

**Exploring the Use of Social Media and the Associated
Ethical Considerations in Paramedic Education**

استكشاف استخدام وسائل التواصل الاجتماعي والاعتبارات الأخلاقية المرتبطة
بها في تعليم المسعفين

by

SUNIL SOOKRAJ

**Dissertation submitted in fulfilment
of the requirements for the degree of
MASTER OF EDUCATION**

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Abstract

Social Media (SM) is ubiquitous in paramedic students' personal learning environment. SM has the potential to add value as an educational tool. However there are disadvantages such as not being accepted as formal learning tools and potential for inappropriate use. The purpose is to explore how paramedic students and paramedic educators use SM, and the associated ethical considerations, in paramedic education.

The study was conducted in the interpretative paradigm using a mixed methods approach. A sequential qualitative then quantitative strategy was employed to interview educators and survey students respectively. Data from the interviews was used in the construction of the survey questionnaire.

90% of students want to use SM for their paramedic studies. YouTube (72.5%), WhatsApp (47.5%) and Medical applications (47.5%) are the most highly used SM applications. 70% of students use SM to gain further knowledge and improve their understanding. 54.5% spend more than one hour per day using SM for education. At least 60% of all students are aware of the SM policy at some level. 77.5% of students know how to behave ethically when using SM for paramedic studies. Participants highlighted the need for a specific SM guide and additional SM ethics training in paramedic education.

مختصرة نبذة

وسائل التواصل الاجتماعي موجودة في كل مكان في بيئة التعلم الشخصية للطلاب المسعفين. تمتلك وسائل التواصل الاجتماعي القدرة على إضافة قيمة كأداة تعليمية. ومع ذلك، هناك عيوب مثل عدم قبولها كأدوات تعليمية رسمية وإمكانية الاستخدام غير المناسب. الغرض هو استكشاف كيفية استخدام الطلاب المسعفين والمعلمين المسعفين لوسائل التواصل الاجتماعي، والاعتبارات الأخلاقية المرتبطة بها، في تعليم المسعفين.

أجريت الدراسة في النموذج التفسيري باستخدام منهج الطرق المختلطة. تم استخدام استراتيجية كمية ثم تسلسلية لمقابلة المعلمين وطلاب المسح على التوالي. تم استخدام بيانات المقابلات في بناء استبيان المسح.

YouTube (72.5%) 90% من الطلاب يريدون استخدام وسائل التواصل الاجتماعي في دراساتهم الطبية. تطبيقات استخدامًا. 70% من التواصل الاجتماعي والتطبيقات الطبية (47.5%) هي أكثر تطبيقات **WhatsApp (47.5%)** والطلاب يستخدمون وسائل التواصل الاجتماعي لاكتساب مزيد من المعرفة وتحسين فهمهم. يقضي 54.5% أكثر من للتعليم. ما لا يقل عن 60% من جميع الطلاب على دراية ووسائل التواصل الاجتماعي ساعة واحدة يوميًا باستخدام سياسة وسائل التواصل الاجتماعي في مستوى ما. 77.5% من الطلاب يعرفون كيف يتصرفون بشكل أخلاقي عند وسائل التواصل للدراسات الطبية. سلط المشاركون الضوء على الحاجة إلى دليل وسائل التواصل الاجتماعي استخدام. في تعليم المسعفين ووسائل التواصل الاجتماعي محدد وتدريب إضافي على أخلاقيات الاجتماعي

DEDICATION

In the Name of GOD, the Most Beneficent, the Most Merciful.

This dissertation is dedicated primarily to all paramedics, paramedic educators, and paramedic students alike, May GOD accept all of our efforts to save lives.

The Noble Quran Chapter **5. Verse 32.**

“... that if anyone killed a person not in retaliation of murder, or to spread mischief in the land - it would be as if he killed all mankind, and if anyone saved a life, it would be as if he saved the life of all mankind. ...”

The second dedication is to all SM users, let us use this technology with the best of intentions, for the best of purposes and in the best of manners.

The Noble Quran Chapter **49**

Verse 6. “O’ you who believe! If a rebellious evil person comes to you with a news, verify it, lest you harm people in ignorance, and afterwards you become regretful to what you have done. “

Verse 11. “O’ you who believe! Let not a group scoff at another group, it may be that the latter are better than the former; ...”

“..., nor defame one another, nor insult one another by nicknames. How bad is it, to insult one's brother after having Faith, and whosoever does not repent, then such are indeed wrong-doers.”

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To my mentor Professor Mohammed Hag-Ali for giving off your sagely advice, valuable time guidance, wisdom and teaching me humility.

To M. Ebrahim S. for his guidance & for evolving the adage “Transformation or Transmission?”

To the multitude of respected personalities who are not mentioned here by name yet have contributed to my academic and intellectual development.

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List of Definitions & Abbreviations

1. Social Media may be defined as “a group of Internet based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content” (Kaplan & Haenlein, 2010)

2. Paramedic, for the purposes of this dissertation, is an encompassing term referring to the uniformed cadre of specialist health care providers (generally linked to an Emergency Medical Service) who provide emergency, urgent and ambulatory medical services primarily in the prehospital environment.

3. Clinical Practicum is that part of paramedic education where the students undertake hands on clinical skills and patient care training as frontline providers, supervised by the operational paramedic mentors, in the hospitals and the prehospital fields.

SM - Social Media

UAE – United Arab Emirates

CME – Continuing Medical Education

1. Chapter 1

1.1. Introduction

The use of Social Media (SM) is ubiquitous in modern digital society and is enmeshed in the fabric of contemporary human existence in the technology-driven world. This is particularly widespread in the millennial and digital native generations where it is extensively used in daily life. Masters et.al. (2016) state that that mobile technologies have apparently become a standard tool in everyday life in the general population. Medical Education is also evolving with mobile technology and has progressed from traditional delivery to online lectures and e-books and further to podcasts and web-based applications (Cheston, Flickinger, & Chisolm, 2013). SM has emerged as the latest trend that is being constantly modified and, used as an educational tool. The use of SM as an educational tool has naturally cascaded into paramedic education where it is prevalent in many spheres of teaching and learning.

