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Veterinary Nursing students' experience in the clinical learning environment and factors affecting their perception

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Abstract

Student veterinary nurses (SVNs) spend a significant proportion of their training time within the clinical learning environment (CLE) of a veterinary practice. These clinical experiences are vital for building practical and professional skills. To evaluate the current satisfaction of SVNs in the CLE, a cross-sectional survey design was used incorporating a previously validated instrument. To provide understanding of factors that may affect the SVN satisfaction, additional validated tools were added across factors including resilience, wellbeing, personality and work place belonging. A total of 171 SVNs completed the survey. In addition two open questions were included to provide greater depth of understand of the SVN experiences. Results showed that 70.76% of respondents were satisfied/very satisfied with the CLE. Significant factors that affected the satisfaction scores included, depression, anxiety and stress (p=<0.001), Psychological sense of organisational membership (p=<0.001), agreeableness (p=0.022) and emotional stability (p=0.012). The qualitative data demonstrated shared SVN factors that are considered to contribute to clinical learning and those that detract from clinical learning. Educational facilities and training veterinary practices can support the SVN within the CLE by creating a greater sense of belonging, considering the SVN individual personality and wellbeing and including the SVN in discussion around learning support needs.

Introduction

For nursing students, the clinical learning environment (CLE) is acknowledged as a vital component of the curriculum.[1–3] Student veterinary nurses (SVNs) in the UK are required to undertake a minimum of 1800 hours working within an approved veterinary training practice (TP),[3,4] which represents a significant element of the training required for SVNs, prior to professional registration.

Positive experiences in the CLE are vital to ensure the appropriate development of professional behaviours, clinical reasoning and performance of clinical skills in nursing students.[5–9] Assessing this environment via student feedback is key to maintaining a student-centred approach and achieving appropriate learning outcomes.[8,10,11]

Various reports have highlighted that the clinical environment is complex and dynamic.[12–14] Socio-cultural factors can be difficult to manage in the CLE, and have been found to cause negative experiences for human and veterinary nursing students.[6,12,15–17] Challenges within the CLE can include poor relationships between staff and students, ineffective communication to students, unclear expectations, busy caseloads, incivility and bullying.[7,17–25]

Whilst there is a plethora of published research around the perception of the CLE for human nursing students,[6,12,25–30] only one report for SVN experiences could be identified.[17] However, the two professions' practical training can be considered comparable, as evidenced by the RCVS Standards Framework for Veterinary Nurse Education and Training, which adopted the structure and format of the Nursing and Midwifery Council Standards of Proficiency for Registered Nurses.[3,9]

Research has demonstrated the negative impacts of an inadequate CLE can include reduced learning opportunities and confidence, poor mental health and dissatisfaction among human nursing students, leading to increased attrition.[5,12,16,31] It is therefore important to ensure that the CLE is managed positively to build confidence and encourage student engagement with learning opportunities.[12] Research involving a range of health profession training environments has shown that identifying areas of concern can lead to the development of appropriate improvement strategies.[32–34] These have included changes to communication and feedback within clinical supervisor training,[33] and the development of strategies to improve working relationships between the student, clinical supervisor and education provider.[34,35]

Within the RCVS Standards Framework for Veterinary Nurse Education and Training [3], there are six sets of standards that govern the responsibilities of Accredited Education Institutes (AEIs) and TPs towards SVNs that must be adhered to. These are designed to ensure the student will have a positive clinical learning experience, tailored to their specific needs, within the socio-cultural landscape of the TP. Some of these directly relate to the CLE and include the requirement to gather student feedback.

Practical training in human nursing is reported to be much more stressful than purely academic learning, and the ability to cope varies based on individual and contextual characteristics.[36,37] Factors that have been shown to impact the individual student's experience in the CLE include their perceived sense of belonging in the work place,

personality, resilience, stress, anxiety and depression.[1,25,36,38–40] Creating a sense of belonging in the workplace has been demonstrated to mitigate anxiety, depression and burnout and has been strongly correlated with CLE satisfaction, which positively influences student retention.[38,39,41] Providing a sense of belonging, security and psychological safety is key for student engagement in learning opportunities in the CLE.[42,43] Students with high resilience have been reported to adopt self-regulatory coping strategies, whilst students with low resilience adopt self-blame strategies.[25] Offering early interventions that afford students a greater sense of belonging in the CLE have been recommended to support resilience.[25]

Research has found that the four personality domains of emotional stability, extraversion, agreeableness and conscientiousness promote a professional quality of life for mental health care workers, alongside workplace belonging; while lower emotional stability (neuroticism) was a strong predictor of developing secondary traumatic stress.[39] Therefore, there are convincing reasons to suppose that SVN perceptions of the CLE are also interrelated with work place belonging, personality, resilience and wellbeing factors and exploring this will be beneficial in developing the best strategies for signposting appropriate support.

