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STUDY TIME WITHIN <mark>PRE-REGISTRATION</mark> NURSE EDUCATION: A CRITICAL REVIEW OF THE LITERATURE

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HIGHLIGHTS

- Research on the use of directed study time within pre-registration nurse education is lacking.
- Nursing students prefer others to direct their learning.
- Many nursing students lack the skills required for self-directed learning.
- Further research is needed to explore the use of directed study time within pre-registration nurse education.

SUMMARY

Background: Pre-registration nursing students throughout the United Kingdom (UK) are required to complete a minimum number of theory hours within the course. Anecdotal evidence suggests that students are required to attend campus for approximately fifty percent of the theory hours. The remaining theory hours are often labelled as 'study time' in which students are not required to attend campus. There is a general assumption amongst many academics that all students are prepared and motivated to direct their learning and therefore use this time to study. However some students chose to work during this time and many have dependents. Considering the increasing cost of nurse education combined with the government cuts to student bursaries in England it is timely to review the literature to determine how study time is used within pre-registration nurse education.

Objective: To present a critical review of the literature pertaining to study time in pre-registration nurse education.

Design: An integrative review of the literature.

Data Sources: A search of electronic databases: Cumulative Index to Nursing and Allied Health (CINAHL); Cochrane; Medline; Science Direct; Blackwell Synergy; Electronic Journals Service (EJS); Scopus; Taylor & Francis, Eric and Routledge Wiley was undertaken.

Review Methods: The inclusion criteria consisted of peer reviewed primary research, discussion papers, unpublished doctoral theses' and editorial papers directly related to the key words and nurse education published in English.

Results: Twelve papers were included in the review. Analysis of the papers led to the development of two themes: orientation to self-directed learning (SDL) and preparation for SDL.

Conclusions: The literature demonstrates that pre-registration nursing students lack the necessary skills for SDL. There is a lack of research on how study time is used within pre-registration nurse education. This calls for empirical research to fully explore how nursing students and lecturers perceive study time within pre-registration nursing curricula.

INTRODUCTION

Within the UK pre-registration nursing curricula are required to meet the standards set by the Nursing and Midwifery Council, the Quality Assurance Agency for Higher Education (QAA) and relevant university regulations. Various reports (The Patients Association, 2013; Keogh 2013; Francis, 2013) which identified significant failings within the current health care system has placed the quality of nurse education within the UK under the spotlight. Considering the rising cost of nurse education and the cuts to funding within England nurse academics must demonstrate that the provision of pre-registration nursing curricula is not only of a high quality but that it also cost effective. This paper provides an integrative review of the literature on the use of study time in pre-registration nurse education.

BACKGROUND

In accordance with European Union (EU) regulations, all pre-registration nursing courses throughout the EU must be 4600 hours or three years in duration. This is outlined in Directive 2005/36/EC of the European Parliament. In the UK, the Nursing and Midwifery Council (NMC) interpret this as 2300 hours of theory and 2300 hours of practice throughout three stages (NMC, 2010). The completion of 2300 practice hours is non problematic as students are allocated to practice placements in which they complete the required hours evidenced through practice assessments and a portfolio of evidence verified by their practice mentors. However the way in which the theory hours are used is subjective as it is determined by each university. There is no published evidence available which supports how the 2,300 theoretical hours are structured or used. Anecdotal evidence suggests that within many pre-registration nursing programmes approximately fifty percent of the 2,300 theory hours (1,150 hours) are allocated to contact time between lecturers and nursing students. The learning and teaching methods used within this time varies from lectures, tutorials, group work; problem based learning and blended learning amongst others. Approximately 1,150 theory hours are structured by lecturers and student nurses are required to be present on campus and the remaining 1,150 hours are often unstructured. Within this time student nurses are required to study independently either on or off campus. Whilst student nurses studying in some other countries outside the EU are not required to complete a minimum number of hours, anecdotal evidence suggests that all nursing curricula have an element of non-taught time in which student nurses are expected to direct their learning. Throughout and within universities across the UK a range of labels are used to describe this portion of theory time within pre-registration nursing programmes including 'study time'; 'directed study time' and 'free time'. Regardless of the label used this time is generally intended for students to self-direct their learning not for lecturers to direct their learning activities. There is an unwritten expectation that student nurses will use the time to self-direct their learning, based on the assumption that all students have the skills and motivation to self-direct their learning during study time. Throughout the remainder of the paper, the authors refer to this time as study time.