Whilst there are many push and pull factors to use SM in teaching and learning, there are barriers to official implementation in educational institutions for a variety of reasons such as pedagogy, systems issues and inappropriate SM use. Inappropriate SM use can be potentially disruptive and have severe negative consequences. It has been hypothesized that ethical awareness and appropriate ethical behaviour can mitigate against these disadvantages however evidenced-based information is limited in this area. Much of the information and literature about SM comes from other educational fields and other health disciplines (Manca & Ranieri, 2016) such as humanities and social work.

Studies specifically discussing the use of SM in paramedic education are very limited with even less studies of associated SM ethics. No evidence has been found of this type of dissertation having been done before in paramedic education. This will make it a novel dissertation that may add value to the relevant bodies of knowledge in paramedic education. The dissertation uses a mixed methods methodology to offer complementary findings about educator and student experiences and perceptions.

1.2. Problem Statement

SM is widely used by paramedic students but not readily accepted in most education systems primarily due to the potential for inappropriate use. This dissertation aims to explore the baseline application of SM as an educational tool, and the associated ethical considerations amongst educators and students in paramedic education, within the United Arab Emirates.

1.3. Research Objectives

1. To explore the Paramedic educator's experiences of SM as an educational tool in paramedic education.
2. To explore the Paramedic educator's ethical considerations for the use of SM as an educational tool in paramedic education.
3. To describe how paramedic students use SM as an educational tool, and the extent to which it is applied, in paramedic education.
4. To determine the paramedic students' awareness of SM challenges and ethical considerations.

2. Chapter 2 Literature Review

2.1. Introduction

Initially, Google was used to search for relevant information to investigate the general concepts, obtain a better understanding and also to generate further search terms. The main search terms were social media in paramedic education, social media ethics, social media use in education, advantages and disadvantages of SM use. Specific Medical Subject Headings (MeSH) terms were also used such as EMS hospital ethics, medical ethics, nursing ethics and paramedic ethics. Google returned many articles from Google Scholar and the natural progression to Google Scholar followed.

Thereafter the literature search employed three primary means to conduct online electronic searches viz.; the university library, Mendeley and Summon. This was very useful in providing articles that would otherwise require subscriptions. The Mendeley platform was also very helpful in sending periodical updates with recommended research based on previous searches and these returned many useful articles. During the search process, certain articles started to reappear in searches and these became the seminal research articles used in this dissertation. Specific author's also started to appear within specific disciplines and this led to forward and backward author searches to find further relevant research. Specific websites such as the National Ministry of Health and the National Ministry of education were targeted to elicit contemporary information within the local context. Research articles and information were restricted to the English language and there was a strong effort to maintain focus on the main themes of SM, SM ethics and paramedic education.

Research articles and documents were filed on a personal electronic library using the Mendeley platform and backed up on a hard disk drive. Researcher notes were filed on the electronic platform. There were many articles on SM in general and progressively decreasing returns as education and ethics were added to search terms. This significantly further decreased when directed at social media ethics in paramedic education where there are commentaries, editorials and letters but severely limited actual research. The literature search continued until the end of the dissertation and iteratively informed the literature review and dissertation progression.

2.2 Social Media (SM)

Social media plays a significant part in the contemporary educational landscape. The uses and intentions vary but it is mainly it is on communication and collaboration. The concise and definitive definition of SM is elusive as the term is constantly evolving. This is due in part to the evolving; technology, web applications and the manner in which SM use may change for different purposes.

The case for social media is based primarily on the functional advantages that social media technology allows the user. Social media is based on web 2.0 technology and is geared to afford the user instant sharing of content and the ability to generate content in a short space of time. Web 2.0 Technologies are much easier to use than earlier technology tools and can now be downloaded from the web within a few minutes this has made social media highly accessible. The web 2.0 social media tools have been adapted in the form of applications that

are highly customizable to user preference. Most social media applications can now be downloaded from the web at minimal cost, ranging from free applications to premium users which in many cases are relatively low-cost annual charges. Furthermore, these applications are supported by mobile and portable wireless devices which significantly enhance access.

Digital technology is markedly extensive on the global communications landscape. The 2020 Global Digital suite of reports presented by 'we are social' and Hootsuite (Kemp, 2020) provides the following interesting statistics on the state of digital communication. 5.19 billion people of the world's 7.75 billion population use a mobile telephone, this is 67% of the global population. The internet is accessed by 4.54 billion users which is 53% of the world's population. There are 3.8 billion active SM users which is a 49% worldwide penetration. These figures have all climbed steadily compared to the 2019 global digital report.

