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Module Co-ordinator: Dr. Katie Robinson

Supervisor: Dr. Nancy Salmon

Student Number: 13007645

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Abstract

A scoping review exploring student perspective of Inter-Professional Education Practice Placements.

Background: The current health service reform highlights the need for multidisciplinary team work and collaborative practice to be central to health care reform. Inter-professional education (IPE) is limited in Ireland and professional accrediting bodies increasingly require evidence that IPE is embedded within pre-qualification health care programmes.

Objectives: To explore student perspective of inter-professional education practice placements (IPEPP) and to determine the enablers and barriers to successful team functioning.

Methods: A scoping review guided by Arksey and O'Malley (2005) was used as a methodological framework. 29 databases were searched, 836 articles were reviewed. The inclusion criteria included; articles published in English, peer reviewed journals, empirical studies and studies reporting on the student perspective of IPEPP who experienced full placement blocks. A total of 9 articles were included in this study.

Results: The main enablers that facilitate successful IPEPP are collaborative teamwork and a positive learning environment. The main barriers identified include competency standard discrepancies, contrasting facilitator support, and timetabling and shift incompatibilities.

Conclusion: Students recognised the need for structuring timetabling within a placement to allow for attendance at practical clinical experiences, one of the main facilitators to collaborative teamwork. The variation of facilitator styles added uncertainty to student learning and professional identity and it is therefore recommended that a structured and more organised model of facilitator support be in place. Competency standards should also ascertain one set of learning objectives, while student preparation is necessary to address placement expectations and support a more inclusive team based approach to professional development.

Introduction

The current health service reform as set out in the Government policy document on health reform 'Future Health: A Strategic Framework for the Reform of the Health Service 2012-2015' highlights the need for multidisciplinary teamwork and collaborative practice to be central to the health care reform. Multidisciplinary team work and collaboration is imperative to reduce unnecessary hospital admissions, improve patient outcomes and health inequalities, and enable effective working of professionals across provider boundaries while also protecting people from risks to their health and wellbeing (HSE - National Service Plan 2015; WHO & Baker 2010). However, this method of service delivery is different from traditional methods of professional practice where professions work alongside but not with each other. Newly qualified health care professionals are challenged to perform in such teams without prior interprofessional experience and team collaboration. Borowitz *et al* (2012) reports that the current Irish health practice is inefficient, with service delivery a central feature of the problem. Interprofessional education, practice placements and collaboration are effective methods of addressing this issue while improving service delivery and patient outcomes.

Literature Review

Ineffective interprofessional working has been central to debates in both the Republic of Ireland and the United Kingdom professional health and social care services (Williamson *et al* 2011). Between 2002-2005, such ineffective interprofessional working relationships contributed to 10 maternal deaths in London (Healthcare Commission 2006). Following this tragedy, the Climbié Enquiry (Laming 2003) established that the pertinent agencies were lacking effective collaborative working strategies and the Baby P Enquiry (Laming 2009) recommended a change in frontline services to aid more effective working teams. This has also been driven by many factors including; recommendations by government (Department of Health 1999; 2000a), professional bodies (GMC 1993; UKCC 1999), and education strategies (Dearing 1997) and the report of the Bristol Enquiry (DoH 2001; 2002). Consequently, momentum for IPE increased resulting in a mandate that IPE be part of pre-registration training in all health care facilities in the UK (DOH 2002).

IPE has been recognised in the UK and internationally as an innovative approach for the development of a collaborative, practice-ready health workforce (WHO 2010). The Centre for the Advancement of Inter-professional Education (CAIPE) defines IPE as: “when two or

more professions learn with, from and about each other to improve collaboration and the quality of care” (CAIPE 2002). However, it is important to note that IPE includes learning in both academic and work-based settings before and after qualification, with interprofessional education practice placements (IPEPP) being one particular focus of such IPE. The provision of pre-qualification practice-based placements offers students from a variety of disciplines the opportunity to develop an understanding of the differential roles that exist within practice (Takahashi *et al* 2010).

An Australia Report (Nicol 2013) suggests that there is a range of placement types in different contexts that could impact development of inter-professional competencies. Examples of placements as described by Nicol (2013) were predominately in the context of ‘inter-professional practice within services or schemes, driven by the university sector in partnership with service providers, or on-campus service models’. IPEPP’s are delivered in many forms including; workshops, shadowing, tutorials, working collaboratively on case studies, attending placement 1-2 days a week in combination with attendance at University or completing full weekly blocks of placements as designed by the university and health care services. Literature provides few descriptions of integration of student placements within services where teams are engaging in interprofessional practices already or providing interprofessional learning opportunities. Existing literature is written from the perspectives of many, including; clients, practice educator, academics and students. However, there is a particular lack of research regarding IPEPP from the perspectives of students who experience full weekly blocks of placement in line with university and module layout. Research in this areas is vital in recognising facilitators and barriers to successful team functioning and providing quality care and outcomes for patients within the health service. Research Question: What are student perceptions of Inter-professional Practice Education Placements? The primary aim of this study is to highlight student perceptions of inter-professional educational practice placements to inform Irish policy makers and practice placement facilitators in its development. It aims to identify; a) the enablers to successful IPEPP’s, and b) the barriers to successful IPEPP’s.

