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INTRODUCTION

Within the current university context, academic coordination of nursing clinical units in a Bachelor program provides numerous challenges. Management of increasingly large numbers of students on and off campus requires assistance by equally large numbers of clinical facilitators. While students are on clinical placement, clear communication between coordinating academics and clinical facilitators is imperative to ensure consistency between student groups and prompt management of issues as they arise. Coordinating academics often continue to have teaching, research and administrative responsibilities on campus while student groups are on placement, making it vital that communication is not only clear but also time effective (Boyd et al, 2011).

Effective communication is essential for staff management and consistency among teams (Gilley, Gilley, & McMillan, 2009). Methods commonly used by coordinating academics to communicate with clinical facilitators include post or email prior to clinical placements. During clinical placement, communication is commonly via email and telephone. At facilities with large numbers of students, or if issues arise requiring facilitator assistance, face-to-face meetings are arranged. Although individual face-to-face conversations with clinical facilitators may be optimal (Agarwal, 2010), time and geographic constraints mean that this mode of communication is not always possible.

The use of mobile telephone technology including the use of text messaging, known as Short Message Service (SMS), is now used ubiquitously in society. Current trends highlight that mobile phones are replacing traditional methods of communication. As of December 2011, 88% of the Australian population (14 years and over) owned or used a mobile phone, compared with 83% in 2007. Mobile phone adoption is increasing in popularity, with 88% of the Australian population now using or owning one (Roy Morgan Research, 2012).

LITERATURE REVIEW

The use of mobile phones and SMS has grown exponentially over the past 10 years (Horstmanshof & Power, 2005) with this technology now being utilised to remind patients of appointments and medication administration schedules (Bouvy et al, 2011; Hughes et al, 2011), send emergency alert messages (Gow et al, 2009), and offer support to tertiary students (Young et al, 2010). The content of text messages, hereafter referred to as Short Message Service (SMS), sent to university students often include: providing support,

motivation and continuity; alerts and reminders (e.g. timetable changes, library loans); and delivering learning content and revision tips (Naismith, 2007).

Current research surrounding SMS and clinical placement has primarily focused on the student's experience. A quasi-experimental study was conducted by Young et al, (2010) into the use of SMS to supplement existing support mechanisms for second year nursing students whilst attending clinical placement. Both qualitative and quantitative data were collected and found that the majority of students liked being able to SMS their university teacher and felt that the SMS system was easier to use than email or telephone. MacKay and Harding (2009) completed a quasi-experimental study to assess the value of SMS in providing support to student nurses during clinical work experience. This study found students felt supported and motivated with enhanced communication during clinical placement (MacKay & Harding, 2009).

Naismith (2007) examined effective use of SMS communication in higher education in the United Kingdom by developing and trialling an email subscribed SMS service for students in one institution. Naismith (2007) found this service to be a timely reminder for contact with the university and an effective communication strategy. Sending and receiving SMS is a time efficient way of communicating (Christol, 2009).

SMS use can create a sense of being in social contact with others and can keep you 'in the loop', giving the user control and flexibility to send and receive messages at any time (Horstmanshof & Power, 2005). Previous trials have shown that institutionally initiated SMS can promote group interactivity (Scanlon & Issroff, 2005; Markett et al, 2006) and a cross-sectional study conducted by Ramanadhan et al, in 2009 found a connection between staffing teams assisted in the transfer of knowledge. Garner et al, (2002) suggest use of SMS may promote involvement in a community of learners, thus reducing feelings of isolation through promoting a sense of community.

Research surrounding the use of SMS and clinical facilitators supporting students on clinical placement is limited. Hyrkas and Shoemaker (2007) used a descriptive correlational design to survey preceptors of student nurses and newly employed nurses. A statistically significant positive correlation was found between clinical facilitator's perceived level of support and their commitment levels to their role (Hyrkas & Shoemaker, 2007).

