain knowledge that can be applied to clinical situations or increases motivation to learn is weak. Other disadvantages they noted include the significant cost and staff time associated with developing and sustaining PBL and that it increases stress for students and staff alike. It is also potentially difficult to apply PBL in large classes or when there is dis-interest in the philosophy of PBL; while students don't assimilate as much knowledge of basic sciences when compared with traditional approaches.

Colliver (2000) also examined the reliability of assertions that PBL improves educational outcomes. He found no compelling evidence that PBL was more effective than didactic teaching in increasing student's baseline knowledge or clinical performance; particularly to the level anticipated, given the resources needed for a PBL curriculum. Colliver's conclusions were noted by Norman & Schmidt (2000), who acknowledged that powerful advocates of PBL like themselves had overstated its benefits and overlooked the related resource costs associated with its use. They therefore proposed that supporters of PBL should be more realistic about its capacity to increase the acquisition of basic knowledge and clinical skills but asserted that as PBL is stimulating, inspiring and gratifying, this is reason enough to promote its use, provided that the expenditure required is not too excessive.

If one examines research specifically related to the experiences of pre – registration mental health nurses and PBL, despite the growing body of literature, most studies have focused on PBL which formed a subset of the programme, rather than PBL which was incorporated throughout the curriculum see table 1.

Regardless of the variety of approaches to PBL utilised in each of the studies and notwithstanding the difficulties experienced by students in distinguishing whether it was an

effective learning strategy (Wood 2005), PBL was viewed positively with similar experiences noted across studies. PBL was attributed with cultivating self - motivation, independent learning and reflection by Wood (2005). This is consistent with Gould et al (2015), where the process of discussion and sharing of ideas nurtured self-belief and motivation and helped foster a growing sense of ownership of and investment in their own learning. Students in this study also stated that PBL enhanced the professional, academic and interpersonal skills of students. This was similar to Cooper & Carver (2012); where students concluded that PBL nurtured a deeper level of learning, promoted self - directed learning and helped develop the fundamental skills required of a mental health nurse, such as group/team work and interpersonal skills.

The value of working in groups was equally a feature of the experiences of students studied by Atherton (2015), who reported that once they had made the transition from didactic to student led learning, found working in groups enabled them to consider problems from different perspectives, to engage in self – reflection, refine skills in professional communication and resolve conflicts. This developed their critical thinking and self – awareness and they drew clearer links between theory and practice. Positive relationships with facilitators, the flexibility of approach and the professional background of facilitators were other beneficial features. There was however debate about when was the most appropriate time in the programme to introduce PBL, as well as time allocated to complete work.

The study by Curtis (2007) of students who undertook an intensive two day workshop, which utilised PBL as a means of preparing them for a mental health placement, reported increased confidence in understanding mental health legislation and undertaking assessments. It also provided a clearer understanding of the role of the mental health nurse and diagnostic criteria, while students valued the involvement of clinical staff in closing the theory practice gap.

Comment [K6]: I have included additional studies which include studies highlighting the disadvantages of PBL.

Table 1:

PBL in this programme

The structure of the BN (Hons) mental health programme incorporated a generic common foundation year, followed by two years of field specific modules, with three modules in each year as illustrated in table 2:

Each module incorporated a hybrid method, with PBL interspersed with didactic sessions (Smith & Coleman 2008). The content of both approaches directly related to the learning outcomes of the module. Table 3 illustrates the PBL cycles, with each module team providing well - designed problems and triggers, as is required for a successful PBL

programme (Nierderhoffer 2000). In the third year, printed materials were supplemented with professionally produced films, with actors and lecturers playing roles to provide an emotionally stimulating medium, aimed at encouraging in-depth reflection (Lexton et al 2005). As the programme and complexity of clinical cases proceeded, greater emphasis was placed on self - directed learning; while assessment at the end of each PBL cycle escalated from formative in year 2 to summative in year 3.

Comment [K7]: I have tried to provide greater detail of the BN course and the PBL curriculum.

Table 3:

Aim of the study

The aim of this study was to investigate the perceived advantages and disadvantages of PBL from the perspective of pre-registration mental health nurses undertaking the BN programme, with a view to influencing future teaching and learning strategies within the university.