Methods

A scoping review was conducted to facilitate an understanding of student perceptions of IPEPP's and included mixed-methods studies. Scoping reviews are an increasingly popular approach providing a tool for summarising literature in areas such as health system quality (Levac *et al* 2010). Davis *et al* (2009) asserts that scoping reviews encompass extensive overview of research while Rumrill *et al* (2010) state that such research can influence policy and practices, as it goes beyond exploring the literature and identifies gaps in knowledge and practice. Arksey and O'Malley (2005) provide a scoping review methodological framework containing six stages, which the current study followed. It includes: 1) Identification of research question, 2) Identification of applicable studies, 3) Study selection, 4) Charting the information, 5) Collecting, summarising and reporting the results, and 6) Discussion (Optional).

Search and Selection Process

Twenty nine databases (Table 1) were searched. The search strategy omitted time period restrictions or filters to avoid missing any relevant studies or documents. Researchers conducting literature reviews are advised to seek assistance from individuals with expert skills in information retrieval strategies (Dissemination C.R.F.A. 2009). Two expert librarians were consulted at different stages of the data retrieval process regarding appropriate databases to search, and the development and combination of keywords to use.

Ref: Table 2 outlines the keywords used in the search strategy, and Figure 1 outlines the search results.

Table 1. Databases Searched

<ul style="list-style-type: none"> • Academic Search Complete • AMED – The Allied and Complementary Medicine Database • ATLA – Religion Database with ATLASerials • Avery Index to Architectural Periodicals • Biomedical Reference Collection: Expanded • British Education Index • Business Abstracts with full text (H.W. Wilson) • Business Source Complete • CINAHL Plus with Full Text • Communication and Mass Media Complete • EconLit with full text • Education full text (H.W. Wilson) • ERIC 	<ul style="list-style-type: none"> • General Science full text (H.W. Wilson) • Greenfile • Historical Abstracts • Humanities Full Text (H.W. Wilson) • Library, Information Science and Technology Abstracts • Omnifile Full Text Mega (H.W. Wilson) • PsycARTILES • PsycINFO • Readers' Guide Full Text Mega (H.W. Wilson) • Regional Business News • Social Science Full Text (H.W. Wilson) • SPORTDiscus with Full Text • UK and Ireland Reference Centre • Pubmed • Scopus • Cochrane Library
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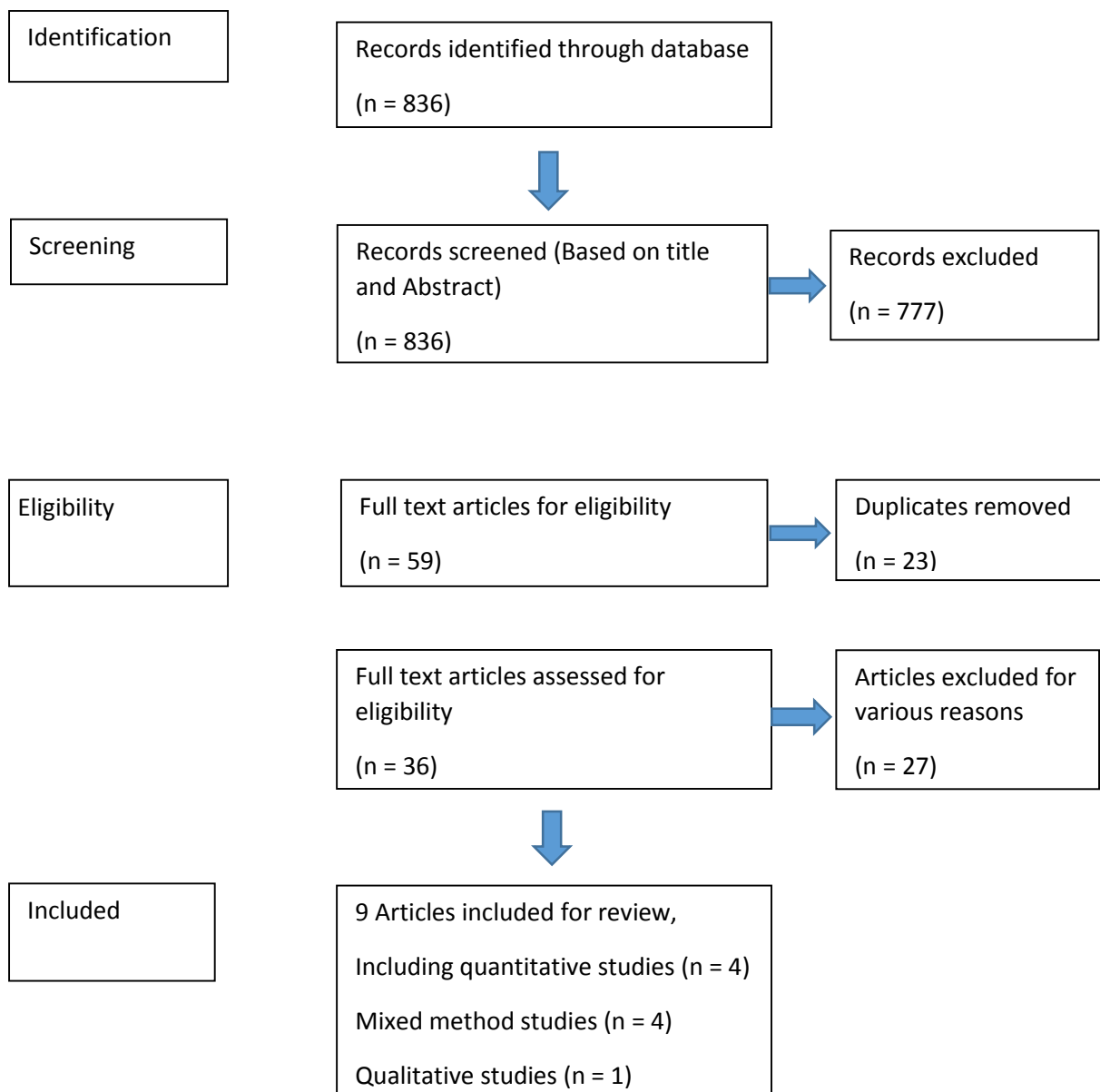
Table 2. Search Strategy Keywords