Utilising validated instruments to evaluate experiences alongside factors relating to individual characteristics in mixed-method design has been widely utilised in health worker research.[1,16,21,28,36,39] To this end, an instrument, the Student Veterinary Nurse Clinical Learning Environment Inventory (SVN CLEI) has recently been developed and validated to assess the perception of satisfaction of SVNs regarding the CLE.[9] Considering the importance of the CLE in providing nursing students with the practical and professional training required for the role, the limited research relating to SVN experiences and perceptions, and the RCVS requirements for tailored support, it is important that the VN profession empirically investigates the current student experience in the CLE. In the UK, gathering student feedback conforms with the RCVS Standards Framework for Veterinary Nurse Education and Training, standard 3.18.

Using the SVN CLEI, alongside other validated instruments investigating workplace belonging, resilience, personality, and psychological wellbeing with additional open questioning will aim to facilitate an initial understanding of current SVNs and their perceived experiences in the CLE in the UK. Conducting this novel research for SVNs will allow identification of any factors that correlate with, or differentiate from, the student satisfaction of the CLE, as reported in other professions.[29,38,39,41,44] Findings may guide targeted recommendations for TPs and AEIs and inform future research. Investigating factors which affect satisfaction during clinical training can be beneficial to identify tailored support for a successful student transition.[45] This study's aims are to gain an understanding of current student satisfaction levels within the CLE and identify personal factors that may impact on the level of perceived satisfaction.

Methodology

A cross-sectional, mixed methods design was achieved using a self-administered psychometric survey comprised of five validated instruments and two open questions. This method is appropriate for a novel area of enquiry and serves as an accessible way to collate data and determine covariation and temporal difference to allow targeting of recommendations and further research.[44,45]

The first section of the survey contained demographical questions including student status; full-time or work-based pathway; equine or small animal practice type and geographical region.

The middle section of the survey was comprised of five validated instruments:

1. 25 Item Student Veterinary Nurse Clinical Learning Environment Inventory (SVN CLEI).[9] This reports a Cronbach's Alpha of α = 0.953 with an explained variance of 61.004%. This inventory measures the student's perception across three key factors (clinical supervisor support of learning, pedagogical atmosphere of the practice and opportunities for engagement) that determine the socio-cultural experience of SVNs.

Cumulative means of items within the SVN CLEI were calculated and then divided into three categorical subgroups as listed below. This method has been used to facilitate data analysis in previously published research.[46–48]

- **Dissatisfied/Very Dissatisfied**: Mean Average: 1-2.6 (SVN CLEI Total Score: 25-65)
- **Neutral**: Mean Average: 2.61-3.40 (SVN CLEI Total Score: 66-85)
- **Satisfied/Very Satisfied**: Mean average: 3.41-5 (SVN CLEI Total Score: 86-125)

2. 10 Item Personality Inventory (TIPI)[46] reports a convergent and discriminant validity mean of $r = 0.77$ and a test-retest reliability mean of $r = 0.72$. This inventory identifies the self-reported personality traits across the big five personality domains of: extraversion, agreeableness, conscientiousness, emotional stability, and openness, using two questions per trait. The score for each trait is derived from the mean average of the two items per trait with one item reverse scored for each trait. Final ordinal scores range from one to seven, with higher scores indicating greater levels of the measured trait.[49]

3. Six Item Brief Resilience Scale (BRS)[47] reported a Cronbach's Alpha range of α = 0.80-0.91 with an explained variance range of 55-67%. This scale consists of six questions to ascertain self-perceived level of resilience. Final scores are derived from mean averages, with application of reverse scoring for items 2, 4 and 6. Total scores are then divided into the categories of low resilience (1-2.99), normal resilience (3-4.3) and high resilience (4.31-5.0).[50]

4. 21 Item Depression, Anxiety and Stress Scale (DASS-21)[48] is a set of three self-reported scales designed to measure the emotional states of depression, anxiety, and stress. The reported Cronbach's Alpha and explained variance for each of the scales is; depression α = 0.91/50.4%, anxiety α = 0.81/74% and stress α = 0.89/77.4%.[51] Each of the three DASS-21 scales contains seven items. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items and multiplying them by two.[51] For the DASS-21, there are recommended cut-off scores for conventional severity category labels (normal to extremely severe). (Table 1).