Aim

The aim was to conduct a critical review of research on study time within pre-registration nurse education.

Design

A systematic approach advocated by Aveyard (2014) was used to search and obtain peer reviewed publications including discussion papers and empirical studies. All the evidence which met the inclusion criteria was analysed and critically appraised using the Critical Appraisal Skills Programme (CASP) tools (CASP, 2014). The tools were initially used by the first author and later by co-authors to promote consistency of judgement regarding the value, trustworthiness and relevance of each piece of research. A metasummary approach (Sandelowski et al., 2007) was used to review the literature for trends in terms of subject matter and chronology.

SEARCH METHODS

An extensive literature search was initially conducted through the electronic databases of Cumulative Index to Nursing and Allied Health (CINAHL); Cochrane; Medline; Science Direct; Blackwell Synergy; Electronic Journals Service (EJS); Scopus; Taylor & Francis, Eric and Routledge Wiley. Subsequent electronic resources of the Department of Health (DH); the NMC; the Royal College of Nursing (RCN); Google Scholar and the researchers'

university library catalogue, electronic library and repository were searched. A Problem, Intervention, Comparison and Outcome (PICO) framework (Straus et al., 2010) was used to develop a series of keywords. The keywords used to search the databases were "study time"; "directed study time"; "study skills"; "self-directed learning"; student nurses"; "lifelong learning"; "adult learning"; "learning styles"; "andragogy"; "pedagogy"; "critical thinking"; "time"; "time management"; "curriculum hours"; "learning"; "education"; "social class"; "motivation"; "homework"; "autonomy"; "gender"; "culture"; "problem based learning"; "pre-registration nurses" ; "undergraduate nurses" and "nurse education" were used in combination. Date limits of 2005 to 2015 were set. All the publications which met the inclusion criteria were included within the literature review (Table 1). The searches were carried out by the first author and the co-authors verified the searches to verify the value, trustworthiness and of the literature in view of the inclusion criteria.

Table 1: Inclusion and Exclusion criteria

Inclusion	*Exclusion*
Published in the English language.	Not written in the English language.
Published between 2005–2015.	Published outside of the set timescales.
Peer reviewed primary research related to the topic (key words).	Primary research not directly related to the topic (key words).
Peer reviewed discussion papers related to the topic (key words).	Discussion papers not directly related to the topic (key words)..
Editorial papers directly related to the topic (key words).	Editorial papers not directly related to the topic (key words).