<ul style="list-style-type: none"> • Clinical placement • Clinical therapy • Health care • Healthcare • Inter-disciplinary • Inter-professional • Interprofessional education • Inter-professional education • Interprofessional/inter-professional practice 	<ul style="list-style-type: none"> • Interprofessional AND learning • Inter-professional AND learning • Inter-professional AND training • Interprofessional AND training • Multi-disciplinary • Placement • Practical inter-professional training • Practice education • Shared learning • Social care • Students
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Initially, articles were screened based on the title and abstract. Full articles were assessed for eligibility and duplicates were removed. The following inclusion criteria was used:

- Articles published in a peer-reviewed journal.
- Studies published in English.
- Empirical studies.
- Studies reporting the perspectives of students who had experienced full weekly blocks of inter-professional education practice placement.

Figure 1. Search Results



In total, 836 titles and abstracts were reviewed by the researcher. Following review of the title and abstract, and with duplicates removed, 36 articles were assessed for eligibility. This final screening was based on the entire article using specific headings in excel to ensure that the article met the inclusion criteria. These headings were guided by the ‘Standards for Reporting Qualitative Research SRQR’ guidelines, which is essential for transparency and reporting qualitative data (Patton 2005). Such headings included; background literature, study context, sampling strategy, ethical issues, methods, participants or ‘units’ of study, data processing, data analysis, reliability/validity or trustworthiness, limitations, key findings and reasons for inclusion or exclusion in the study. Twenty seven articles were excluded for a range of reasons including sampling sizes being too small and the use of telephone interviews being an unreliable source of data collection in some articles. A total of nine articles were included in the study. Only studies with ethical approval were included in this research. The purpose of this research is to provide policy makers and academia’s with information regarding student perspectives of IPEPP and with this arises the responsibility to report on literature and findings with both honesty and truthfulness.

Data Extraction

An inclusive approach to data extraction was adopted which embraces a range of research approaches that traditionally have been termed, ‘action’, ‘emancipatory’, or ‘participatory’ (Walmsley & Johnson 2003). Included articles were imported into Endnote database. An excel spreadsheet was used to critically appraise each article and chart information that contributed to answering the research question. The reviewer systematically documented data from the articles through the use of headings in the excel spreadsheet. The data entered allowed for a critical appraisal of the articles and to highlight possible themes and concepts. Initially, findings were categorised under these headings; enablers, barriers and practicalities followed by the generation of analytical themes.

Ref: Table 3, 4 and 5 outlines key aspects of each article.