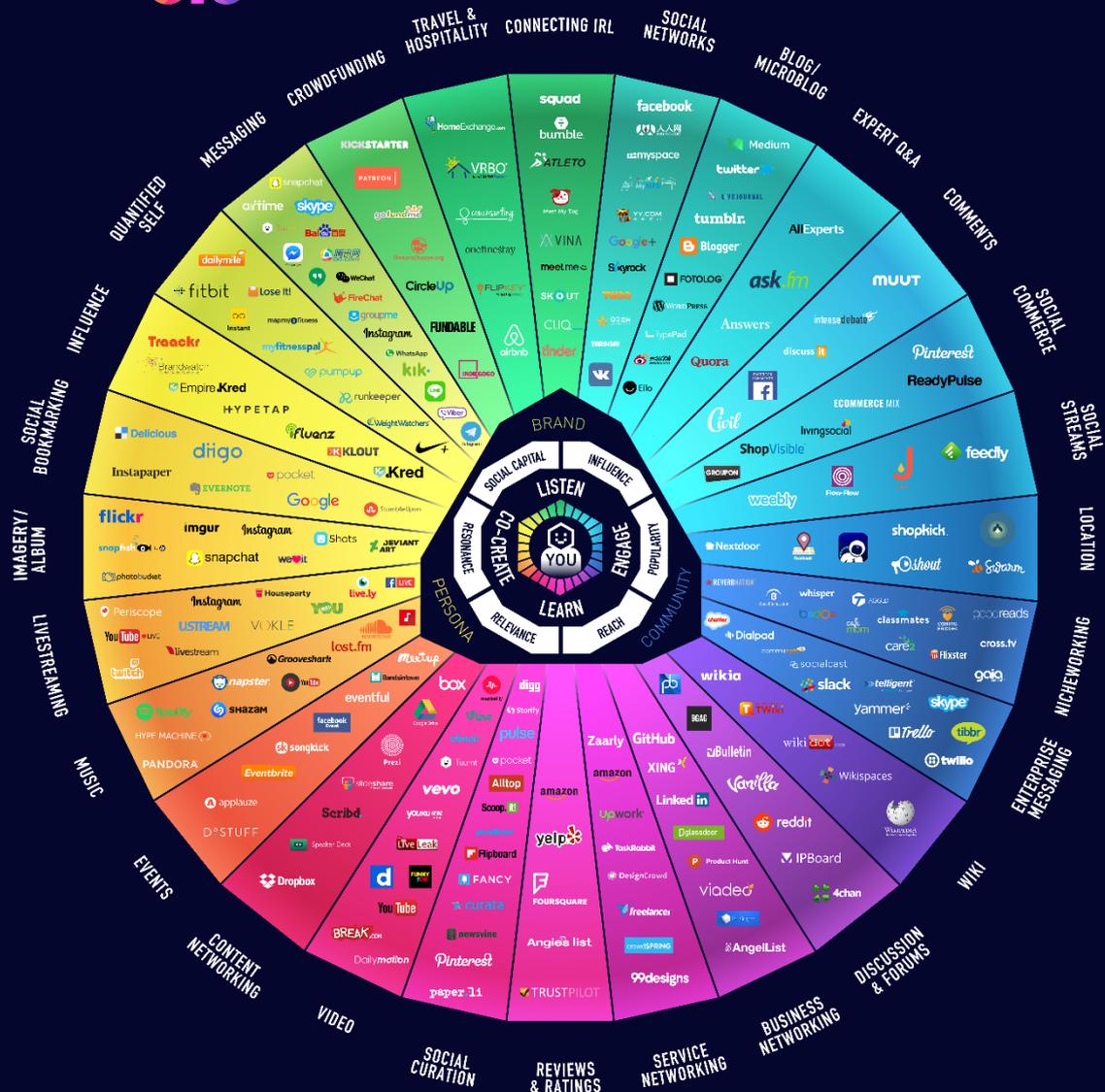
Mobile devices account for 50% of the share of total daily internet time in 2019 as compared to six years ago, when it was only 33%. Chat applications and social networking sites are the most commonly used applications at 89%. The global average time spent on the mobile device was reported at 3 hours and 40 minutes with 50% of that time (almost 2 hours) spent on social communications applications. In the UAE 9.73 million people out of the 9.82 million population are actively using SM, this a 99% penetration within the UAE context. There are 18.38 million active mobile connections in the UAE which averages out at almost two per person. The most used social platforms in order are Facebook, YouTube, WhatsApp and Facebook Messenger. YouTube is the most used SM platform in the UAE as per Kemp (2020).

2.2.1 Social Media Platforms

Social media platforms are internet-based tools primarily based on the function of sharing information. This information is communicated between individuals (person or entity) and groups and SM generally allows for one and two way communication. The term information broadly refers to content, ideas, messages, experiences, images, and video or audio clips. SM platforms may be broadly categorized as sites (content/knowledge hosting), wikis (a site that allows collaborative editing of information), social networking (Facebook, WhatsApp) professional networking (LinkedIn) discussion forums (Reddit,) media sharing (YouTube, Tik Tok, Instagram), content production (Tumblr, Blogger] and microblogs (Twitter) virtual reality and gaming environments (Second Life), and some others.

CONVERSATION PRISM 5.0

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Figure 1. The Conversation Prism (Solis, 2020)

2.2.2 Facebook

Facebook (which started in 2004) is the most used SM site in the world according to Kemp (2020) and Manasivejic et al. (2016). Manasivejic (2016) offers that students are using Facebook for communication, collaboration and educational content sharing whilst collaboration through communities of practice were the main educational benefit. Selwyn (2009) supports the content sharing mode from his study where two of the themes he identified showed that students' used Facebook for exchanging practical and academic information. Selwyn (Selwyn, 2009) states that individuals can use SM like Facebook in many different ways and for different purposes and that most students in his study used the Facebook Wall feature to post comments and interact with each other. Callaghan & Fribbance (2016) however, state that Facebook has limited evidence of effectiveness as a pedagogical tool but does play a supportive role in students' education. Selwyn (2009) also noted that students' were using Facebook as a means to contest the power relationship in the institution.

2.2.3 YouTube

YouTube is a very common-place social media site that has been in operation it has been since 2005. The platform was formed by three ex PayPal staff who created the YouTube website. The purpose of their website was to upload short videos for entertainment purposes. The ease of access and volume of video content on YT makes it an ideal repository for those who want to use videos in teaching and learning. In 2009 the University of California, Berkeley was the first university to transfer all its course lectures and special events onto YouTube (Fralinger &

Owens, 2009). Many studies show that YouTube (YT) is the second most popular social media platform which is used in education today (Kemp, 2020).

Bonk (2009) states that it contributed greatly to education in global terms and many English language teachers I said to be using YouTube to teach language this is according to Duffy (2008). The attraction of YouTube seems to be the fast and fun access to videos and interaction which come from all corners of the world. The impact is so much so, that it seems as if YouTube is changing the way learning is taking place Ng et.al. (2009). YouTube has a presence in over 43 countries and in over 60 different languages. Some of the analytics show that YouTube has approximately one trillion views. Certain factors that promote the popularity and attractiveness of YouTube include the ease of use, limited cost of the YouTube site (of course the internet and data cost is incurred) and the fact that they are so many users hosting different types of content.