Methodology

Developing an appreciation of students perception of PBL necessitated a qualitative approach to research, in attempting to understand phenomena in terms of the significance or meaning this has for each individual (Hatch 2002). Purposive sampling was used to recruit students to two focus groups from three successive cohorts. A total sample of 53 students were available, one cohort of 11 students and two of 21 students. Prior to the commencement of the study, students were given an information sheet and two copies of the consent form. A subsequent time tabled session provided an opportunity for students to ask questions, clarify any concerns and if they wished to be involved, to hand in one signed copy of the consent form. Consent forms were allocated a number, cohort 1 (March) 1 – 11 and cohorts 2 & 3 March and September 1 – 21. Even numbers were allocated to focus group one and odd numbers to focus group two, with the aim of having representation within each focus group from each cohort. Only 16 of the 22 students who initially agreed to participate attended. Subsequently 8 students were allocated to each focus group. This is consistent with the optimum size of six to ten members typically associated with focus group membership (Morgan 1998), see table 4:

As this was a small scale unfunded study, focus groups provided a cost-effective and expedient means of attaining data from multiple participants (Krueger & Casey 2000) and was consistent with the approach used in similar studies (Wood 2005 & Rowan et al 2008).

Comment [K8]: I have provided a brief paragraph to justify the use of a qualitative approach.

Participants may also feel more secure articulating their views in groups of friends and colleagues, rather than on a one to one basis with an interviewer. Furthermore, although individuals or sub-groups can monopolise discussions or press their specific views, focus groups arguably enable participants to reflect on and react to the views of others thus providing useful insights into phenomena (Parahoo 2006).

Comment [K9]: I have provided a rationale for using focus groups here.

Table 4:

Data Collection and analysis

Data collection and analysis was influenced by Seidel and Kelle (1995 pp 55-56). The first stage involved data collection or ***noticing relevant phenomena*** via the focus groups. These took place on the university campus, lasted approximately one and half-hours and were digitally recorded. Two members of staff from the child field acted as independent moderator and a scribe. The moderator adhered to a semi structured approach and used a discussion guide to facilitate discussion which was broadly influenced by Wells et al (2009):

- The benefits of PBL
- The difficulties associated with PBL and possible solutions
- Facilitation
- The assessment of PBL.

The second stage of analysis involved ***collecting examples of phenomena*** by reading the transcripts and identifying portions of text and allocating these to one or more of the categories above. These categories were expanded to:

Assessment of PBL
Benefits of PBL
Disadvantages of PBL
Facilitation
Group dynamics
Process of learning
Ways to reduce difficulties associated with PBL

The third phase of finding ***commonalities, differences, patterns and structures*** was undertaken over a further three stages of decontextualizing and re-contextualization of the data (Tesch 1990). Specific portions of text or phrases/ terms were coded via NVIVO computer software. Coffey & Atkinson (1996 p 27) describe this as "linking segments or instances in the data" The views expressed by students, recommendations for future practice and personal reflections were incorporated into "tentative" themes, which were subsequently revised and refined by drawing comparisons with the concepts of PBL, see table 5:

Table 5:

As the process of transcribing and analysing the data took some time, no member check was undertaken as the students who took part in the focus groups had left the course. Although this is a potential limitation of the analysis, there is debate about the value of this process which is described in detail by Angen (2000).

Comment [K10]: I have tried to describe the data analysis in more detail here. I have also revisited the data as recommended and the themes have been revised as a result.

Due to the word constraints I removed the appendix which lists all the text captions which were applied to

Assessment of PBL
Benefits of PBL
Disadvantages of PBL
Facilitation
Group dynamics .
Process of learning
Ways to reduce difficulties associated with PBL

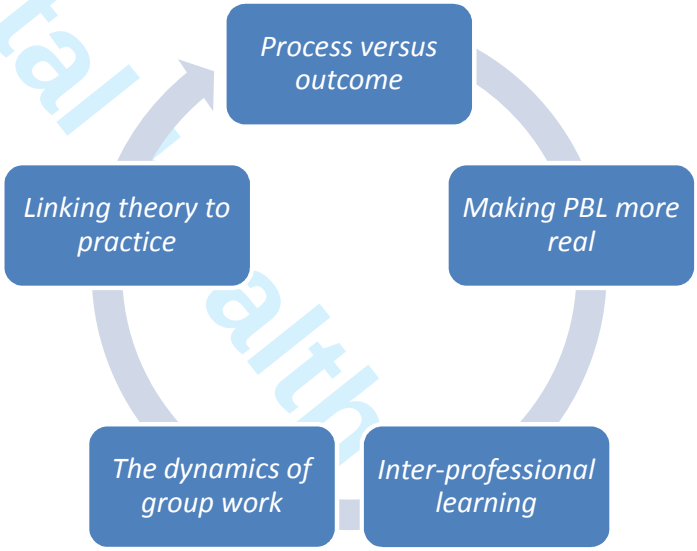
I have also included a rationale for not having undertaken member checks.