Table 1: Depression, Anxiety Stress categories relating to DASS-21 scores.[51]

5. 18 Item Psychological Sense of Organisational Membership (PSOM)[42] measures the sense of being personally liked, accepted, included, respected, and valued by

managers, employees and the organisation. The PSOM scale reported a Cronbach's Alpha of α = 0.94 with an explained variance of 45%. The scale results in a possible range of scores from 18-90, (scale midpoint of 54), with higher scores indicating a greater sense of belonging.[52]

The final part of the survey consisted of two open questions, inviting responses relating factors that had contributed to learning and factors that had detracted from learning in the CLE.

Participants and sampling

The survey was generated using the survey tool Online Surveys (Jisc® Online Surveys, Bristol, BS1 6NB UK, onlinesurveys.ac.uk) and was available from 7th January 2022 to 6th April 2022. Non-random convenience and snowball sampling of SVNs was achieved through Facebook® sites, specific to the VN profession such as "VetNurse Chatter", alongside email contact with Veterinary Nursing (VN) course providers and practice groups across the UK. The British Veterinary Nursing Association (BVNA) and the VN Times also shared the survey on social media platforms. Inclusion criteria restricted participants to current UK based SVNs, who were currently in a CLE and had spent at least eight weeks working there, to ensure they had enough time to develop informed opinions about their experiences. Convenience sampling allowed access to a broader range of student cohorts, included the breadth of student status' and protected against the attrition of a probability sample.[53] Snowball sampling allows an increase of participants for researchers by asking professional contacts and respondents to share the study with appropriate acquaintances that fit the criteria.[54] This allowed the authors to quickly achieve the required sample for a robust evaluation. Using this method of data collection was also considered most appropriate, as it did not breach any data protection rights of students by the direct use of institutional databases.

Although there are currently 6,027 SVNs enrolled with the RCVS, only 3,905 are work based students with 2,122 studying a higher education course (Personal communication, Email, 08/09/2022, Andrew Grainger, RCVS). Higher education students will only spend approximately one quarter of their full-time course in clinical placement, and so much less than 2,122 would have been eligible to take part. However, the exact eligible figure is not available. The inclusion criteria requiring students to be currently in clinical placement, for at least eight weeks, therefore reduced the total population size for this study.

Data Analysis

Descriptive analysis included frequencies and scale scores with standard deviation (SD) reported where appropriate. The Likert data were inferentially analysed using SPSS version 26.0 (SPSS Inc., Chicago, IL, USA). Significance was set at $p<0.05$.

Kruskal Wallis tests with Dunn's pairwise comparison and Bonferroni correction were conducted to identify if a significant difference existed between SVN CLEI categories of satisfaction when compared with TIPI scale scores and PSOM scale scores.

Pearson's Chi-Squared tests were conducted to identify if a significant relationship existed between the SVN CLEI categories of satisfaction and demographic categories, BRS categories and the three DASS-21 subdomain categories.

Qualitative data gathered from the two open questions were analysed following a six stage thematic analysis approach, which is detailed by Braun and Clarke and described as Phases of Thematic Analysis.[55] The research team analysed the data independently and final themes were rigorously discussed and agreed by all.

Ethical Considerations

A favourable ethical opinion was received from the University of Bristol Faculty of Health Sciences Research Ethics Committee (Code 9503).

Results

A total of 171 SVNs completed the survey in full. There was no reason to remove any individual submission.

Demographics

In summary, most respondents were work based, employed SVNs, 66.08% (*n*=113) with 33.92% (*n*=58) being full time students on a placement for a Higher Education (HE) course. The majority of respondents were studying the small animal pathway, 97.08% (*n*=166), with 2.92% (*n*=5) studying the equine pathway (see Table 2 for full demographic results). The South-West region had the largest single representation of respondents with 25.73% (*n*=44), Northern Ireland had the smallest representation with 2.34% (*n*=4), see Figure 1 for full break down of regions).

