Can the use of a Facebook group in addition to classroom teaching enhance exam success in a Drug Calculations module?

Conference or Workshop Item

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Introduction

A wide range of literature acknowledges the use of e- and traditional learning in the health professions but further research is frequently recommended to explore perceived benefits (Lahti, Hatonen & Valimaki, 2013) particularly in the rapidly changing technological environment. Mobile and smartphone technology means that students can now access a range of professional, personal and educational related information at anytime. The increasing use of online social networks for instant and frequent communication is also an important factor.

Facebook [as an online social network] boasts 1.11 billion users worldwide; over 61% of these users access this via mobile 'anytime, anywhere' (Statistics Brain, 2013). In the United Kingdom an estimated 80% of student nurses may have a Facebook account, with a wide range of informal programme/university specific 'groups' available to members for support/advice. This suggests a range of work, social and personal uses for online social networks, where a range of life modes interact in one place [figure.1 adapted from Ozenc & Farnham, 2011].

Many students report using Facebook several times a day for personal use therefore it is suggested that Facebook can offer convenient, fast and flexible access to educational support alongside personal and social activities; complementing the 'always on' behaviours of nursing students today.

Figure 1: Interaction between professional, social and family [personal] boundaries *(adapted from Ozenc & Farnham (2011))*

Aims

To establish if a module specific Facebook group can improve examination success and user satisfaction in a Drug Calculations Examination.

Objectives

- Set up a Facebook group for pre-nursing students to provide additional support for a Drug Calculations module and examination
- Analyse quantitative data on students who choose to opt into or out of the group and their examination performance
- Evaluate qualitative feedback in order to establish student experience and perception of Facebook groups for educational support

Primary Hypothesis

Students who choose to participate in the Facebook group will improve their examination success and learning experience of the Drug Calculations module.

Method

A closed Facebook group was set up by the researcher. Students opted in by requesting to participate and also signed a consent form in class to agree for their participation and contributions to be used as part of the research. Ethically, this meant that students were all offered the opportunity to use the Facebook group resources whether they chose to participate in the research or not.

Discussions were posted to prompt students to consider practice situations relating to drug administration calculations. In addition, the Facebook apps function was used to develop quizzes where students were able to practice questions and obtain instant feedback on their performance.

Examination scores and feedback questionnaire were used to evaluate exam success and satisfaction of pre-nursing students undertaking a Drug Calculations Module. A 30 student cohort opted in or out of using a Facebook group in addition to classroom teaching.

Results

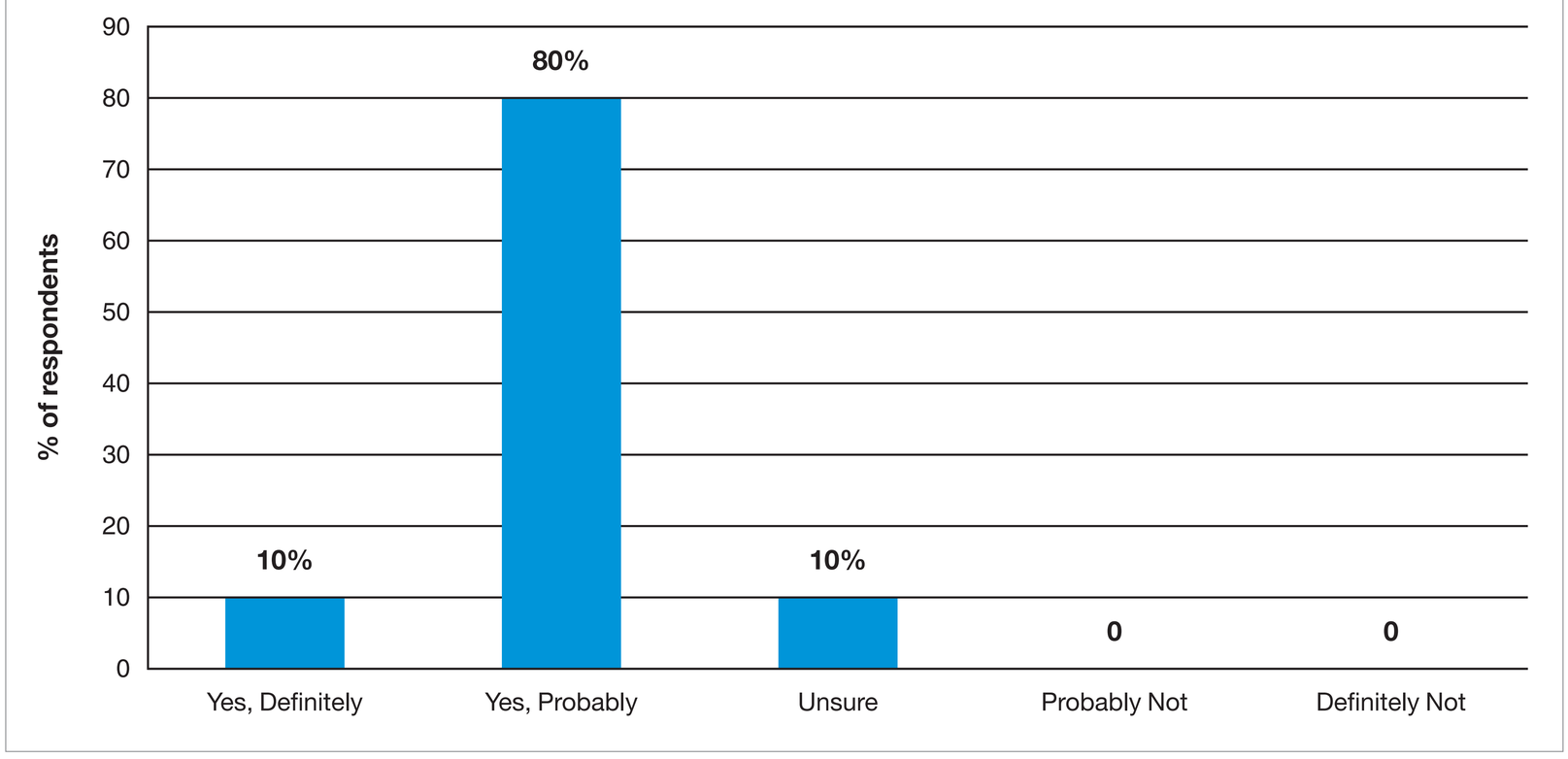
The mean age of participants was 30 and 37% declared dyscalculia as a learning disability. A t-test to the 95% confidence level showed that students who opted in to the Facebook group were more likely to pass on first attempt with a higher mark on their exam; p=0.038 df 15.

Chi-square testing showed White British students were more likely to opt-in to the Facebook group p=0.000. Non-White British males were more likely to opt out.

90% of group users expressed that it improved their learning experience and would use it again [figure.2]. One student commented:

> "Great idea, I knew help was there if I needed it... Facebook connects you to other users with similar problems. Liked, liked liked"

Figure 2: Did participation in the Facebook group improve your learning experience?



Conclusion

Facebook groups enhanced student success in their Drug Calculations examination and were a satisfactory option to students who chose to opt in. Students from Black/Black African groups were less likely to use this learning option. Additional research is required into student demographics and use of Facebook groups, along with more robust exploration of student use of Facebook groups for formal/informal educational support/advice.

References

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