Ethical considerations

The proposal for this study was approved by the School of Nursing and Midwifery Studies (SONMS) Research Review and Ethics Committee at … University. Due to the nature of the study, the key issue involved ensuring that students provided informed consent, had an opportunity to withdraw consent at any time, that their identities remained anonymous and that data confidentiality was protected (Polit and Hungler 1998).

Comment [K11]: Identifier removed.

Findings



The overarching theme of ***process versus outcome*** encapsulates the student experience of PBL. Students enjoyed the flexibility and variation, while simultaneously feeling frustrated by the structure of PBL across modules; perceiving that PBL involved additional rather than supplementary work and experiencing difficulties associated with ***the dynamics of group work.***

The positives of PBL are exemplified in both focus groups, with PBL allowing students to make mistakes, to foster decision making and to think critically about the different perspectives associated with problems and triggers. The flexibility of the approach also helped promote personal motivation, and ***linked theory to clinical practice***.

Focus Group 1:

> "I've never done anything like this before, so it's helped me to learn".
>
> "You can make mistakes without it going the wrong way like in an essay, as long as you justify everything…
>
> "It's amazing how many different points you can get off one trigger, everyone comes up with a different answer."

Comment [K12]: Themes have been revised and now include:
Making PBL more real
Inter-professional learning
Linking theory to practice.

These are positive recommendations which correlate with the tenets of PBL.

Focus group 2:

"It's a more fun way of learning…."

"They (lecturers) make it very clear that it's wide open, there's no right way to actually focus on it; the flexibility of it gives you the chance to dig away at little areas".

"You learn presentation skills, working in a group skills, so it is still relevant for the workplace and relevant for later modules".

However, competing demands on their time and the mixed experiences related to ***the dynamics of group work*** impacted on the value students placed on the process of PBL. Consequently, they were more engaged when the assessment of a PBL cycle was summative. There were also debates about whether PBL facilitated the same level of learning as traditional approaches.

Focus group 1:

"PBL isn't (summatively) assessed (in year 2) so it's not rocket science to realise your effort goes into your assignment which goes towards your degree. It's really hard trying to put all your energy into PBL while it doesn't make any difference to your classification".

"I think I read a lot more through PBL than I would for an essay actually… with PBL, you've got to try more… than you would for an essay".

Focus group 2:

"I was with a bunch of people who didn't want to do any work and the main reason that they cited was that it wasn't marked, so that took away all their motivation,…."

"Doing a presentation … isn't a good way of assessing how much you've done, like compared to an essay for example".

"I think you learn more than in a lecture…. With PBL, you've got to go and find the stuff…"

Students placed particular value in **linking theory to practice,** as discussing issues while on placement was a more active way of learning, whilst assessed presentations helped build confidence and developed skills associated with multi - disciplinary team working.

Focus group 1:

"We can use placement as well because we're going on a community placement and this PBL is specifically about community. I think we can discuss things like that in the teams as well. Go into what would you do and stuff like that."

"It was good experience in standing up and doing presentations particularly getting close to qualifying and the interview process".

Utilising clinical placements as part of the PBL process was also acknowledged as a way of alleviating perceived gaps in student knowledge, with students questioning why this was not a consistent feature of all the modules.

Focus group 2:

> "The nice thing about this PBL though is, because the presentations are after the placement, they're normally before, it's the placement that highlights the gaps in your knowledge from the lectures and I know I'm weak in some areas and that's highlighted by the placement, so I go off and learn it."

There were also requests to receive feedback after each trigger and for formative presentations at the end of a PBL cycle to be graded; to encourage a more cohesive and methodical approach to work. This was perceived as a way of addressing potential deficits in knowledge; enable students to monitor their academic progress more closely and in contrast to informal feedback, stop students from disengaging without penalty.