YouTube can be used in multiple ways to facilitate teaching and learning in education (Wilson, 2015). One method is to use the multitude of medical and clinical videos that can be found on the platform and introduce that into you a lesson plan. The ways in which this can be done is to; firstly supplement face to face; secondly, replace face to face and thirdly it can be used as a homework based or flipped-classroom type of exercise. Supplementing face to face can be used as a video during the course of the lecture to emphasize key points for clinical features or medical management. YouTube videos can also be integrated into the lesson plan as an introduction, or as a seminal part of the lecture contents or as additional content material

(Jones & Cuthrell, 2011). Teachers can also record videos of themselves presenting a lecture and posting this to the YouTube platform for students to access and use. There are many additional activity benefits, some of them being that students can pause and replay sections if they need to.

Wilson (2015) discusses other benefits of YouTube. The other institutional advantages are that there is the ease of access. The cost is minimal and there is minimal additional management effort required for access or use. The YT platform is externally maintained. The platform only requires institutional access in terms of blocking undesirable content that is specific to the institution. Minimal installation, startup activities and maintenance as it is just accessed on the existing network and internet setup. The education section and certain sites may require subscriptions. There is less control than on institution-owned platforms e.g. blackboard or sites and software etc. There is also the risk of more third party exposure.

YT allows access to data analytic metrics that can be used as tools to measure use and link to outcomes (O'Brien, Slattery, & Walsh, 2019). In practice, we can actually do more with the YT analytics as compared to a hardcopy textbook. It is very difficult to measure how much of the book is read or how often it is used. Multiple data points can be captured used platform based metrics e.g. how many views of the videos per student. Did the student watch the entire video or just skipped sections? Feedback e.g. likes can be instant. There are also other specialized data and ways to attain that data.

2.2.4 Communication platforms

There are many communication applications e.g. Facebook Messenger, WhatsApp and Twitter which may be, and are, used in paramedic education. These applications have been researched over the course of the last decade in other educational disciplines. Reasons for using these included distance learning, virtual learning, social engagement, communication, speed of feedback and relationship building. Social media video conferencing technologies like ZOOM help to reduce the effects of distance learning, assist in blended learning and improve student interconnectedness (Hung & Yuen, 2010).

2.2.5 Social Media pedagogy & theory in education

The application of SM in paramedic education is adjunctive to the pedagogy and the curriculum. . SM develops and evolves faster than we are able to measure its impact and effectiveness in education (Cheston et al., 2013). The primary benefit arises from its ability to connect so many in so little time and stimulate collaboration from user-generated content It is necessary to expand on this view and deliberate on the implied constructs of connectivism and collaboration which fall under the constructivism approach to learning. Learning theories centre around 3 major concentrations viz, constructivism, behaviourism and cognitivism. Siemens and Downes (Siemens, G Downes, 2010) add connectivism to this mix. Connectivism is specifically applicable to the digital era and the use of SM in education. Connectivism is not a stand-alone concept but rather combines with one of the mainstream theories. Connectivism is based on the ability to connect and interact through the media to find a wide variety of information and

opinions. Heutagogy is another pedagogical stance that means past andragogy and is explained as a learner-centred approach rather than a curriculum or teacher-centred approach with non-standardized assessments (Bhojrab, Hurley, Neilson, Ramsay, & Smith, 2010). This is where CME and clinical practicum converge in paramedic education and it is here that SM is currently more widely used. This leads to the communities of practice model (Lave & Wenger, 2003) where SM is widely used in this model for connecting and sharing.

The three main potentials for educators to use SM are; exposing students to other practices, extending the learning environment, and promoting collaboration according to Gruzd, et. al. (2018). They identified six factors that aligned the use of SM with effective teaching viz. facilitating student engagement, assisting the educators to organize their teaching, enhancing student attention, building communities of practice and resource discovery.

The pedagogy of SM in education is based on the Technological, Pedagogical and Content Knowledge (TPACK) framework (Mishra, Mishra, & Koehler, 2006), which is well suited to this particular intervention and design. Using the YT platform with current technology within the teacher's pedagogy to deliver the content makes this a good fit in paramedic education. The TPACK framework has certain benefits (Kurt, 2018) for SM i.e. content being taught by using technology, technology is integrated into the pedagogy, concepts

can be applied using a different pedagogy, students with different language skill levels have the visual aid to address their skill deficiencies.

Technological knowledge implies that the teacher has to know the technology, be able to implement the technology and also be capable of adapting the technology to meet different scenarios. The teacher has to have an above-average appreciation of the technological tool, its associated requirements, and specific troubleshooting skills. The information technology aspects can be managed by the educational technology department. (Sookraj, 2019).

Pedagogical knowledge is explained as the teacher's knowledge and praxis around teaching and learning (Kurt, 2018): methodologies, psychology, best practices, evidence-based processes, styles and assessment methods within differing contexts and with different students to meet the educational outcomes. This includes objective setting and lesson planning which are crucial in this dissertation.

Content knowledge refers to the actual discipline-specific material (Koehler, Mishra, Kereluik, Shin, & Graham, 2014) that the educator will deliver to the students. The actual amount of subject matter or content knowledge required is based on the audience, needless to say, a better content knowledge base would enhance teaching and learning.

This factor also includes the teacher's ability to communicate the content verbally and instructively.

All three tracks need to come together and the point of convergence is where the greatest benefit will be realized. In paramedic education, one common pedagogic approach is to use problem-based learning. In this instance the technology is YT, which has videos of clinical problems (content Knowledge), can be integrated into the pedagogy. The teacher has to use his/her Content knowledge subject matter specialty to select the appropriate subject matter specialty with the best pedagogical value from the available technology. This provides a solid basis of convergence in which to apply the TPACK framework.