Table 3 Quantitative Studies

Author and Year of Publication	Title	Research Question/Purpose of Study	Study Design and Methodology	Population	Main Findings
O'Brien <i>et al</i> (2003)	Student perceptions of an inter-professional clinical experience at a university clinic in Auckland, New Zealand.	The study explored students' perceptions of inter-professional placement and the utility of an inter-professional education questionnaire.	Quantitative Analysis. IPE Student Questionnaire. Part 1: students' inter-professional clinical experience. Part 2: clinical placement and personal experiences. Part 3: students' demographic characteristics.	42 students completed the questionnaire. The majority of students were studying podiatry or physiotherapy. Students who completed placement in 2012 completed the study, length of placement varied.	83% of students had a good experience, 91% stated it changed how they related to other health professionals and 78% gained a better understanding of what other health professionals did.
Brewer <i>et al</i> (2013)	An Australian hospital-based student training ward delivering safe, client-centred care while developing students' inter-professional practice capabilities.	An evaluation of an Australian inter-professional training ward.	Quantitative Analysis. A validated attitudinal scale, capability assessment rating drawn from Curtin's Inter-professional Capability Assessment Tool, and short pre and post surveys.	2-3 Week placement. The professional distribution varied with 39% medical, 22% nursing and 42% allied health students.	A clearer understanding of both professions specific & inter-professional roles & responsibilities while recognising negative factors such as professional commitments and lengthy rotations.
Dando <i>et al</i> (2012)	Evaluation of an inter-professional practice placement in a UK in-patient palliative care unit.	To report on undergraduate students' evaluations of a new hospice-based inter-professional practice placement that	Quantitative analysis. Questionnaire: Four evaluations were conducted 1) generic written evaluations, 2) a specific student	12 students attending for three weeks in six rotations from September 2008 to May 2009. Each group comprised of a mixture of final-year students from	Results suggest the goals of enhancing inter-professional attitudes and collaboration were achieved. A degree of professional respect was

		took place in the voluntary sector from 2008-2009.	evaluation, 3) patient evaluations, 4) mentor evaluations.	different professions, including nursing, occupational therapy, physiotherapy and medicine.	achieved. Students improved in the areas of teamwork and delivery of effective patient care.
Otter <i>et al</i> (2003)	An Evaluation of an Interdisciplinary Joint Clinical Placement between Podiatry and Pharmacy Students. A pilot placement programme in University of Brighton (UK).	To evaluate a new clinical placement for third year undergraduate Pharmacy and Podiatry students.	Quantitative Analysis. Pre and post semi-structured, self-administered questionnaire	Podiatry students (n = 45) and a stratified sample of Pharmacy students (n = 48) were included in the study.	Podiatry students reported an increase in confidence & prioritising pharmaceutical problem lists. An effective learning environment is linked positive to a placement.

Table 4 Qualitative Studies

Author and Year of Publication	Title	Research Question/Purpose of Study	Study Design and Methodology	Population	Main Findings
Frakes <i>et al</i> (2014)	Experiences from an inter-professional student-assisted chronic disease clinic in Queenstown, Australia.	The study explored early evaluative information regarding student experiences included self-reported changes in practice.	Qualitative analysis. Structured interviews with both students and clinical educators	73 students from exercise physiology, nutrition and dietetics, occupational therapy, pharmacy, podiatry and social work. Students were completing a final year clinical placement of 4-6 weeks in duration.	The largest improvements were reported in the areas of discipline specific knowledge (77%), understanding of inter-professional practice (72%) and communication skills (60%).

Table 5 Mixed Method Studies

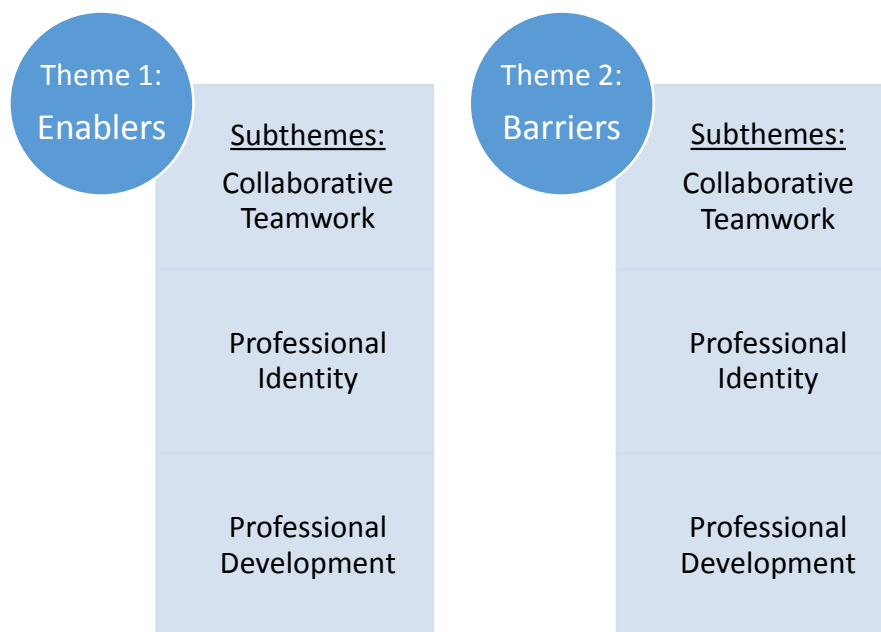
Author and Year of Publication	Title	Research Question/Purpose of Study	Study Design and Methodology	Population	Main Findings
Morison <i>et al</i> (2003)	Facilitating undergraduate inter-professional learning in healthcare: comparing classroom and clinical learning for nurses and medical students. Study was carried out at Queens University Belfast & 3 hospitals based in Belfast.	The study focused on the development of an undergraduate IPE programme for medical and nursing students and aimed to address some issues on the development of the programme.	Mixed methods approach. A triangulation of data-collection methods were employed (post-programme questionnaires, focus groups and semi-structured group interviews).	Placement: 80 medical students and 16 nursing students replied to the questionnaire, giving a response rate of 74%.	IPE was most successful when enabling exchanges of perspectives and allowing practical activities. However, practical issues of shift and timetable incompatibility were the most significant barriers to successful placement.