RESULTS

The initial search located 4252 papers for review. The titles and abstract were read to determine the relevance, 4194 papers were rejected due to irrelevant titles leaving 58 for the detailed review. Having reviewed the 58 abstracts, a further 32 papers were excluded from the review leaving 26 papers. The analysis process was repeated on the 26 papers using the original CASP framework, out of which a further 14 were excluded leaving 12 papers to be included in the review. The 12 papers were published between 2005 and 2015 and were classified as empirical research (n=11) and a discussion paper (n=1) (Figure. 1). Empirical research papers were published across five countries, the two countries which published the most and were more consistent on the subject were Australia (n=4) and Italy (n=2); followed by the UK (n=2); Sweden (n=2); and China (n=1). This output indicates the international interest in study time although almost all of the empirical studies (with the exception of one) focus on factors relating to self-directed learning (SDL) as opposed to the use of study time. The number of research papers which were identified, and either included or excluded in the review are presented as a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow chart (Figure 1). The 11 empirical research papers included in the review were separated into two groups (qualitative and quantitative); summarised in two tables (Tables 2 and 3) and presented in chronological order. The most popular design was quantitative which accounted for ten out of eleven studies.
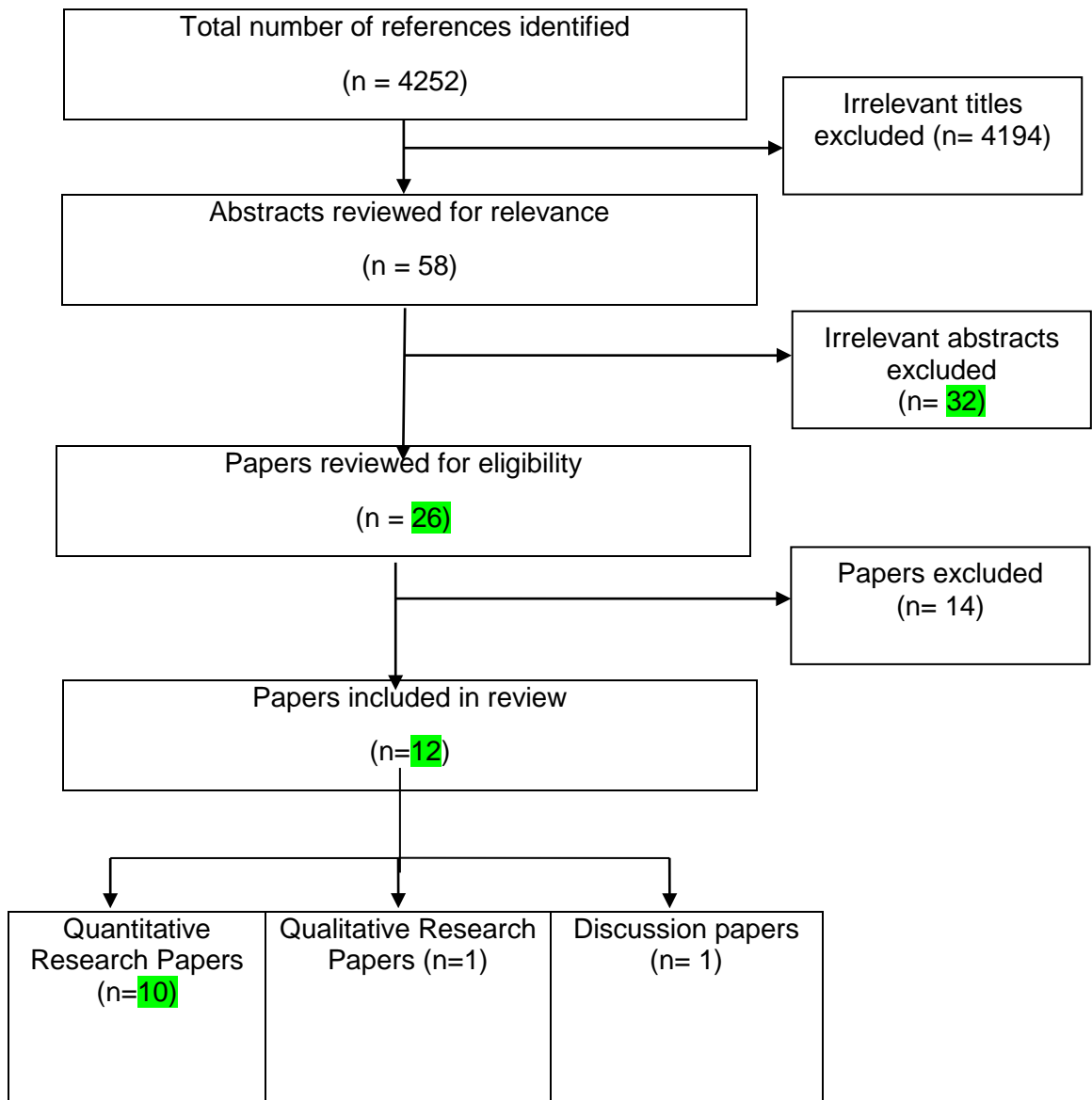
Figure 1: PRISMA flowchart