According to a study by Watson (2000), clinical staff perception of support is directly related to the opportunities to talk to academic staff. Clinical facilitators feel better able to meet the obligations of the role if they perceive that they were receiving support and had a collaborative relationship with the university (Öhrling & Hallberg, 2001; Yonge et al, 2002).

A study examining the lived experience of workplace supervisors of students in teaching, nursing and social care education; report that limited contact between coordinating academics and professionals in the field causes frustration (Lofmark et al, 2008). Without strong collaboration between the university and clinical facilitators, the quality of student supervision is questionable (Lofmark et al, 2008).

Anecdotally, clinical facilitators often request support from coordinating academics in relation to information about curriculum, expectations and assistance to manage students who are not meeting competency standards and require supportive interventions. The advantage of being able to send an SMS to many recipients at once is that it helps to provide support and create a collaborative environment whilst utilising time more efficiently. The aim of this research was to explore the use of SMS for coordinating academics and clinical facilitator communication.

METHODS

A descriptive survey was used to explore the use and perceptions of SMS communication for clinical facilitators. The specific questions the survey sought to answer were:

- 1. Is using SMS a convenient method of communication between the coordinating academics and clinical facilitators?
- 2. Does using SMS improve communication between coordinating academics and clinical facilitators?
- 3. Do clinical facilitators report feeling more supported due to the use of SMS?
- 4. Do clinical facilitators report feeling part of the teaching team due to the use of SMS?

<u>Setting</u>

The research was conducted at a large Australian metropolitan university. The university's School of Nursing is located on one metropolitan and one regional campus, with approximately 2,900 continuing undergraduate students across the three-year Bachelor of Nursing course. The course consists of twenty-four units (subjects) delivered over six semesters (three years full time).

Clinical placement, an integral component of the Bachelor of Nursing course, is offered in every semester at a wide range of healthcare facilities in various locations from community, primary healthcare, residential facilities and acute care hospital settings. During off-campus clinical placement, students are assisted by clinical facilitators, responsible for assessing students' performance against a set of competencies in the workplace. Clinical facilitators may supervise students in one of two models; either supervising a group of up to eight students or working one to one with a single student, referred to as preceptoring.

Participants

All 46 clinical facilitators, working with first and second year Bachelor of Nursing students in November and December 2011, were approached to participate in this study. Of this cohort, 24 clinical facilitators were seconded by the healthcare facility, 19 were employed directly by the university and 3 worked in preceptor roles. All participants had access to a mobile phone with SMS capability.

The role of the clinical facilitator is to support students to meet learning objectives of the unit, to act as a professional role model and assess student competence. Some clinical facilitator's are the only employee working at a facility in this role, whilst others work alongside other clinical facilitators. Prior to commencement in the role, clinical facilitators are provided with training in the form of a workshop, which covers crucial aspects of the role and provides access to resources, useful strategies and support networks. Clinical facilitators also have access to online resources, a dedicated clinical placement website, and may attend internal workshops provided by off-campus facilities.

Instrument

The authors developed a 15-item questionnaire for clinical facilitators with reference to existing literature and their respective coordinating academic and clinical facilitation experience. Twelve items used categorical five point Likert scales and three items used open-ended questions. Five items assessed age, gender, experience, highest educational qualification and current use of SMS. The remaining seven items addressed the convenience of SMS regarding timing of messages, perceived approachability of the coordinating academic and satisfaction with SMS.

The survey instrument was tested for content validity (Creswell, 2009; Creswell & Plano Clark, 2007) in a pilot test prior to distribution with three participants (two experienced clinical facilitators and one senior coordinating academic), and minor revisions were made on the basis of their feedback.

Procedure **Procedure**

Approval to undertake this study was granted by the University Human Research Ethics Committee. Following ethical approval, all eligible clinical facilitators were emailed a participant information sheet and invited to participate. During the two-week off-campus clinical placement, clinical facilitators were sent SMS via mobile phone on Monday, Wednesday and Friday from the coordinating academic. The information sent focused on the most important information to be considered at that time. Examples of typical SMS are as follows:

Hi all, Day 1 of CP1 rotation 2, students should be coming prepared with their objectives completed in their Clinical Placement Guides. Ensure they have the full correct uniform and please let me know if any students are absent.