Hood <i>et al</i> (2014)	Trying on the professional self: nursing students' perceptions of learning about roles, identity and teamwork in an inter-professional clinical placement. Australian based study.	The study aimed to describe how senior nursing students viewed the clinical learning environment and matured their professional identity through inter-professional learning in a student-led hospital ward.	Mixed methods approach. Qualitative and quantitative programme evaluation was conducted using exit student focus groups and a satisfaction survey.	23 undergraduate students participated in the study; medical students (n = 9), nursing students (n = 10/11), occupational therapy students (n = 2), and physiotherapy students (n = 2). Placement length: 2 weeks.	Students valued the IPP experience and met the needs for clinical learning. Students reported that the experience enabled them to learn the practice of working together in a more effective manner than ever experience before.
Reeves <i>et al</i> (2002)	'It teaches you what to expect in the future...' inter-professional learning on a training ward for medical, nursing, occupational therapy and physiotherapy students. A UK study.	To examine an inter-professional training ward placement for medical, nursing, occupational therapy and physiotherapy students. To record processes and outcomes associated with an IPP.	A mixed methods approach. Semi-structured interviews employed with facilitators, questionnaire data and group interviews collected from all students.	Two medical students, two nursing students, one occupational therapy student and one physiotherapy student. Placement length: 2 weeks.	Students valued the experiential learning they received on the ward and felt the ward had prepared them more effectively for future practice. Difficulties in learning styles during placement.
McGettigan <i>et al</i> (2015)	IP training for final year healthcare students: a mixed methods evaluation of the impact on ward staff & students & of factors affecting sustainability. A UK study.	To examine the impact of a 2 week IP training placement undertaken on a medical rehabilitation ward by three cohorts of final year medical, nursing and therapy students.	Mixed methods approach. Impact on students was evaluated using the readiness for Inter-professional Learning Survey (RIPLS) and placement survey.	Between 2007-2010, 362 medical students and 26 nursing and therapy students completed placements. Placements were 2-6 weeks duration.	Students showed significant improvements in teamwork, professional identity and patient-centred care.

Findings

Nine articles that met the inclusion criteria were critically evaluated (Figure 1). The studies included four quantitative studies (Table 3), one qualitative study (Table 4) and four mixed methods studies (Table 5). The articles comprise of literature from three countries; United Kingdom (n = 5), Australia (n = 3) and New Zealand (n = 1) with a variety of study contexts and placement length (2-6 weeks). The charting process of the literature facilitated data extraction that allowed for the findings to be grouped into two themes to identify student perceptions of IPEPP's, namely; 1) enablers to successful IPEPP's, and 2) barriers to successful IPEPP's. Subthemes identified include; collaborative teamwork, professional identity and professional development.

Figure 2. Diagrammatic representation of themes and subthemes



Theme 1: Enablers to successful IPEPP's

Collaborative Teamwork

A compelling theme in the literature was that collaborative teamwork positively influenced IPEPP's. Factors that contribute to successful collaborative teamwork include: practical experiences, greater levels of responsibility and autonomy in combination with supportive and approachable facilitation. Teaching and communication styles, levels of competency, trust, respect and knowledge of roles and responsibilities were also afflicted with successful collaborative teamwork. Findings suggest that teaching was successful when students were taught as a team, rather than two separate groups. However, a focal point in Morison's *et al* (2003) study, is the student preference for learning together only when the same skills are essential for both groups. Similarly, findings from Reeves *et al* (2002) suggested that nursing, occupational therapy and physiotherapy students found patient review meetings too medically oriented and would have benefited from some structural profession specific tutorials. An interesting finding from this research was the collaborative learning between students of medicine and nursing disciplines. Otter *et al* (2003), Hood *et al* (2014) and Dando *et al* (2012) all assert similar findings in that shared learning was one of the most positive aspects of inter-professional placement for medical students, however it wasn't rated strongly by nursing students due to time constraints... *"Medical Student: I felt the nursing and medical students were really able to learn from each other – theory from medics and hands on care from nurses"* (Dando *et al* 2012). This is particularly noteworthy given the literature emphasised issues of medical dominance and hierarchy power. Many of the nursing and therapy students entered placement with the opinion that medical professionals "ran the show" (Hood *et al* 2014) and had little engagement with other professionals. However, in retrospect, the literature results indicate that nursing students were in fact the professionals who were less enthusiastic about team teaching due to external constraints and resources. On closer inspection of the data, it was not emphasised whether their views of team-teaching were based primarily on external factors and access to resources or a personal belief and attitude towards effective and collaborative teamwork.