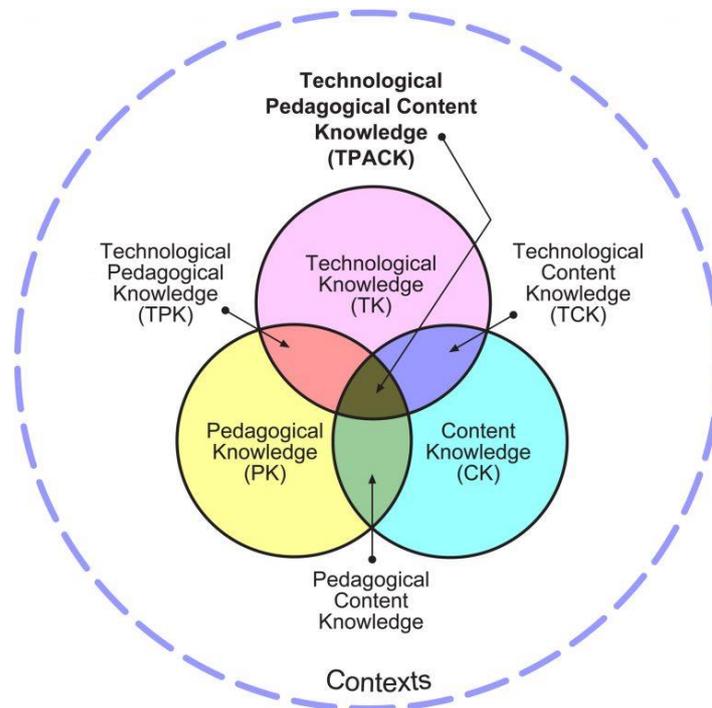


Figure 2 The TPACK Framework (Mishra et al., 2006)

2.2.6 Social Media use in Education

Learning theory suggests that learning brings about change in behaviour. This change in behaviour is manifest as a transformation of the individual within the specific learning context. Does the use of social media in paramedic education bring about a change in behaviour or transformation in the individual or collective? Many believe that social media is just a means to push messages or share content i.e. just to transmit information. Is social media being used for transmission or transformation? Is this the baseline question that we should also be asking in paramedic education?

Whyte and Hennessey (2017) found only five (5) Meta-analyses of SM in medical education demonstrating the lack of research in this area. Negative impacts such as privacy (clinician, institution and patient) and inappropriate professional behaviour also persist and this discourages lecturers from implementing SM use in medical education. The uptake of SM use is concentrated in the younger generation, 91% of students between the ages of 18 to 25 use Facebook whilst only 6% over 50 years old have a profile, creates technical knowledge and digital-professional role model challenges for lecturers. The positive impact of SM in medical education include the speed of access to information, faster feedback to students and overcoming geographical limitations according to (Whyte & Hennessey, 2017). There are many other advantages such as increased student engagement, self-directed learning, creation of Personal Learning Environments (PLE's) and preparation for the use of SM in professional life post education. Most educators use SM to optimise visual content (Manca & Ranieri, 2016) and most SM users in education tend to consume rather than create or produce content.

The University of Nottingham which has branches in the United Kingdom, China and Malaysia includes email as social media when advising their medical students (Gay, 2018). The department of education at Monash University (Henderson, Auld, & Johnson, 2014) states that Most SM sites according to them are not meant to support curriculum and assessment but they are used ubiquitously in the education setting especially for collaboration and communication. They discuss four key challenges for using SM in the classroom. These are consent, confidentiality, boundaries and recognizing & responding to illicit activity.

Parusheva & Aleksandova (2018) discussed the expanding range of SM based activities such as communication and knowledge management that can be integrated into education. There are wide-ranging SM tools such as blogs (weblogs), Vlogs (video logs), content sharing platforms, networking applications, online collaborative projects (Wikipedia), virtual social worlds, simulation and educational gaming. There are many benefits of SM in education but they emphasize communication, collaboration and faster resource sharing. Significantly they also note that students sometimes prefer an alternative to the official learning management systems. An additional notable point was that SM introduces students to technologies that can improve the student's chance of finding employment.

Aleksandova & Parusheva (Aleksandrova & Parusheva, 2019) looked specifically at integrating SM tools such as blogging or chats into the established learning management systems in higher education institutions in Bulgaria. They note that students are very keen on using SM tools but most prefer to use it on their existing platforms e.g. Facebook rather than on the

institutional LMS. Manca & Ranieri (2016) found that integrating SM into the learning management system was a major issue and barrier to the use of SM in education.

Bahner et.al. (2012) stated that SM should be used to support and enhance traditional educational methods. Cheston et.al. (2013) argued the opposite from their research, saying that traditional learning styles are being adapted to technologies and resources (Cheston et al., 2013; Van Linge, 2014) which implies that educators need to adapt the delivery of education to suit the needs of their audiences (Masters et al., 2016). However, Manca and Ranieri (2016) found that most educators and students preferred face to face rather than online teaching.

In continuing medical education the focus is different as the student is a graduate looking to maintain or update knowledge and skills through seminars and or short course events. More recently it has evolved into a quality assurance audit system where the practitioner is required to complete a specified number of units and earn the credits to maintain their professional standing. SM seems to be more useful in continuing medical education (Forsetlund et al., 2009) mainly due to accessibility. Using SM has become very time and cost-efficient for busy practitioners as well as being easy to use (Bahner et al., 2012). Hayes et.al. (2015) note that in these continuing education cases, SM allows the opportunity to cross geographical borders thereby allowing real-time access to global experts.

Moran et.al. (2011) researched the use of SM in higher education. Facebook and YouTube were the top two SM used. They found that almost 67% of higher education teachers have used SM in class and 30% have used it out of the class for teaching and learning. Professional faculty used SM in order of social, professional and then educational purposes in that study. They identified two pressing concerns amongst others; one that 80% of teachers were concerned about the integrity of student submissions and two 70% of teachers were worried about privacy. Notwithstanding these concerns over 60% of the teachers still supported SM use as a valuable tool for collaborative learning. Over 70% of teachers supported the use of video, podcasts, blogs and wikis as valuable tools for teaching.