Hi all, end of week 1 already, you should have an idea of students that require more assistance by now, please let me know who they are and give them clear strategies of what they need to do to improve.

It was explained to clinical facilitators that an SMS addressed as *"Hi all"* was sent to all clinical facilitators, and no reply was expected unless there was a request for information. However, an SMS addressed to an individual clinical facilitator, such as *"Hi Mary"* was likely to need a reply. Clinical facilitators were asked to contact the coordinating academic personally by phone if there were concerns relating to the student or clinical placement that needed to be addressed.

At completion of the two-week period, all clinical facilitators were sent an anonymous questionnaire. Return of the questionnaire was accepted as consent to participate.

Data Analysis

Quantitative data were analysed using the Predictive Analytics Soft Ware (PASW Statistics

18.0.3, 2010). Demographic and professional characteristics, such as age and years of experience, were summarised using descriptive statistics. Chi-square tests were used to identify differences in SMS perception amongst clinical facilitators based on level of experience, age or healthcare facility. Bivariate analysis, Spearman's rho, was used to determine the relationships between the respondents' length of time working as a clinical facilitator, the approachability of the coordinating academic or through regular SMS contact, understanding of issues on clinical placement and feeling part of the teaching team. Statistical significance was determined at p<0.05.

Qualitative data were analysed using thematic coding and categorising. Thematic coding and categorising is a primary analytical process where passages of text are 'fractured' to examine individual parts of the data that exemplify an idea (Gibbs, 2008). A code, or shorthand reference note or label, is then applied to the idea (Gibbs, 2008). Coding with words rather than numbers was used as the former provides greater meaning. The authors followed this process and then similarly coded text was grouped together to enable comparison between events, actions and interactions. Where appropriate the author's linked coded text to other concepts for further analysis. Thematic categories were then applied to grouped codes, which represented a recurring issue (Gibbs, 2008). This was a process of intensive reiteration between authors until consensus was reached.

<u>RESULTS</u>

A total of 46 questionnaires were distributed to clinical facilitators. Questionnaires were returned from 22 participants, providing a response rate of 47.8%.

Demographic and professional characteristics of participants

Almost all respondents were female (91% n=20) and over 40 years of age (77% n=17). This is consistent with the nursing population in Australia where the average age of registered nurses in 2009 was 44.3 year and the percentage of females was 90.4% (Australian Institute of Health and Welfare, 2009). Over half of respondents (55% n=13) held a postgraduate qualification of a Graduate Certificate, Graduate Diploma or Master's Degree. One participant held a Doctor of Philosophy qualification. Experience as a clinical facilitator with the university ranged from less than one year to greater than 10 years, with the majority (37% n=8) having between three and five years of experience. All questionnaire respondents were clinical facilitators employed directly by the university rather than seconded from the

facility. Table 1 provides complete details of the demographic and professional characteristics of the respondents.

All participants agreed that it was convenient to receive the SMS, with 77% (17) strongly agreeing with this statement. Fifteen participants (68%) strongly agreed they were able to reply to the SMS at a convenient time and place. Almost all participants agreed (82%) that the coordinating academic was more approachable as a result of regular SMS communication. The majority of participants indicated they felt an increased level of support (77% n=17) and felt included in the teaching team (82% n=18) due to receipt of regular SMS communication. Over half the participants felt that SMS communication alone with the coordinating academic was sufficient (55%) (Table 2).

Correlations were found between the approachability of the coordinating academic and two variables: clinical facilitator perception that the coordinating academic understood issues on clinical placement (r=0.785, p<0.001,), and clinical facilitator perception of being part of the teaching team (r=0.768, p<0.001).