Professional Identity

On completion of placements, students reported a greater understanding of self-identity and the identity of professional clinical roles. Factors that influenced the development of professional identity include; positive collaborative teamwork and good communication skills. Findings suggest that students who attended an IPE university programme prior to attending placement were better prepared for teamwork and had developed better professional identity awareness, however students continued to develop significant communication skills while on placement to further facilitate the development of professional identity (McGettigan *et al* 2015). Morison *et al* (2003), Hood *et al* (2014), and Brewer *et al* (2013) identified that good communication is vital to overall professional development while two studies acknowledged that good communication enhanced confidence, thus providing a 'knock-on' effect in that the students felt more confident in approaching staff and students from other professions. Improved confidence and greater interaction with other professions aided professional identity awareness, and students had developed significantly in this competency area by the end of placement... *"I'd be more willing to go up and talk to other students, other disciplines. [I've] definitely more confidence in approaching other staff (Nursing student)"* (Hood *et al* 2014). In addition, all the studies govern that students altered the way they perceived other professions. Their increased understanding of the roles of other professionals, their willingness to adopt a team-based approach and lessening of the "professional silo" attitudes known to be harmful within a healthcare team were adopted by students across studies. They reported a change in their previously held views about the positioning of professionals and the power relationships in a multidisciplinary healthcare team. Qualitative findings state that as a result of successful professional identification, there was an increased mutual understanding between professionals and a dismantling of interdisciplinary barriers. *"I always thought that there was a sense of a hierarchy in the hospital... this placement-for me anyway-broke that down... Everyone was on the same level and on the same page with that client-centred goal of: 'What is the best way that we can care for this patient?'"* (Occupational Therapy Student) (Hood *et al* 2014).

Professional Development

A very notable finding relates to increased autonomy and responsibility. Students responded well to the increased and unfamiliar increase in labour and accountability for planning patient care and making decisions. *"I feel like the accountability thing is a big one, too. The medical*

student or the doctors will come to ask me things...it just feels like you're more in charge, which is really good", (Nursing student) (Hood et al 2014). Students highlighted that this aspect of placement benefitted learning, professional development and the success of the placement. Hood *et al* (2014) described the educational benefits aligning with domains of competency standards for entry into practice and the legitimate gains made in student professional development. On examination of the literature, students did not report much on the benefits of their profession specific and inter-professional learning competencies, except when reporting on some of the negative aspects of IPEPP's.

Theme 2: Barriers to successful IPEPP's

Collaborative Teamwork

Results indicate that the biggest barrier to collaborative teamwork is timetable and shift incompatibilities. Studies differ in their delivery of placements, some students are obliged to participate in team handovers, while others were required to work shifts as part of their training. Reeves *et al* (2002) assert that team handovers were perceived by medical students, occupational therapy and physiotherapy students as a nursing-orientated arrangement and would have benefited from more structural discipline specific handovers... *"It would have be useful to have a structured [medical facilitator] ward round every morning at eight and every afternoon at four"* (Medical Student) (Reeves *et al* 2002). However, studies that reported on 'shift work' also described difficulties in timetabling. In Morison's *et al* (2003) study, medical students were not obliged to work shifts as part of their training which lead to unenthusiastic student's choosing not to participate in team duties. Students unanimously agreed that structured timetabling should be in place to facilitate this barrier. Student preparatory and expectations of placement were also found to be disruptive to team functioning. Both Reeves *et al* (2002) & Otter *et al* (2003) assert that despite receiving preparatory information and a ward-based introductory session, students tended to enter placement with contrasting expectations where medical students were expecting the ward to provide them with profession-specific experience of working as a junior doctor, with reality often leading to difficulties within the structure of the team.... *"You need to adapt to understand that a training ward is about holistic patient care... so you need to be a team player"* (Medical Student) (Reeves *et al* 2010).

Professional Identity

Barriers to professional identity include; different learning styles promoted within specific professions, insufficient support from facilitators and lack of role clarity during shared shifts. Collaborative teamwork drew awareness to the different learning styles that each profession exhibit. Students expressed concern that the different learning styles diluted their own profession specific learning and caution was given to developing both discipline specific and inter-professional knowledge and skills. This, in turn, insured continuous growth of professional identity... “*Clinical problem-solving should only be learned within my own profession/discipline*” (McGettigan *et al* 2015). Findings from Reeves *et al* (2002) state that student’s anxiety was heightened by a perception that the profession-specific facilitators offered differing levels of support, with certain professions not receiving adequate support and guidance. This finding echoed other data in that students were not clear about their role during shared shifts; to work as partners or to shadow one another.