Focus group 2:

> "I know we are adult learners but sometimes if it needs to be taken out of the adult learners hands to get them to learn more effectively, you know, by saying you have to come in and do a presentation, a mini presentation every time, so we can see how far you get. I think that might need to be done, because otherwise you are sending them out on placement with a gap in their knowledge."

The emphasis on ***linking theory to practice*** was reiterated with students recommending that PBL groups work on different scenarios and not variations of the same clinical problem. They contended that this would apply theory to practice more broadly and render the assessed component of each PBL cycle a more interesting and educational experience. This would stimulate the audience, in contrast to the repetitive nature of viewing similar presentations.

Focus group 1:

> "When we did the individual ones (presentations) in module ++++, although we were in two groups, it got really repetitive."

Focus group 2:

> "On the actual assessment days, you're basically sitting watching 16 semi- identical presentations, over 2 days …. Nobody can pay attention to the same presentation 16 times in a row."

Other interesting suggestions included involving service users, carers, spouses of people with dementia or parents of children with mental health disorders. Students expressed that although film clips were beneficial, having the opportunity to ask questions in real time would

make PBL more real. However, they recognised that if this wasn't possible, using documentaries showing people experiencing symptoms could be nearly as effective.

Focus group 2:

> "We saw that chap who was a diagnosed with schizophrenia being interviewed, and you could see, it was really useful… oh he's responding, he's got voices now so at different phases you could pick up on that.."

> "Early dementia for example when people have got insight, ….or to have somebody coming in with their spouse and say here's how my life has changed and I'm onto this stage, that would make the PBL more real."

Focus group 1:

> "It does make it more real though, apart from the lecturers haven't changed in 10 years! It does make it realistic with real people."

> "You get the tone of voice and the sense of emergency in the video clip"

Perhaps the most interesting ideas came from students in focus group 2 who suggested incorporating ***inter-professional learning,*** via cross – field presentations or having students themselves to produce the triggers; with the final grade of the exercise dependent on the outcome.

> "it gives them (students from other fields) a bit of insight into what we're learning!".

> "I'd love to hear a presentation from other fields, because in mental health you always have family involvement."

> "Could you change the PBL so that it's more student led, in the sense that the student's decide what the next trigger is? So… you could mock up an MDT, and pretend that you're a CPN and rather than a trigger, you basically get the notes and then you could pick out bits that may be missing or what you want to ask next, then you go onto the next trigger…. So you make up the next trigger and by the end, what you've done dictates what happened to the patient. So if the patient ends up committing suicide then you may not score as well as if the patient ends up having a fruitful life."

> "From a motivational point of view, I'd be much more likely to engage, if that was a real case".

Discussion

As expected, aspects of the student's narrative in this study are consistent with views expressed in other studies. What this study adds however, is a diverse and somewhat illuminating series of student generated recommendations, which closely correlate with the underpinning philosophy of PBL. This is to link theory to practice and to incorporate real life aspects of clinical care and knowledge from across professional disciplines, by utilising assorted media formats (Biley & Smith 1998).

Students in this study stated that the flexible nature of PBL promoted adult learning and permitted them to make mistakes; while simultaneously cultivating critical thinking and decision making skills. This enhanced confidence and motivation and enabled them to draw comparisons with clinical practice; particularly in the modules where PBL encompassed both the theory and clinical components. From a facilitators perspective this was heartening, as there was a conscious effort to provide process driven leaning outcomes, which promoted student autonomy to investigate the triggers freely.

Conversely, despite module teams utilising assessment strategies aimed at reducing student dependence and encapsulating collaborative empiricism, which supported reflection and self- appraisal, (Pengelly 2010); students expressed reservations about PBL. They had mixed feelings about the value of group work, as although it enabled them to perform to their strengths and to learn from members of their own and other PBL groups; it was simultaneously open to abuse from students who lacked commitment. This is a common problem associated with PBL according to Seymour (2010), who states that Levi (2007) coined the term "social loafing" to describe individuals who shirk, either as a result of believing that their contribution is not appreciated, or more frequently because they recognise that the efforts of other group members will ensure they are not disadvantaged. Students were also concerned that PBL didn't generate the same depth and breadth of learning when compared with writing essays and they associated PBL with increased workload and extra stress. Furthermore, levels of engagement with PBL increased in modules where the end product was a summative assessment. These concerns are indicative of the conflict created by appreciating the collaborative philosophy of PBL on the one hand, while revering the value of summative assessment (Savin – Baden 2004) on the other. This was also noted by Smith & Coleman (2008) and Tully (2010) and is common when students perceive that their work is unrewarded or of less value (Pengelly 2010). Seymour (2010) recommends creating group guidelines at the commencement of PBL (Baptiste 2003), to clearly articulate the expectations of group members and help students to reflect on group performance and motivation.