Thematic analysis

Analysis of responses to open-ended questions revealed three categories: connection, approachability and collaboration. Respondents identified that regular SMS contact from the coordinating academic promoted a sense of association and bond that facilitated collaboration and time management.

Connection

Respondents in this study identified the importance of a sense of connection between the university and clinical facilitators. This relationship or bond was enhanced by regular SMS communication:

"...provided physical connection - not just name on paper. Sometimes SMS would lead to follow up phone call, providing further connection." (Participant 4)

"By texting us, I felt I wasn't alone." (Participant 3)

Approachability

Respondents highlighted the importance of accessibility, openness and approachability of the coordinating academic. Regular SMS contact between the two parties enhanced the clinical facilitators' perception of easy access to the university, and in particular to a central contact person; the coordinating academic.

"I felt that the coordinator [coordinating academic] was interested in how I was going out on prac [clinical placement] and approachable if I had any concerns". (Participant 8)

"Receiving encouragement, with invitations to call and feedback from potential issues (i.e. the circulated text regarding the administration of S8's [Schedule 8 drugs] and Blood Pressures). Did save on telephoning for clarification and also enabled calling at a time that was suitable". (Participant 1)

Further, participants highlighted the expediency of regular SMS contact, suggesting it was handy and convenient for use in the clinical setting and for communication with large groups of people.

"If I did need to speak to someone, my msg's [messages] were always promptly responded to with a courtesy call". (Participant 18)

Collaboration

A sense of collaboration was highlighted as a positive outcome from regular SMS contact. Participants identified the importance of a relationship between the 'university' and themselves.

"SMS are useful; we are all 'on the same page' and working together as a team to meet practicum [clinical placement] objectives." (Participant 22)

"A relationship had already been formed through messages therefore when an issue did arise, I felt I already knew the Coordinator [coordinating academic] well enough to be frank." (Participant 20) *"Felt more connected and that the Unit Coordinator [coordinating academic] was actually interested in the progress of students on prac [clinical placement], not just the problem ones".* (Participant 15)

DISCUSSION

This study found receiving SMS at regular intervals, from the coordinating academic, gave clinical facilitators a sense of connection and collaboration with a team. Through regular SMS coordinating academics were seen to be more approachable. Sending and receiving SMS were found to be a time efficient method of communication.

Previously identified communication uses of text messaging, in the university context have focused on student cohorts (Young et al, 2010; Ramanadhan et al, 2009; Garner et al, 2002; MacKay and Harding. 2009). This study provides a timely insight into SMS communication with the focus on clinical facilitators who are supporting students on placement. Although clinical facilitators surveyed in this research did not speak directly to the coordinating academic on a regular basis, they reported a sense of support through communicating via SMS. Similarly, MacKay & Harding's (2009) research found that student's sense of support from the educator was enhanced through using mobile technology. Clinical facilitation is a complex and challenging role and there is greater need for support strategies to be implemented for staff undertaking these roles.

In the context of this study, it is not uncommon for clinical facilitators to work alone at a facility, crossing paths with another clinical facilitator only at the changeover of shifts. As with Watson's (2000) study, clinical facilitators reported a greater sense of support through direct contact with the coordinating academic. Regular SMS gave the sense that the clinical facilitator was not alone.

When working alone on placement, regular SMS encouraged a sense of connection, through communication with the coordinating academic. This highlights that SMS, although used as an "en mass" communication in this study, is still perceived as personal communication. This perception of personalisation fosters a sense of belonging to the university and connection with the community of academic staff delivering the course.

The results from Ramanadhan et al's, (2009) study, which highlighted that a transfer of learning was assisted by connections between teaching teams, are reiterated in this study. Comments from clinical facilitators suggest regular SMS assisted with knowing the required level of competence of students during the placement. Clinical facilitators were able to contact the coordinating academic directly if the instructions via SMS were unclear or if further assistance was required relating to the nursing student.