Table 2: Respondent related demographics

Figure 1: Geographical location of veterinary practices

Pearson's Chi-Squared tests were conducted to assess whether the demographic factors of status, pathway, region, and age were significantly associated to SVN CLEI level of satisfaction. No significant relationships were found.

Student Veterinary Nurse Clinical Learning Environment Inventory (SVN CLEI)

The SVN CLEI scoring from this study showed a range of perceived satisfaction scores, with the total SVN CLEI score ranging from 34-125. Factor 1 ranged from 12-50, Factor 2 from 17-60 and Factor 3 from 3-15. (Table 3). SVN CLEI totals showed that 10.53% (*n*=18) of SVNs were dissatisfied/very dissatisfied, 18.71% (*n*=32) were neutral and 70.76% (*n*=121) were satisfied/very satisfied.

Table 3: SVN CLEI final scoring

Ten Item Personality Inventory (TIPI)

Mean and standard deviations were calculated as follows; Extraversion M = 4.16, SD = 1.50, Agreeableness M = 5.30, SD = 1.00, Conscientiousness M = 5.88, SD = 0.87, Emotional Stability M = 4.34, SD = 1.29, Openness M= 5.38, SD = 0.96.

A Kruskal-Wallis test established that there was a statistically significant difference in Agreeableness median scores relative to categorical subgroup SVN CLEI satisfaction ($\chi2(2) = 7.644$, $p < 0.022$). Pairwise comparisons were conducted using Dunn's procedure with a Bonferroni correction. The post hoc tests revealed a significant difference in median scores between those in the Neutral subgroup (5.00) and those in the Satisfied/Very Satisfied subgroup (5.50) ($p = 0.019$).

There was also a statistically significant difference in Emotional Stability median scores relative to subgroup SVN CLEI satisfaction ($\chi2(2) = 8.776$, $p = 0.012$). Pairwise comparisons were conducted using Dunn's procedure with a Bonferroni correction. The post hoc tests revealed a significant difference in median scores between those who were in the Dissatisfied/Very Dissatisfied subgroup (3.25) and those in the Satisfied/Very Satisfied subgroup (4.50) ($p = 0.013$).

There were no significant differences regarding Extraversion, Conscientiousness or Openness.

Brief Resilience Scale (BRS)

38.60% (*n*=66) of respondents demonstrated low resilience, 56.73% (*n*=97) revealed normal resilience and 4.67% (*n*=8) demonstrated high resilience.

Pearson's Chi-Squared tests were conducted to assess whether BRS scores were significantly related to SVN CLEI satisfaction subgroup. No significant relationships were found.

Depression, Anxiety and Stress Scale -21 (DASS-21)

Depression scores ranged from severe at 5.26% (n=9) to normal at 55.56% (*n*=95). Anxiety scores ranged from mild at 9.94% (*n*=17) to normal at 44.44% (n=76) and stress scores ranged from extremely severe at 2.34% (*n*=4) to normal at 54.97% (*n*=94) (Table 4).

Table 4: Frequency and scale results for DASS-21 scores

A Pearson's Chi-Squared test was conducted to assess whether DASS Depression Score and SVN CLEI satisfaction subgroup were related. There was significant evidence of an association, ($\chi2(8) = 44.586$, $p < 0.001$).

A Pearson's Chi-Squared test was conducted to assess whether DASS Anxiety Score and SVN CLEI satisfaction subgroup were related. There was significant evidence of an association, ($\chi2(8) = 42.321$, $p < 0.001$).

A Pearson's Chi-Squared test was conducted to assess whether DASS Stress Score and SVN CLEI satisfaction subgroup were related. There was significant evidence of an association, ($\chi2(8) = 30.199$, $p < 0.001$).

Psychological Sense of Organizational Membership (PSOM)

Scores ranged from 29-90 (M = 67.26; SD = 15.63). There were 78.95% (*n*=135) of respondents scoring above the scale mid-point and 21.05% (*n*=36) scoring on or below the scale mid-point.