Professional development

‘Workload’ and ‘placement competencies’ were identified by students as barriers to professional development. The majority of students on placement felt that there was conflict between their own workload and their inter-professional workload. In some placement settings, students complete on average 15 profession-specific and 10 inter-professional learning objectives. This resulted in confusion, stress and uncertainty around whether the placement was primarily focused on providing a profession-specific or an inter-professional experience. Concern was expressed by both students and educators that the learning objectives workload was too much for a student on a two week placement. An interesting statistic in O’Brien’s *et al* (2013) study affirms that despite such vast experiences by students on an inter-professional placement, only 27% of student’s envisaged seeking employment and furthering their professional development in an inter-professional workplace. Therefore, consideration must be given to factors effecting student workload and mitigating the negative aspects of IPEPP. However, caution is needed when interpreting that statistic as the study was cross-sectional and did not investigate change over time. Consequently, it is not known whether the students had positive or negative attitudes towards inter-professional placements at the beginning of their placements.

Discussion

The objective of this research was to explore student perspectives of IPEPP and the literature reviewed confirms that a variety of enablers and barriers greatly impact student experiences. The topics addressed in this discussion include; 1) the complexity of the learning environment and collaborative teamwork, 2) how to create positive learning environments for IPEPP students and 3) the Irish and International IPEPP context. Limitations and implication for practice are also discussed.

The complexity of the learning environment and collaborative teamwork

A positive learning environment was a recurring and an overarching theme in the findings that aided the development of collaborative teamwork, professional identity and professional development. It was viewed as the cornerstone to providing a sense of belonging while also improving inter-professional socialisation which is one of the desired outcomes of such clinical placements (Abu-Rish *et al* 2012; McCallin and McCallin 2009). Literature suggests that health care professionals such as Pharmacist, Occupational Therapists, Registered Nurses, and Physicians who collaborative on a regular basis, foster a positive and rewarding practice environment (Freeth and Reeves 2004; McNair *et al* 2005). The findings of this study provide IPEPP programme designers with insight into approaches in how to maximise student learning and mitigate the negative aspects of IPEPP within the learning environment. Students identified that learning can be maximised through participation in social yet challenging tasks. Four key findings that students identified to maximise their learning include; attendance at practical clinical experiences; being provided with a greater level of responsibility and autonomy; having a supportive and approachable facilitator; and identifying different learning styles at an early stage of placement. Student perspectives of barriers to successful IPEPP's provided insight into approaches that may reduce challenges, such as; increasing student preparedness to address placement expectations; address different learning styles within professions; identify role clarity at an early stage in the placement while also addressing competency issues and unstructured timetabling.

MacDonald (2009) notes that interprofessional collaborative practice facilitates optimal contributions by all team members when caring and providing holistic client care. However, qualitative studies suggest that collaboration in an effective manner requires specific role expectations and the professional contributions from each team member to be clearly defined (Pellat 2005; Suter *et al* 2009). It is therefore imperative that all team members are able to

identify and exhibit strength in their own roles (Bronstein 2003; At-wal and Caldwell 2005; Pellat 2005) as well as demonstrate knowledge of the roles of other health care professionals. The findings of this study highlight the importance in identifying role clarity, professional identity awareness and developing knowledge of other professional roles. It was identified that students who were better prepared for placement by attending at an IPE learning module in University had better skills in these areas. Therefore, the critical point here is the central role that student preparedness plays in the development of knowledge, skills and collaborative practice. The collaborative team-based approach performed within an IPEPP also reflects the occupational therapy collaborative group learning model as it provides opportunities for students to share experiences and learn from each other in small groups (Boud and Griffin 1988; Smith and Waller 1997). Group supervision sessions, provide students with the opportunity for peer learning and reflective reasoning in their placement experiences and this process reflects contemporary occupational therapy practice in which interpersonal skills and reflection on practice are appraised (Stockhausen and Creedy 1992; Swinehart and Meyers 1993; Neistadt 1996).

How to create positive learning environments for IPEPP's

This study offers a unique insight into various approaches that will enhance a positive learning environment for IPEPP students. The principal investigator of this study identified two key approaches which include; 1) regular and consistent facilitator support for all student disciplines and 2) addressing the issues of learning competency discrepancies. A culmination of these approaches helps foster a positive learning environment.