A positive feature of the discourse was the student's ability to articulate their vision for PBL and to make recommendations for future practice. Students wanted a formal mark at the end of each cycle of PBL; irrespective of whether this was formatively or summatively assessed, to increase student engagement and to enable them to monitor their academic progress. This was useful, as Dolmans et al (2005) states that the facilitator should sustain the learning process, review each student's knowledge, check that all students are participating in the process and oversee individual student's progress. The need for frequent evaluation and feedback on group performance is also recommended by Seymour (2010), especially if the PBL group work is not summatively assessed, to provide a means of motivating disengaged students. Notwithstanding these views, it is equally important to accommodate individual styles and approaches to facilitation but this must involve student centred facilitation not tutor inactivity (Riley & Matheson 2010). Facilitators must ensure that there is a mutual understanding of what is expected as part of the process of learning via PBL through a developmental process (Roberts 2010).

Other interesting suggestions included incorporating inter- field and inter-professional collaboration, using multiple PBL problems and triggers, having access to real case examples from service users or documentaries, revising the assessment strategy and extending PBL across theory and placement. Each of these recommendations was aimed at reinforcing the link between theory and practice and bringing PBL to life. This correlates with the view of Dolmans et al (2005) who assert that one of the advantages of PBL is that it contextualises learning by being concerned with the real world and Ertmer & Newby (1993), who state that students should examine problems in various contexts, to enable them to acquire the ability to transfer knowledge from one context to another which in turn promotes flexible and creative thinking.

Comment [K13]: The discussion has been revised.

Implication for nurse education

The role of the facilitator in PBL is crucial in trying to ensure that it is enjoyable, meets the needs of both individuals and groups and adheres to the learning outcome of the module (Roberts 2010). Nonetheless, adapting PBL to module structures not ideally suited to PBL was problematic. The key issue revolved around the fact that a number of modules required students to submit their summative assessments prior to going on clinical placement. This negated the option of extending PBL through theoretical and practical components of all modules, thus causing disparity. Equally, as PBL was directly linked to the learning outcomes of each module, the time that could be allocated for PBL work was condensed into

the theory block in some modules. This resulted in students simultaneously working on PBL and theoretical assignment and therefore viewing PBL as additional, rather than supplementary work.

On a positive note, the student generated recommendations in this study clearly have the potential to improve student motivation and engagement, by incorporating service user/carer involvement, inter-professional learning and student led approaches. It is acknowledged that these are not novel strategies in themselves, as they have been consistently included in many pre –registration programmes, including our own. Nevertheless, they have particularly relevance for adapting PBL to a revised generic pre-registration programme, where modules extend across semesters and where there is no direct correlation between the theoretical and clinical components of modules. Consequently, using different problems for each group and extending PBL across theoretical and clinical components of modules are practicable.

Recommendations:

- Create group guidelines at the commencement of PBL.
- Utilise a diverse range of problems and triggers to enhance motivation and engagement with the process of PBL.
- Consider involving service users / carers, documentaries of real cases or where case notes or actors are used try to adapt authentic cases accounts.
- Use students or actors rather than lecturers for role play.
- Where possible extend the PBL cycle throughout theoretical and practice components of modules.
- Provide a clear and consistent approach to supervision and feedback. Give feedback during and after each PBL cycle.
- Consider strategies to incorporate inter-professional learning as part of the PBL process to help nursing students and other professions learn about their respective roles.
- Use innovative ways of presenting problems and triggers and provide supplementary learning materials via recorded lectures or discussion boards on Blackboard and links to electronic journals.
- Take students to different learning environments.

Comment [K14]: Revised recommendations which specifically relate to the experience of this approach to PBL. I hope these are less generic yet still being of relevance to other institutions.