The level of trust developed by a person receiving an SMS towards the sender in Glyman's (2010) study is supported by the results of this research. Some clinical facilitators in this study reported a sense of familiarity with the coordinating academic through regular SMS. This enabled more comfortable collaboration between clinical facilitator and coordinating academic. Collaboration between coordinating academics and clinical facilitators through SMS clarified roles and the united efforts in assisting students on clinical placement. Supporting previous studies that clinical facilitators were better able to meet the obligations of their role when they collaborated with and received support from the university (Öhrling & Hallberg, 2001; Yonge et al, 2002).

Results from this study support the findings from Naismith's (2007) research that both coordinating academics and clinical staff found communicating via SMS to be convenient and time efficient. This study found that SMS enabled the mobile phone user to communicate non-urgent matters at a time that suited the clinical facilitator. This was particularly useful as some hospitals do not allow the use of mobile phones within the building.

This study has been limited by the nature of the design and sample size. As such, the findings should be considered with caution. Further, all respondents in this study were clinical facilitators employed directly by the university; no clinical facilitators seconded to the role by their employing healthcare agency chose to participate. Thus, participants in this study may have an existing level of connection or collaboration with the university. This could have led to potential bias in this sample and altered the results. Further research is needed to determine if SMS is an effective means of communication with clinical facilitators who are not employed by the university. Due to the anonymous nature of the questionnaire it is not possible to compare the characteristics of those who participated with those who did not.

A further limitation identified in this study is the use of closed questions in the data collection instrument, which may have prevented more detailed responses. For example, numerous participants included extra information to answer the question: would you prefer to speak to the Unit Coordinator [coordinating academic] on a regular basis rather than through SMS? Participant 15 responded "*I found this question difficult to answer yes or no. Do we want to tie up Unit Coordinators [coordinating academics] on the phone for hours? … On the flip side I feel we don't want to be jettisoned out there because we don't know what [is] going on in the class room and no way of knowing what students tell us is true or not so." This comment reinforces the need of clinical facilitators to have an ongoing affiliation with the university.*

CONCLUSION

There is wide scope for the use of mobile phone communication within university settings. Increasingly large student cohorts in undergraduate nursing programs require efficient and effective communication between the coordinating academic and clinical facilitators. The findings of this study suggest that regular SMS between coordinating academics and clinical facilitators improves communication. Using SMS to communicate has limitations when issues arise, as verbal communication is needed to understand the intricacies of the issues.

The themes that have been identified by clinical facilitators in this study are, that the use of SMS increased a sense of connection, approachability and collaboration with the coordinating academic. The results of this study suggest that the use of SMS between coordinating academics and clinical facilitators can be an additional strategy to effective communication. This is a growing area of need and further study in this area is recommended.

REFERENCES

Agarwal, O. P., 2010. Effective Communication I. Mumbai, IND: Himalaya Publishing House.

Australian Institute of Health and Welfare. 2009. Nursing and Midwifery workforce. Accessed 6 Aug, 2013. Available at <u>www.aihw.gov.au/nursing-midwifery-workforce</u>.

Bouvy, M. L., de Bakker, D. H., Santen-Reestman, J., van Dijk, L., van Vlijmen, B., & Vervloet, M., 2011. Improving medication adherence in diabetes type 2 patients through real time medication monitoring: a randomised controlled trial to evaluate the effect of monitoring patients' medication use combined with short message service (SMS) reminders. [Report]. BMC Health Services Research, 11, 5.

Boyd, C. M., Bakker, A. B., Pignata, S., Winefield, A. H., Gillespie, N., & Stough, C., 2011. A Longitudinal Test of the Job Demands-Resources Model among Australian University Academics. Applied Psychology: An International Review., 60(1), 112-140.

Christol, T., 2009. Negotiating through TEXT MESSAGING. Law & Order, 57(6), 80-85.

Creswell, J. W., 2009. Research design: Qualitative, quantitative and mixed methods approaches. Thousand Oaks: Sage Publications.