2.2.7 Advantages and disadvantages Social Media

Life wire (Lifewire, 2018) describes the advantages and disadvantages of social networking in ample detail. Some advantages of SM are that it connects people, promotes socializing and has the benefit of instant communication. Some disadvantages are privacy issues, online peer pressure, cyberbullying, cyberstalking, distraction and supporting a sedentary lifestyle. Green & Hannon (2007) add predatory behaviour as a further risk which can also compound matters. Cultural awareness is also relative where what is acceptable for some may not be for others. Personcentredtech.com (Huggins, 2020) describes some of the professional concerns of regarding SM use for practicing therapists. They include oversharing of client information, messy email and texting boundaries, and inadvertent patient identification. They also provide some basic methods to reduce risk.

An interesting paradox is Social media privacy (Barret -Maitland, N. Lynch, 2019). By its very nature and function, SM is meant to break down the barriers that inhibit social interaction and transcend boundaries that limit social connections. This is an antithesis to the concept of privacy hence the paradox. SM erodes the boundaries of privacy, Selwyn (2009) quotes Davies and Merchant, from their 2007 work, where they say that SM is like “private lives in public spaces”.

Generally, there are weak security measures to ensure privacy in most applications. Furthermore, failing to establish adequate privacy settings on your personal/private sites can lead to loss of your control of information/material that has been published. Once published, it is potentially there forever, even if your privacy settings are such that access is limited. The privacy policy of a social media site can also easily change without the individual’s knowledge. However ethical behaviour can go a long way to promote and preserve privacy.

Many social networking technologies can create a false sense of anonymity. Inappropriate behaviour by users generally arises from the imagined anonymity when seated in front of a computer. Web socialising in particular encourages high levels of familiarity which may result in the blurring of professional boundaries. Some other pitfalls are misrepresentation, defamation, loss of personal vs professional boundaries, not following institutional professional guidelines, not acknowledging Intellectual property rights,

blurring of private vs public vs organizational boundaries, lack of responsibility and accountability for online actions.

'We are social' (Kemp, 2020) has coined a new word for the first W in the World Wide Web and are now calling it the "Worried" Wide Web. They have made this play on words because their data shows that 64% of internet users have cited privacy as "an important issue". They are significantly concerned about confidentiality and how their data is being used by others. Breaching confidentiality can take place through many formats and sometimes users may not know or may not be aware that they are in violation. Sobaih et. al. (2016) states that users can breach of copyright law through the unlicensed downloading and use of material from the internet. Other issues that are brought to the fore in an earlier article (Henderson, Johnson, & Auld, 2013), discuss the use of data, whose data is it, what privacy is, what is private and what the present and future consequences are. These are interesting themes which have very unclear answers, and therefore they state that SM use has "to draw on a broader and less defined ethical" framework and guideline.

There are many professional guides for medical professionals and these may also inform paramedic practice. Paramedic students will be exposed to the professional use of SM when they perform their clinical practicum training in the field. This exposure will also influence their behaviour when they return to the educational setting. Chretien & Kind (2013a) provided a framework for physician SM interaction that apply to all medical professionals and medical students. In the course of these interactions on SM there are

multiple pathways through which sensitive information may be exposed. The advantages of SM use in medical education include improved; knowledge and skills, medical student engagement and collaboration (Curtis & Gillen, 2017) whilst some of the disadvantages were variable participation, technical issues, privacy issues and security concerns. These advantages and disadvantages are transferrable to the paramedic education setting, especially to the students. There is also the fact that medical professionals are still considered as doctors, nurses or paramedics etc. even when they are not on duty (British Medical Association, 2013). This is part of the social contract theory where society at large has certain expectations of people in these professions. Paramedics and by extension paramedic students are also held to these standards. Paramedic students will face these expectations when they engage with external bodies and when in clinical practicum thus as clinical students they will carry the burden of these professional-level expectations.

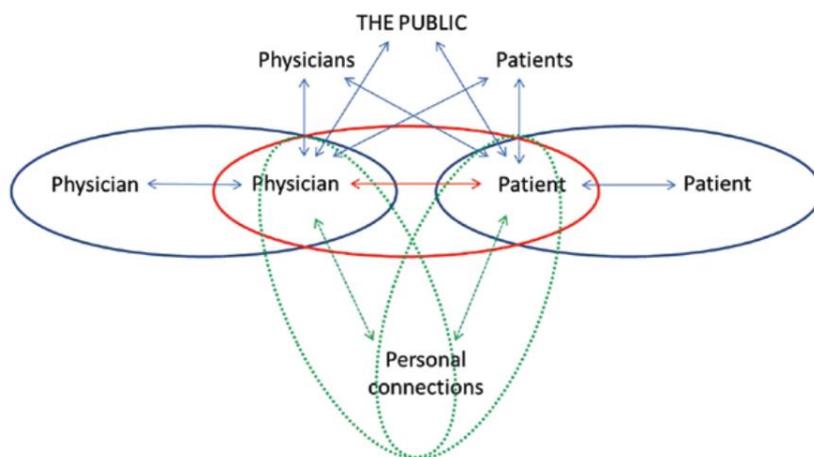


Figure 3. Physician Social Media Interactions (Chretien & Kind, 2013)

The American Nurses Association (ANA) reports that 60% of nurses engage in social networking. They state the benefits like networking, building relationships, discussion of education, disseminating best practices and research and educating the general public on nursing matters. They state the risks as breaching of patient privacy, compromising the public's trust of nurses, potential to undermine nurse's careers and information can "take on a life of its own" (American Nursing Association, 2011). The ANA has a set of principles for SM and Paramedic associations should also have a similar guide as this will also influence student behaviour and educator behaviour in clinical practicum and CME.