Conclusion

The findings of this study indicate that student's value PBL as an adult learning experience which cultivates critical thinking and decision making skills. It is also comparable with clinical practice, while its flexible nature enhances motivation and self-confidence. It also clearly places considerable demands on the student's motivation and engagement, particularly when a hybrid approach is used. Nevertheless, it is clear that students in this study were able to effectively and constructively appraise their experience, which resulted in the presentation of helpful recommendations for future practice which were closely associated with the underpinning tenets of PBL and were feasible options.

Conflict of interest

There are no conflicts of interest, this study was unfunded.

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Table 1:

Wood (2005)	Explored PBL as part of a wider exploration of mental health nurse education.
Curtis (2007)	Evaluation of intensive skills based workshops for undergraduate nursing students which utilised PBL to prepare students for mental health placements in Australia.
Cooper & Carver (2012)	A longitudinal qualitative study of a pre-registration post graduate course which used PBL as the primary teaching strategy.
Atherton (2015)	A qualitative study of ten students via focus groups which explored the experiences of second year mental health students utilising PBL in one module.
Gould et al (2015)	Analysed data acquired as part of the evaluation of a second year module which utilised PBL.

Table 2:

Year 2

Term 1		Term 2		Term 3	
Module 4 **Theory** 8 weeks	**Module 4** **Placement** 6 weeks	**Module 5** **Theory** 8 weeks	**Module 5** **Placement** 6 weeks	**Module 6** **Theory** 8 weeks	**Module 6** **Placement** 6 weeks
Placement	Working Age Adults Mental Health Services		Older Persons Mental Health Services		Children and Young People's Mental Health Services

Year 3

Term 1		Term 2		Term 3	
Module 7 **Theory** 8 weeks	**Module 8** **Placement** 6 weeks	**Module 7** **Theory** 8 weeks	**Module 8** **Placement** 6 weeks	**Module 9** **Theory** 2 weeks	**Module 9** **Placement** 12 weeks
Placement	Community Mental Health		Specialist Mental Health services		Student request

Table 3:

PBL in the BN Mental Health Programme

Year 2:

Working age adult module:

One trigger: Care Programme Approach initial assessment. Cohort split into four groups, formative group presentations. Each group required to answer three questions related to:

- Engagement
- Problem identification and aids to assessment
- Process of co-ordinating care via CPA and traditional nursing models.

One additional trigger question for each group relating to:

- Practicing professionally and ethically
- Respecting individual culture and diversity
- Promoting recovery
- Identifying opportunities for health promotion.

Mental Health Care of the Older Adult

Two triggers: Referral letter from Liaison Nurse to fictitious ward and transcript of notes taken following ward round. Formative assessment: group poster presentations. All groups are asked to consider

- Main features of vascular dementia.
- Effects of presentation on the care planning process
- Impact of hospitalisation on clients ability to meet activities of living
- Assessments approaches
- Advantages and disadvantages of assessment processes.
- Alternative assessment approaches

One additional trigger question for each group relating to:

- How is dementia diagnosed? What tests/assessments are used?
- How are the patient's care needs assessed on admission? Are all needs equally assessed?
- Compare medical model with person-centred care. Strengths and weaknesses of these models?

Children and Young People's Mental Health
Four triggers relating to the care of a family as part of the Children & Adolescent Mental Health Service. School report, initial assessment by CAMHS services, record of a follow up session by a nurse, record of a telephone conversation between mother and CAMHS.

Students to consider guiding principles of relevant assessment issues and prioritisation of issues.

Year 3:

The Principles of Community and Specialist Mental Health Nursing
PBL culminates in the completion of a 15 minute summative presentation focusing on issues arising from the four PBL triggers These triggers include written materials and movie clips.

Cycle 1 Service user in primary care newly-referred to secondary community mental health services

presenting with psychotic symptoms. Cycles progress and include the process of assessment, involvement of the crisis response and home treatment team ending in hospital admission. Complex case (substance use, child protection, vulnerable adults).

Table 4:

Focus group 1

March cohort	September cohort	March cohort	Total
1	5	2	8

Focus group 2

March cohort	September cohort	March cohort	Total
1	4	3	8

Table 5:

Tentative themes:	Refined reviewed themes:	Final themes:
Time Resourcing, Adherence/non adherence to group work Adult learning	Process versus outcome Dynamics of group work Consistency “Getting out what you put in” “An adult learning experience”	Process versus outcome The dynamics of group work Making PBL more real Inter-professional learning Linking theory to practice