Table 2: Summary of quantitative studies

Author(s) year		Aim/s	Sample and setting	Methods/Instrument	Key Findings/Recommendations
1.Salamonson and Andrew (2006) AUSTRALIA		To examine the influence of age, ethnicity and part time employment on nursing students' academic performance for second year pathophysiology and nursing subjects.	267 nursing students, one university, Sydney, Australia	Quantitative survey over a 2 year period 2001-2002	• 78% of second year students were in paid employment • Students not in paid employment had the highest academic achievements • Age was positively related with academic performance, but hours of part-time employment and ethnicity were negatively associated with academic performance • Working more than 16 hours per week had a detrimental impact on the academic performance of nursing students
2.Smedley (2007) AUSTRALIA		To identify the self-directed learner readiness of first year nursing students. To assess the validity and reliability of the self-directed learning readiness scale by Fisher et al. (2001)	67 first year nursing students in 1 small college, Sydney, Australia.	Fisher et al's. (2001) Self Directed Learning Readiness Scale	• SDLRS has reliability and internal consistency. • Student nurses' have a limited ability to self-manage their learning • Not all students have the ability to manage time, be self-disciplined, plan learning, set times for learning, apply methodical and systematic approaches to learning, problem solve, prioritise and seek out information. • There is a necessity for faculty to devise and implement strategies to develop the skills of self-directedness as previously outlined.
3.Williamson (2007) UK		To develop a self-rating scale of self-directed learning (SRSSDL). To test the scale and establish its reliability and construct validity	Purposive convenience sample 15 first and 15 final year undergraduate nursing students aged 20-25. One university, UK.	Developmental and descriptive qualitative approach	• First year students had low levels of self-direction in learning and established the need for support in developing self-directed learning skills. • Final year students developed a better understanding of the skills for self-directed learning but also expressed a desire for further opportunities to self-direct learning.
4.Nilsson and Stomberg (2008) SWEDEN		To analyse nursing students' levels of motivation during different stages and to identify reasons for the levels of motivation.	315 nursing students at different stages on the course in one university, Sweden.	Questionnaire	• Mean motivation score over all semesters was 6.3 out of 10 • 73/315 students scored <4 and reported negative opinions about the organisation of the programme, attitude towards studies, life situation and degree of difficulty/ demand on studies • 234/315 with motivation score >6 reported positive opinions to becoming a nurse • The mean score value for the motivation ranking

					• differed significantly between male (5.8) and female (6.8) students • The main motivation factor was becoming a nurse. • There is a need to understand the students' situation and their need of tutorial support.
5.Snelling et al. (2010) UK		To investigate the hours of study for students undertaking a single module in a pre-registration nursing programme.	26 student nurses studying one module at one university, UK.	Participants recorded their study activity hours in a log	• 200 hours of module time was allocated to directed study. The mean time spent on studying was 128 • More than 50% of participants had a part time job • More research on how and for how long nursing students go about their studies will assist in developing student centred programmes of study meeting regulatory requirements. • Clarity concerning the meaning of programme hours is required.
6.Fisher and King (2010) AUSTRALIA		To re-examine the factor structure of the subscales of the SDLRS and provide evidence of its validity.	Cross-sectional survey 227 first year undergraduate nursing students. Sydney, Australia	Three one-factor congeneric models, each representing a different subscale were tested with maximum likelihood confirmatory factor analysis	• 11 out of 40 items had to be removed from the analyses as they failed to provide good fit with their subscales • Confirms factorial validity of the Self-Directed Learning Readiness Scale for Nursing Education (SDLRSNE) • Further research needed to investigate the factor validity of the SDLRSNE, and to examine the stability of the items across factors using multi-factor models.
7. Bin Yuan et al. (2012) CHINA		To explore students' readiness for self-directed learning.	536 nursing students at four nursing schools in Beijing, Shanghai, Chengdu and Macao, China.	Cross sectional research design. Fisher et al's. (2001) Self Directed Learning Readiness Scale (SDLRS) (translated in Chinese)	• 62.3% of students had a high level of readiness for self-directed learning. 37.7% had a low level of readiness for self-directed learning. • Senior students had higher scores for self-directed learning readiness than junior students.
8. Cadorin et al. (2013) ITALY		To examine the factor structure of the Italian version of the Self-Rating Scale of Self-directed Learning (SRSSDL) and provide evidence of its validity.	Cross sectional design. 844 (453 Registered Nurses, 141 Radiology Technicians, 182 nursing students and 68 radiology technician students) 2 universities, Northern Italy.	The Italian version of the SRSSDL Scale	• The shorter Italian version may reduce time needed to complete therefore faster and easier to use.
9. Cadorin et al. (2015) ITALY		To evaluate the impact of tutorial strategies and levels of self-directed	A pre–post intervention non-equivalent control group design was used.	Italian version of the SRSSDL (Self Rating Scale of Self Directed Learning scale (SRSSDL)	• 36.8% adjusted variance in SDL scores emerged which were considered as being due to: 1) Having received a reduced nurse-to-student supervision. 2)

Author(s) year		Aim/s	Sample and setting	Methods/Instrument	Key Findings/Recommendations
		learning on student nurses ability of self-directed learning.	Structured and tutorial interventions were used for the treatment group and questioning by university tutors during the initial placement. For the control group, unstructured and non-intensive tutorial strategies were used. 201 Bachelor of Nursing Degree students, in 2 two Italian Universities.		Having received higher level and structured tutorial intervention by academics. 3) Having reported having reported higher SDL scores at the start. .
10. Phillips et al. (2015) AUSTRALIA		To determine the level of self-directed learning readiness (SDLR) among undergraduate nursing students.	407 undergraduate nursing students from all three years of the course. 1 university in Australia	An online survey questionnaire	• No significant age or gender differences. • First year students scored lower than third year students in terms of self-directed learner readiness. • Participants who held post graduate qualifications showed lower scores for self-management than those without.