A Kruskal-Wallis test established that there was a statistically significant difference in PSOM Median scores relative to SVN CLEI satisfaction subgroup ($\chi 2(2) = 61.877$, $p < 0.001$). Pairwise comparisons were conducted using Dunn's procedure with a Bonferroni correction. The post hoc tests revealed a significant difference in median scores between those who were Neutral subgroup (57.00) and Dissatisfied/Very Dissatisfied subgroup (40.00) ($p = 0.011$), between those in the Satisfied/Very satisfied subgroup (75.00) and those who were Dissatisfied/Very Dissatisfied subgroup (40.00) ($p < 0.001$) and between those who were in the Neutral subgroup (57.00) and those who were in the Satisfied/Very satisfied subgroup (75.00) ($p < 0.001$).

Qualitative Data

Four themes were identified from the data relating to factors that detracted from the students' learning experience in the CLE: clinical supervisor barriers, negative TP factors, inter-personal barriers, and challenges outside the CLE. Figures 2 and 3.

Figure 2: Factors that detracted from clinical learning part 1

Figure 3: Factors that detracted from clinical learning part 2

Three themes were identified from the data relating to factors that contributed to the student's learning experience in the CLE: inter-personal support, positive TP factors and support outside the CLE. Figures 4 and 5.

Figure 4: Factors that Contributed to clinical learning part 1

Figure 5: Factors that contributed to clinical learning part 2

Discussion

The sample population was derived from a heterogenous sample of SVNs from across the UK. Therefore, it accounted for the usual variance in learning between SVNs, making it an appropriate and representative sample for the study aim.[56] There are substantially less equine practices and equine course places than small animal in the UK, which is evident in the RCVS lists of approved courses and TPs.[57–59] The proportion of equine practices and equine students represented in the study is in line with their market share.[9] Participant gender was not included in the survey questions due to the small percentage of males reported in the profession, (2.7%),[60] which would not give rise to meaningful comparisons. The sampled population of SVNs (n=171) represented 2.84% of the total population of SVNs in the UK as at 8/9/2022 (n=6,027), although the final eligible total would have been reduced due to the inclusion criteria, as previously detailed.

SVN CLEI

The majority of participants reported themselves to be Satisfied/Very Satisfied with their clinical learning experiences in practice. However, almost 30% felt Neutral or Dissatisfied/Very Dissatisfied. In human nursing students, overall satisfaction has been strongly related to the clinical learning experience and this can be the deciding factor on whether a student continues on the nursing programme,[61,62] and by extension the same is likely to be true for SVNs. Only by measuring student experiences using appropriate methods, such as the SVN CLEI, can effective remedial

action be identified and taken. It is recommended that the factors that have affected their perception should be explored and addressed through support meetings with the TP and AEI to facilitate feedback and ensure reasonable adjustments and support are applied where required.

TIPI

Research has previously linked personality type with job and training satisfaction. [63–65] However, prior to this study this has not been investigated in relation to SVNs. Those with high agreeableness and emotional stability were significantly more likely to be Satisfied or Very Satisfied with their SVN CLEI experience. Research has shown that a student who is less neurotic (more emotionally stable) and more agreeable is likely to have a more positive outlook that affects all aspects of life, including the workplace,[63], which supports the findings of this study. Therefore, there may be value in developing interventions/strategies for SVNs, that will encourage an appreciation of how their personality traits can affect and impact their ability to engage positively with their learning environment and opportunities. In turn, interventions could then be developed to help those with different personality types to develop greater coping and integration skills within their placement. This should be offered within a supportive and non-judgemental framework.

In this study, the traits of openness, extraversion and conscientiousness did not demonstrate a significant difference between satisfaction levels. In previous studies, openness has not been found to affect work place satisfaction and findings here corroborate this.[66–68] However, in previous studies extraversion and conscientiousness have been positively linked with work place satisfaction.[66–68] The mean scores reported here for SVN extraversion and conscientiousness vary from the general population normative data reported in other research,[49] with this study finding that SVNs have lower extraversion and higher conscientiousness scores overall. This may have impacted the results seen here, when compared to general population norms. In addition, the aforementioned studies have reported “work-place” satisfaction as linked with these traits. However, SVNs may have a different relationship with their working environment when compared to other employees, which may not allow for these personality traits’ protective factors to impact level of CLE satisfaction. Research has shown that higher pay and work status can increase job satisfaction.[69] However, SVNs status and pay is less than that of veterinary surgeons, RVNs and managerial staff, which may in turn reduce the positive impact of some personality traits on their level of satisfaction. However, further study is required to explore these factors in more detail.