Nurses have to be aware of the Health Insurance Portability and Accountability Act (HIPAA)," (Ek, 2018) which guides healthcare providers to protect their patient's confidentiality and health data on terms of social media. Nurses cannot post patient identifiable information as even a picture or story could lead to a HIPAA violation. A HIPAA violation could lead to high fines, possible loss of the nurse's job and possible deregistration from the official nursing register. Paramedic students and educators need to take heed in the clinical practicum environment and also when doing CME.

Many social networking technologies can create a false sense of anonymity. Online socialising in social networking sites promotes great levels of familiarity and this has the effect where professional and personal boundaries may become blurred. Failing to establish adequate privacy settings on your personal/private sites can lead to loss of your control of information/material that has been published. Once published, it is

theoretically there for eternity. Information can still be accessed even if you control the privacy settings on your SM to limit access. The privacy rules, regulations and policies of social media sites and applications are easily changed and a person may not even be aware of the changes.

In the education sector, risks include allegations of teacher misconduct which may involve; inappropriate contact with students or inappropriate conduct outside of school hours, unauthorised sharing of official information with students, disclosing the personal circumstances of another student, Inadequate supervision of students online and access to inappropriate material.

Brady, McLeod & Young (2015) investigated SM in social work education and state that many educators are hesitant to use SM in the classroom due to the lack of available ethical guidelines. Teachers also complain of loss of control and monitoring of the education process (Sobaih et al., 2016). Another aspect of cyberbullying is taking place where educators are being bullied online by students and also by parents (Burns, Fogelgarn, & Billett, 2020).

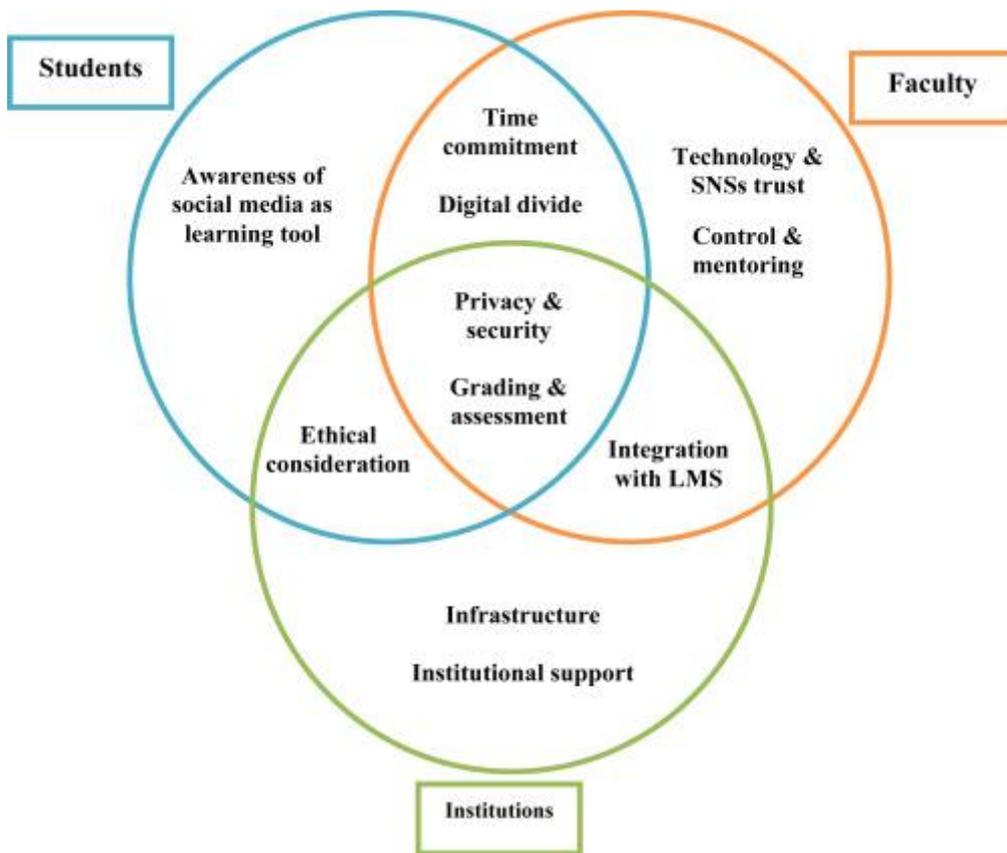


Figure 4 Barriers to use of Social Media for academic purposes (Sobaih et al., 2016)

2.3 Paramedic Education

The paramedic health care provider is a relatively new professional in the medical and health sciences field (I. A. Brooks, Cooke, Spencer, & Archer, 2016). The first instance of prehospital transport is mentioned as 1485, which went on to army medics in the first and second world war to basic trained ambulance drivers in the 1950s to professional prehospital providers emerging in the late 1980s (Caroline, 2010). The paramedic profession has its roots in the surgical department of medicine. This is due to the fact that in the early day's paramedics primarily treated trauma patients at accident scenes (Metz, 1981) and transported them to the hospital where they were eventually seen by the

surgical team. The trauma surgeons realized that many lives could be saved by standardizing and implementing some basic first aid measures. To this day the American Academy of Orthopaedic Surgeons still plays a large role in the paramedic profession primarily by the establishment of a paramedic resource platform and a range of textbooks that have become the foundation in North American paramedic education. The paramedic vocation gradually moved on to become established in city health services (Corman, 2014), the need for their services grew, and the type of service they provided changed from a transport unit to a sophisticated prehospital emergency care system (Blaber & Craggs, 2008). Consequently, the education requirements changed as well.