The variation of facilitation styles added great uncertainty to all students and complicated student learning needs. Brewer *et al* (2013) informed a training ward's innovative model of supervision where students were facilitated for the majority of the placement by an inter-professional facilitator with limited input from a profession specific supervisor (Jakobsen, Larsen, & Baek Hansen 2010). Similarly, Otter *et al* (2003) adopted a style of facilitation where students were responsible for determining their strengths and weakness. This self-directed approach is thought to encourage the adoption of a deeper approach to the learning process (Spencer and Jordan 1999). However, for many professions, the delivery of facilitator support is different from traditional clinical placements where students perform activities under the direct supervision of their supervisor. Therefore, a structured and more cohesive model of facilitator support is warranted across all IPEPP teams to assist student learning in

both a profession specific and interprofession capacity while also addressing timetabling and shift incompatibilities. To encourage a team-orientated and collaborative approach, students also need direct and specific learning objectives. In keeping with previous studies, (Lidskog *et al* 2009; Jacobsen & Linqvist 2009; Reeves *et al* 2002), students found that too many learning objectives and a lack of clarity in the expectations of their role was a barrier to successful IPEPP. Brewer *et al* (2013) introduced strategies to address this issue by providing one set of learning objectives, emphasising the interprofessional practice aspects of the learning experience to all students. This was made explicit at their first orientation session and was reinforced in the debriefing sessions. The unifying learning objectives were also made clear to staff and it appeared that these strategies were successful in engaging collaborative teamwork during the placement.

IPEPP in the Irish and International Context

Over the past decade a number of innovative IPEPP's developed across the globe; however, difficulties exist in the design and delivery of placements in both national and international contexts. It was well documented in the findings that difficulties in scheduling and timetabling were a significant barrier to the successful delivery of placements and therefore, a significant amount of organisational and university collaboration is required (Barr *et al* 2005). Reeves *et al* (2002) highlighted imbalances in student numbers and timetabling difficulties as internal inhibitors for IPE healthcare services, however, the findings also emphasised the difficulties students experienced with competency standards and the delivery of discipline specific and inter-professional subjects (Morison *et al* 2003). From a national perspective, IPE is limited in Ireland (Ryan 2010; Finucane & Kellett 2007). In recent years, placement facilitator posts in Occupational Therapy, Physiotherapy and Speech and Language Therapy were fashioned within key Irish Universities, created by the Health Service Executive following the Bacon Report (Bacon 2001). A key message to programme designers and IPEPP developers is that despite such differences in the delivery of IPEPP's between nations, it is evident that this initiative can enrich team functioning for future practice within a multidisciplinary team.

Implications/Recommendations for Practice

This research will help inform policy makers in the development of IPEPP's across the country with the following recommendations:

1. Collaborative Teamwork: Students recognised the need for structuring timetabling within a placement. This will allow for full attendance at practical clinical experiences, one of the main facilitators to collaborative teamwork. Structuring timetabling will also reduce profession specific 'silos' within a team and students will inform a more cohesive team based approach to practice.
2. Professional Identity: The variation of facilitator styles added uncertainty to student learning and professional identity. It is recommended that a structured and more organised model of facilitator support should be in place before students undertake an IPEPP.
3. Professional Development: It is recommended that competency standards should ascertain one set of learning objectives, emphasising the interprofessional practice aspects of the learning experience. Student preparedness is also necessary to address placement expectations and support a more inclusive team based approach to professional development.

Limitations of Study and Recommendations for Future Research

Certain limitations of this study must be reflected. The scoping review did not offer analysis or enable detailed quality appraisal of previous research. Reference lists of reviews found during the search were not examined for further eligibility due to time constraints. Given the language skills of the researcher and limited financial resources, only peer-reviewed articles published in English were included, thus cultural and linguistic bias are evident in this review. Student demographics, experiences, and placement context also varied. Furthermore, 5 of the included studies were based in the UK, 3 based in Australia and 1 based in New Zealand, indicating that the research internationally is in its early stage of development. Also, given the range of connections between the findings and the existing literature, it appears that the findings are trustworthy. This research not only included student perspectives but also expanded on contextual factors, to inform a more holistic view of IPEPP. However, a fundamental critical approach to the context of working in a multidisciplinary team must be explored further by both professional programmes and

facilitators which is likely to be vital in the future development of IPEPP. Further research is warranted in this area to maximise student experience on an IPEPP, from the perspective of both the academia and student facilitators.

Conclusion

This research detailed student perspectives of IPEPP. A number of insights were gained from the analysis of this literature. First, regardless of placement context, the learning environment greatly influences student experience of IPEPP. The findings of this research indicate approaches that positively influence placement experience and promote a positive learning environment. Secondly, structured timetabling and competency standards in combination with student preparedness and facilitator support is vital to enhance student development in collaborative teamwork, professional identity and professional development. It can also be assumed, that due to such similarities in methodological components of the programmes, that this research is in the early stages of development and requires a comprehensive universal model of support and supervision to enable successful IPEPP. Third, drawing from multiple disciplines, it enabled student perspective to be thoroughly examined. This research can be transferred across stakeholders and disciplines with parallel interests. Moreover, the findings highlight the benefits of some practical approaches taken towards the IPEPP programme. These approaches provide guidance to IPE and IPEPP programme developers, across key Irish Universities.

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