BRS

Whilst there was no association found between SVN CLEI satisfaction subgroup and resilience, it is important to consider that low resilience was reported by 38.6% of respondents in the current study. No research could be identified that had studied this specific relationship in human nursing students. Research involving human nursing students revealed a link between resilience and protective factors for maintaining psychological well-being and decreasing attrition, and have found that resilience is an important consideration for these students in the CLE.[36,70,71] Studies in human nursing students have led to recommendations for clinical educators to build student resilience, such as reframing negative experiences to positive learning opportunities,

facilitating students to recognize personal biases to broaden perspectives, clarifying new experiences and maintaining an environment of trust and respect.[29,72] There is no reason to believe that these strategies cannot be equally applied to the roles of the clinical supervisor, TP team and the AEI when supporting SVNs. These suggestions also link with the identification of personality domains and increasing students' self-awareness and supporting them to recognize personal biases. Further research is needed to examine the impact of resilience on attrition, well-being and satisfaction specifically for SVNs.

DASS-21

All three DASS-21 subcategories demonstrated a significant association with the categories of CLE satisfaction subgroups. This study reported that 33%-45% of SVNs are experiencing moderate to extremely severe levels in each of the subscales, depression, anxiety and stress. This highlights that there is a large proportion of current SVNs who are experiencing poor mental health, which should be considered when tailoring support. A negative correlation between these factors and CLE satisfaction has been reported in human nursing students and they have also been reported to have higher levels of stress, anxiety and depression than students studying other programmes.[1,40,73–75] In addition, protective strategies become even more important when considering the SVNs are likely to experience higher levels of stress, anxiety and depression than their non-nursing counterparts. In relation to students with long term mental health diagnoses, there is a legal, ethical and moral obligation to ensure these students receive the support they require to feel satisfied with their clinical learning experiences and to subsequently develop clinical and professional competence.[76] It has been suggested that identifying students at risk of poor mental health using screening tools can facilitate effective support structures during nursing studies.[77] However, it must be clear that these would not be used as part of the selection process, but merely to ensure appropriate support of students entering the programme in line with the Equality Act (2010). Encouraging students to appreciate their own state of well-being and identify strategies to build resilience through tools such as Wellness Recovery Action Plans (WRAP) can also be beneficial and build self-reliance.[78]

PSOM

There was a significant difference across all CLEI satisfaction subgroups when compared with the mean PSOM scale scores; PSOM scores rose with increasing levels of satisfaction. These findings echo those of studies in human nursing students, demonstrating the importance of developing PSOM, psychological safety and a sense of belonging for nursing students.[41,42,79,80] Human nursing students reported that feeling like they belong in the work place enabled them to engage in learning opportunities and negotiate their learning needs.[42] Appreciating students as stakeholders in creating an appropriate CLE, rather than mere consumers, can support the sense of belonging and connectedness.[79] However, the CLE presents multiple challenges in creating a positive PSOM, and there needs to be a cultural change that fosters participation, continuity, high quality inter-personal relationships and values contributions from team members across all levels.[80] For the SVN, the TP must first appreciate the anticipatory fear that can proceed entering the TP for the first time.[81,82] There are multiple actions the TP could take to help settle in a new student and foster a positive sense of belonging and connection. Firstly, contacting the student

ahead of the start date and offering an induction meeting, to include practice orientation and key staff introductions.[83] Ensuring an induction process on commencement, which is communicated clearly to the student, will set up expectations for both the TP and student, providing guidance in the initial weeks to help settle nerves.[83] Assigning a "buddy" in addition to the clinical supervisor, who is either another more experienced student or newly qualified RVN can support a sense of belonging.[83] Senior staff should be involved in the student training plans and ensure all staff are clear on their responsibilities towards students, whilst encouraging positive interpersonal interactions through example and zero tolerance policies for incivility, in line with the RCVS Standards Framework.[3] Overall, the TP should practice evidence based medicine and have clear protocols in place that are followed by the whole team, to provide the student with the ability to translate classroom to clinic teaching and avoid confusion.[84]

Qualitative data

Themes identified highlighted a shared experience about the common challenges faced by SVNs in the CLE. Themes derived from comments relating to factors that detract from learning included: clinical supervisor barriers, negative TP factors and inter-personal barriers. There are some key strategies that TPs can consider to mitigate these factors.