Table 3: Summary of qualitative studies

Author(s) year	Aim/s	Sample and setting	Methods/Instrument	Key Findings/Recommendations
1.Bengtsson and Ohlsson (2010) SWEDEN	To explore what students consider important for their motivation and attainment of knowledge.	31 students (nursing students and medical students), Sweden.	Focus group interviews	• Both groups considered the most important factor for learning was their own motivation. • The role of the lecturer is pivotal in terms of motivating students to learn. • Nursing students focused on assessments and the lack of time. • Medical students regarded learning as more of a long-term activity. • Nursing students used surface approaches to learning; medical students used deep approaches to learning.

To compare and contrast the research available in an integrated manner, a coding process was used to develop key themes as advocated by Aveyard (2014). Codes were assigned to the results and findings sections of each paper. The codes were reviewed to check for patterns of identical or similar codes, which were grouped together, to form themes and names were assigned to each theme. The literature which specifically related to study time in pre-registration nurse education was sparse. The associated literature was separated into two themes: orientation to SDL and preparation for SDL and sub themes were developed within each theme.

Orientation to SDL
The literature on this theme includes motivation to be a self-directed learner and time for SDL. The influence of lecturers on student levels of motivation for learning in general was identified in a quantitative study by Nilsson and Stomberg (2008). Data collected from Swedish nursing students revealed that the main motivation factor to learn centred on becoming a nurse. Nilsson and Stomberg (2008) highlighted the need for tutorial support to motivate students to learn.

A further Swedish study (Bengtsson and Ohlsson's, 2010) compared nursing students' motivation towards SDL with medical students. The findings from this qualitative research revealed that nursing students focused on tasks and assessments and the lack of time to complete assessments. In contrast medical students did not focus on time but viewed learning as a long term activity. This study revealed that nursing students used surface approaches to learning unlike medical students who used deep approaches to learning. The quality of lectures and the level of student guidance from lecturers were considered significant factors which influenced students' levels of motivation towards independent learning.

Whilst Bengtsson and Ohlsson (2010) highlighted problems within the student nurse group in terms of the level of motivation towards SDL and the perceived lack of time, the concept of time for SDL has received little attention within nursing literature. Timmins (2008) presented a discussion on study time (which she refers to as 'directed study time') within nursing curricula. She noted inconsistent approaches to SDL and that the amount of time devoted to SDL was ambiguous both nationally and internationally within nursing curricula. Although Timmins (2008) drew attention to the problems with variations in the amount of time for SDL, only one empirical research paper specifically investigated study time within a pre-registration nursing course (Snelling et al., 2010). This quantitative study which focused on one module within an undergraduate nursing curriculum in England revealed that out of 200 hours allocated to study time, student nurses spent only 128 hours studying and over fifty percent worked in part time employment. The time that nursing students spend on part time work whilst studying on a full time course was also noted within an Australian context by Salamonson and Andrew (2006). They reported that 78% of second year students were in paid employment, working in excess of 16 hours per week which negatively impacted on their academic performance. Snelling et al. (2010) recommended further research on the ways in which nursing students approach their studies and the length of time they spend studying to inform the development of student centred programmes of study to meet regulatory requirements. Snelling et al. (2010) also called for further clarity in the meaning of programme hours set out by the NMC (2010).

Preparation for SDL
Whilst the literature on the use of study time is sparse, there is ample quantitative literature regarding student preparation for SDL within pre-registration nurse education. The most cited scale used to measure an individual's ability for SDL is the SDL Readiness Scale

(SDLRS) originally developed by Guglielmino (1977) and later adapted for use within a nursing context by Fisher et al. (2001). Fisher et al's version of the SDLRS and adaptations of it have been widely used within pre-registration nurse education in Australia (Smedley, 2007; Phillips et al. 2015); Italy (Cadorin et al, 2013; Cadorin et al. 2015); the UK (Williamson, 2007); and China (Bin Yuan et al., 2012).