Creswell, J. W., & Plano Clark, V. L., 2007. Designing and conducting mixed methods research. Thousand Oaks: Sage Publications.

Garner, I., Francis, J., & Wales, K., 2002. An Evaluation of the Implementation of a Short Message System (SMS) to Support Undergraduate Student Learning. In S. Anastopolou, M. Sharples & G. Vavoula (Eds.), *Proceedings of mLearn 2002 - European Workshop of Mobile and Contextual Learning.* (pp. 15-18). Birmingham, UK.

Gibbs, G. R., 2008. Analysing Qualitative Data: SAGE Publications

Gilley, A., Gilley, J. W., & McMillan, H., S. (2009). Organizational Change: Motivation, Communication, and Leadership Effectiveness. *Performance Improvement Quarterly*, *21*(4), 75-94.

Glyman, P., 2010. Text Time? Credit Union Management, 33(2), 46-47.

Gow, G., McGee, T., Townsend, D., Anderson, P., & Varnhagen, S., 2009. Communication technology, emergency alerts, and campus safety. Technology and Society Magazine, IEEE, 28(2), 34-41.

Horstmanshof, L., & Power, M., 2005. Mobile phones, SMS and relationships. Australian Journal of Communication, 32(1), 33-52.

Hughes, L. D., Done, J., & Young, A., 2011. Not 2 old 2 TXT: There is potential to use email and SMS text message healthcare reminders for rheumatology patients up to 65 years old. Health Informatics Journal, 17(4), 266-276.

Hyrkas, K., & Shoemaker, M., 2007. Changes in the preceptor role: re-visiting preceptors' perceptions of benefits, rewards, support and commitment to the role. Journal of Advanced Nursing, 60(5), 513-524.

Löfmark, A., Morberg, A., Öhlund, L., & Ilicki, J., 2008. Supervising mentors" lived experience on supervision in teaching, nursing and social care education. A participation-oriented phenomenological study. Higher Education, 57(1), 107-123.

MacKay, B., & Harding, T., 2009. M-Support: Keeping in touch on placement in primary health care settings. Nursing Praxis in New Zealand, 25(2), 30-40.

Markett, C., Sánchez, I. Arnedillo, Weber, S., & Tangney, B., 2006. Using short message service to encourage interactivity in the classroom. *Computers & Education, 46*(3), 280-293.

Naismith, L., 2007. Using text messaging to support administrative communication in higher education. Active Learning in Higher Education, 8(2), 155-171.

Öhrling, K., & Hallberg, I. R., 2001. The meaning of preceptorship: nurses" lived experience of being a preceptor. Journal of Advanced Nursing, 33(4), 530-540.

Ramanadhan, S., Wiecha, J. L., Emmons, K. M., Gortmaker, S. L., & Viswanath, K. (2009). Extra-team connections for knowledge transfer between staff teams. Health Education Research, 24(6), 967-976.

Roy Morgan Research, 2012. Mobile phone use grows as home telephone connections slow. Retrieved 04/04, 2013, from <u>http://www.roymorganonlinestore.com/News/Mobile-phone-use-grows-as-home-telephone-connectio.aspx</u>

Scanlon, E. E., & Issroff, K. K., 2005. Activity Theory and Higher Education: evaluating learning technologies. Journal Of Computer Assisted Learning, 21(6), 430-439.

Watson, S., 2000. The support that mentors receive in the clinical setting. Nurse Education Today, 20(7), 585-592.

Yonge, O., Krahn, H., Trojan, L., Reid, D., & Haase, M., 2002. Supporting Preceptors. Journal for Nurses in Staff Development, 18(2), 73-77.

Young, P., Moore, E., Griffiths, G., Raine, R., Stewart, R., Cownie, M., & Frutos-Perez, M., 2010. Help is just a text away: The use of short message service texting to provide an additional means of support for health care students during practice placements. Nurse Education Today, 30(2), 118-123.