Firstly, clinical supervisors should be carefully chosen. Selection should not only be limited to clinical experience, but also require that evidence of qualities that will support learning such as positive interpersonal skills, enthusiasm for the profession and support of the learning environment should be selected.[85] Clinical supervisors who feel "forced" into the position have reported having less confidence in their abilities to undertake this role.[86] This may contribute to the opinions seen in this report around clinical supervisors lacking in experience and engagement with training. More support from experienced clinical supervisors and the AEI have also been reported as beneficial for those new to the role.[85]

The TP must ensure that the appropriate training time (three hours per week) is allocated, so that students have sufficient time to log their clinical experiences and have protected tutorial time with the clinical supervisor, as required by the RCVS Standards Famework.[3] Due to ever changing clinical demands, it is important that this time is built into the nursing rota. SVNs should be given clear guidance and expectations around their workload in line with their stage of learning, they should be considered in a super-numerary capacity to the nursing team, to ensure they are not placed under the equal demands of the registered veterinary nurse. Alongside this, the number of SVNs in the TP should be carefully considered to ensure that all students have access to the appropriate clinical caseload and qualified staff to support their training and development. Considering these factors will provide evidence for the AEI quality assurance TP visits and thus, compliance with the requirements of the RCVS Standards Framework.[3]

Positive inter-personal experiences in the CLE are key for creating factors that enhance learning.[71] A strong and supportive team is reported to be an essential factor that enables nurses to thrive in challenging environments.[87] Overall, encouraging a strong team morale, positive attitudes within the workplace and civility may require a cultural shift in some TPs, but will be in the best interests of the whole practice team,

not just the student. The factors outside the CLE that were reported to detract from learning are likely to be discussed more readily in a supportive team. This will allow signposting to additional support from the associated AEI, such as financial bursaries, well-being and counselling services. In addition a general medical practitioner, (GP) appointment can also be recommended for mental and physical health needs.

Future research

To further explore the experiences of SVNs and the impact this has on individuals, the use of interviews for the collection of qualitative data will add greater depth of understanding to some of the factors highlighted here. This should be focussed on the socio-cultural elements of the CLE, which are easier to measure with qualitative data derived from interviews.

Limitations

The self-reported nature of this study is a limitation due to the social desirability effect, which can cause participants to report what they feel to be socially accepted or preferred, rather than their honest opinion.[88] However, this has been reported to have a marginal effect when assessing well-being.[89] The selection of validated, abbreviated instruments, including the TIPI, BRS and DASS-21, allowed multiple factors to be investigated in this exploratory research for breadth and depth, whilst maintaining brevity to encourage participation. However, the authors recognise that using these abbreviated scales could reduce the reliability of the data collected, compared to the full scale versions. The convenience sampling approach will also have introduced selection bias. The lead researcher is based in the South-West and due to the convenience sampling methods, this would explain the higher proportion of respondents from this region.

Conclusion

The CLE is a complex sociocultural landscape, and it can be challenging to manage to maintain positive learning experiences. When nursing students have a positive CLE experience, they are more likely to be engaged with the learning opportunities provided and develop appropriate professional and clinical skills for their future career. This study demonstrates that there are factors such as personality type, well-being, and a sense of belonging that affect SVN satisfaction with the CLE. Therefore, taking time to understand factors such as personality type and well-being indicators for each SVN, alongside careful planning to increase the sense of workplace belonging, could increase the overall satisfaction of the CLE and in turn, increase learning engagement and reduce attrition. Considering the importance of this environment in training, this should be a priority for TPs and AEIs, which should begin with getting to know the individual student and gathering timely and regular feedback. Ensuring the student is appreciated as a stakeholder, rather than consumer, will support a student-centred approach and facilitate co-creation of a tailored training plan.

Conflict of Interest

The authors report no conflict of interest

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Data Access Statement

Supporting data are available to bonafide researchers only, applying via a link via the dataset's record at DOI: 10.5523/bris.3b54l8re2smo52eoqxc87359gs. The process for applying for this restricted dataset is available at: https://www.bristol.ac.uk/staff/researchers/data/accessing-research-data/.

Requests for access will be directed to the Research Data team at Bristol, who will assess the motives of potential data re-users before granting access to the data. No authentic request for access will be refused and re-users will not be charged for any part of this process.

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