Smedley's (2007) quantitative study found that first year nursing students have a limited ability to self-manage their learning with some lacking the ability to manage time; self-discipline; plan learning; set times for learning; apply methodical and systematic approaches to learning; problem solve; prioritise and seek out information. Smedley recommended that lecturers develop and implement strategies to improve students' skills of self-directedness. Cadorin et al. (2015) evaluated the effect of tutorial strategies to support students' ability for SDL and found that students were better prepared for SDL after receiving tutorials with lecturers' and one to one supervision in practice.

Phillips et al. (2015) also used a version of the SDLRS to assess readiness for SDL with a cross sectional sample of 407 students on a three year undergraduate nursing programme. The findings revealed no significant differences between age and gender, although first year students were found to have lower levels of self-direction. The results also demonstrated that those with previous post-graduate qualifications had lower levels of self-management and those without.

DISCUSSION

The literature pertaining to study time in nurse education is scarce, nevertheless the two themes of orientation to SDL and preparation for SDL could influence the ways in which students approach and use study time within nursing curricula.

The literature demonstrates that many nursing students are ill prepared and lack the necessary skills for SDL (Smedley, 2007; Phillips at al. 2015). The fact that nurse lecturers play a key role in motivating nursing students to study (Nilsson and Stomberg, 2008; Bengtsson and Ohlsson, 2010) draws attention to the teaching and learning methods used within pre-registration nurse education. In the context of the UK prior to the move of nurse education into universities (mid to late 1980s) student nurses were taught within Schools of Nursing located in NHS hospitals. Nurse training (as it was then) predominantly relied on rote learning and teacher centred methods of teaching (Handwerker, 2012). Student nurses were taught by "nurse tutors" within a classroom for several weeks at a time. At that time the compulsory theory hours within pre-registration nursing courses were filled with teaching sessions or lectures, with minimal time allocated to group or project work and no time allocated to study.

The relocation away from hospital based training into higher education had a huge impact on the roles of nursing students and nurse tutors. Formally employed as NHS employees undergoing an apprenticeship style of training, nursing students became university students with supernumerary status. Furthermore, the former nurse tutors became nurse lecturers and nursing curriculum was required to meet university requirements. This influenced the teaching and learning strategies used and the amount of face to face time between lecturers and student nurses. Student nurses were allocated study time within the curriculum to direct their own learning. The shift from previous teacher led strategies towards student centred methods with a greater focus on SDL occurred at a time when Knowles' (1970) theory of andragogy and the promotion of adult centred learning theories were in vogue.

Knowles, most widely recognised and internationally cited for promoting the theory of andragogy within adult education maintained that education should focus on 'facilitation' rather than 'teaching' and he asserted that it consisted of three concepts. 1. *Self-directed learning*, that students had an increased responsibility to determine what should be learned and how; 2. *Student centred learning*, that learning should be based on their individual needs, the teacher learner relationship should be democratic and 3.*Andragogy;* which differentiates from pedagogy which Knowles referred to as the teaching of children. The move towards humanistic approaches was further promoted by Rogers (1983) in his renowned publication of Freedom to Learn. Rogers (1983) regarded individuals to be self-directed learners as he stated:

> "*we live in a world of kaleidoscopic change, if we want people who can function well in that world we can only have them if we are willing to allow them to become self-starting, self-initiating, self-directing learners*" (Rogers, 1983, p134).

Whilst there have been other significant proponents of student centred learning since the 1970s including Boydell (1976); Mezirow (1981); Candy (1991) and Grow (1991), Knowles (1970) was the most widely recognised and influential within education. Despite such popularity, Knowles' critics claimed that andragogy was ambiguous and impractical (Cross, 1981; Rachal, 1983; Hartree, 1984; Brookfield, 1986; Darbyshire, 1993). Darbyshire (1993) accused Knowles of undermining children's experience as he indicated that children are not motivated to learn which Darbyshire (1993) argued was not an accurate reflection of reality, as many children demonstrate high levels of initiative and problem solving within school. Both Hartree (1984) and Brookfield (1986) argued that whilst Knowles assumed that all adults were self-directed; many did not want to be and lacked the adequate preparation for SDL. In response to the critics Knowles (1984) revised his original theory, which still distinguished children from adults in terms of learning but recognised that some adults may not be familiar with SDL.

Nevertheless the findings from this review support the points raised in the 1980s by Hartree (1984) and Brookfield (1986) in relation to the lack of preparation for SDL amongst learners. This leads the authors to question whether SDL and the time allocated to SDL was embedded within nurse education throughout universities without full consideration. The fact that nursing students lack the confidence and skills to engage with SDL (Smedley, 2007, Phillips et al., 2015) evokes the question of whether or not nurse lecturers support student nurses to develop the skills required to self-direct their learning within study time and whether nurse lecturers have the capacity to do so.

The fact that lecturers also play a significant role in motivating student nurses to engage with learning (Nilsson and Stomberg, 2008) and SDL (Bengtsson and Ohlsson, 2010) draws attention to lecturers' perceptions of study time and the messages which they portray to students. The authors question whether the previous educational experiences of nurse lecturers influences the support provided for students to empower them to study independently; particularly if lecturers are more familiar with didactic methods of teaching and directing learning with little experience of facilitating student centred learning or promoting SDL. The research calls to question the relationship between nurse lecturers and students and whether or not student nurses are empowered by lecturers to become independent learners or whether lecturers want to retain control over learning.

With increasing attention on recruitment and retention to university courses due to rising costs in education, there has been a drive to attract and support a diverse student population. This is evidenced by the delivery of foundation courses or transition courses in universities which provide a stepping stone for less academically able students to access degrees in higher education. Such courses focus on developing students transferable skills at the beginning of university study. The evidence demonstrates that such courses improve

students' self-efficacy (Ford et. al, 2015). Research has found that self-efficacy can substantially effect motivation and academic performance (van Dinther et al., 2011). Whilst transition courses are gaining popularity in some countries for example Australia, in the UK many undergraduate nursing courses do not include transition periods due to limited space within curricula.

Whilst Timmins (2008) called for academics to provide some structure to support students studying independently within study time there is limited evidence which has explored if and how this occurs within nursing curricula. The high proportion of student nurses who are employed whilst studying on a full time course leads one to consider that their engagement with SDL in study time is problematic and that learning within the allocated study time is not a priority for them. This problem is not isolated to the UK but relevant to nurse education on a global scale.

These findings demonstrate that the inability of pre-registration nursing students' to self-direct their learning within the time available is not being addressed nationally or internationally within higher education. The misguided assumption that all students (by the fact that they are adults) are prepared and motivated to direct their own learning appears to continue. Furthermore, within the United Kingdom the concept of 'flexible pedagogies' is promoted, as set out in a report on behalf of the Higher Education Academy (Barnett, 2014). The notion of flexible learning builds on Knowles' theory of andragogy by placing the responsibility for learning with the student. The move towards more flexible pedagogy within universities is intended to produce flexible graduates prepared to engage with unknown situations and uncertainties to meet the needs of the workforce in the 21st century. Whilst flexible learning is attractive to both students and academics by accommodating the individual needs of students, unless students are adequately equipped with the skills to structure their time and manage learning effectively how can they reach their full potential? It is evident that if flexible pedagogies are to be introduced throughout universities in the UK, there needs to be more investment with individual students at the beginning of their course or prior to them commencing on a course to develop such skills.

CONCLUSIONS

A review of the literature has revealed that there is a lack of empirical research specifically pertaining to study time in nurse education. The international research available relates to students' orientation to SDL and preparation for SDL. The evidence demonstrates that many nursing students, specifically first year students lack the ability to direct their learning. This presents a significant problem for pre-registration nurse education on a global scale. Whilst nursing curricula and the number of mandatory theory hours allocated to study time varies, they each contain a specific number of hours which are allocated to study time in which students are expected to undertake SDL; however if students are not adequately prepared and lack the necessary skills to direct their learning how is this time being currently being used? The concept of study time and how it is used within pre-registration nursing curricula continues is an area which has been relatively unexplored. Whilst efforts are being made within higher education to support students and improve retention and this is one area in which students clearly need additional support. In the context of the UK, considering the shift of emphasis towards increased flexibility within higher education; the importance the NMC place on the completion of hours within pre-registration nursing curricula and the expense of nursing education within an overstretched NHS the use of study time within nursing curricula warrants further exploration. Further qualitative empirical research is required to explore the use of study time from the perspectives of both nursing students and

nurse lecturers; this will inform curriculum development and ultimately enable lecturers to further support students to develop their skills for self-direction to reach their potential within the time available.

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