Paramedic education is a relatively new and burgeoning field in health sciences education. The international EMS education fraternity has moved from humble beginnings of short course training and now Paramedic education is advancing at a rapid rate. The forerunner of professional paramedic education was the vocational training certificate which was only formalized in the United Kingdom in 1966 (National Audit Office, 1999) in early 1970s, and, in the United States of America (National Registry of Emergency Medical Technicians, 2020). It now includes postgraduate offerings with 136 Paramedics from 21 countries holding a Doctor of Philosophy title (Paramedic PhD, 2020). The master's in paramedic practice field is a lot more accessible nowadays with the first official doctorate program specifically in paramedic practice being formalised in the last 15 years. Prior to that most paramedics studied for their doctorates in related disciplines such as emergency medicine and education etc. Paramedic education generally has a

healthy balance between knowledge, skills and competencies. The classroom is supported by laboratory practice and clinical practicum in the field. Paramedic education encompasses large group didactic delivery (didactic and online MOOC type – due to COVID 19), small multi-group practical task training (laboratory) and single students who are geographically widely spread out (Clinical Practicum). Mass communication and collaboration are paramount.

The preeminent PE systems are in the USA, Europe – predominantly the UK, South Africa, Australia and Canada. The UAE is leading the way in paramedic education in the Middle East North Africa region. The UAE boasts a multitude of higher education institutions, colleges and vocational training centres which offer paramedic bachelor degrees to short-course vocational certificates and even professional micro-credentials.

Medical education has progressed significantly worldwide from the early days. Many drivers pushed for change and evolution in medical education, and none the more so than the incidence of medical error (Reason, 1990). Technology is advancing rapidly and has been one of the major pull factors in this evolution. Technology brought about massive changes in paramedic education. Birt et.al. (Birt, Moore, & Cowling, 2017) cite many articles that show the transition from face to face to online learning and consequently self-directed learning due to technology. The students have also changed the ways in which they seek out and share information and knowledge. Students can now find information and answers without necessarily asking the teacher. The teacher is no longer the fountain

from which springs forth all knowledge but is rather the facilitator of knowledge transfer. Thus the roles of the teacher have changed from the traditional model and are constantly evolving.

The mobile device and its various applications have totally disrupted education especially the learning process. The advent of mobile phones has significantly changed the way in which hardware is used in education technology. The BOYD acronym stands for Bring Your Own Device. BOYD has rapidly shifted from laptop to tablet to mobile in paramedic education. Paramedic (pre-hospital emergency medical care providers) students were happy with online learning using a mobile according to Alrazeeni et.al. (2016).

Computer labs have given way to the BOYD methodology. Group emails and limited attachment size has been superseded by SM which allows for large data size content and rapid collaborative content sharing. Online storage platforms such as OneDrive, Google Drive and Box have also impacted and large storage capacity is no longer required. SM platforms have the same ability to store content as accounts are generally backed up and searchable. Furthermore, SM allows for rapid transfer of content to open or closed groups. There is a definite need to separate SM from other technology tools that are used in paramedic education.

2.4. Ethics

2.4.1 Introduction

The word 'ethos' is from the Greek language and means a custom or habit. This word is the basis for the word 'ethics'. The written history of ethics can be traced back to Socrates at approximately 400BC. Ethics looks at the theory of moral philosophy regarding what is right or wrong, displaying 'appropriate' conduct and how people should respond for the greater good in a given situation. There are many aspects to ethics such as but they generally divide into three major areas ("Internet Encyclopaedia of Philosophy," 2020) and further subdivide from there. The three major areas are Meta-ethics, normative ethics and applied ethics.

2.4.2 Application of Ethics

Meta-ethics delves into the philosophy of morals and values trying to understand and explain the discrete and the abstract. The two major views, without trying to oversimplify, "otherworldly" proposes that morals exist independently of humans whilst "this-worldly" argues that moral values are subjectively created by the human experience.

Normative ethics, also known as descriptive ethics, deals with what is good versus bad or is right versus wrong conduct. It is involved with the development of principles that guide people's actions to become norms. A typical example is 'do unto others as you want others to do unto you'. Normative ethics has three main branches known as

consequentialism, deontology and virtue ethics. Virtue Ethics deals with cultivating good virtues and eliminating vices (opposite of virtue), e.g. bravery and cowardice respectively, which will develop 'good' character that will enable one to make the right decisions and take the correct actions. Many philosophers have proposed different virtues and defended their cases over time.

Deontology deals with duty, from the Greek word Deon, and obligatory principles (L. Brooks & Atkinson, 2008) place upon the human being for example the duty to care for one's children. It is sometimes referred to as non-consequentialist ethics as we have to care for them even if at times when it may be detrimental to the parent. The first category covers duty to God, duty to ourselves and duty to others. The second category is the rights (and reciprocal duty) category. Using the example of speech, every individual has the right to freedom of speech but also a duty not to offend others with this speech. The third category is Emanuel Kant's categorical imperative. The fourth category is a list of prima facie duties from W.D. Ross ("Internet Encyclopaedia of Philosophy," 2020):

- *Fidelity*: the duty to keep promises
- *Reparation*: the duty to compensate others when we harm them
- *Gratitude*: the duty to thank those who help us
- *Justice*: the duty to recognize merit
- *Beneficence*: the duty to improve the conditions of others
- *Self-improvement*: the duty to improve our virtue and intelligence
- *Non-maleficence*: the duty to not injure others"

In Consequentialism the morality of an action is determined by the end-result hence it is sometimes referred to as teleological from the Greek word telos meaning end (“Internet Encyclopaedia of Philosophy,” 2020). The correctness of an action in a moral sense would depend on the actions bringing about a good outcome. So consequentialist theories consider it too complex to understand all the preceding actions; like exactly who was did right or wrong, how they did that, what went wrong and condones the bad actions due to the good outcome (L. Brooks & Atkinson, 2008). There are many sub-theories within the branch of consequential ethics with some of the more well-known theories being utilitarianism (the greater good for everyone), egoism (greater good for the Self) and altruism (greater good for others as opposed to the self). There is also the concept of negative consequentialism. Negative consequentialism focuses on minimising bad outcomes as opposed to promoting good outcomes. Thus in the Negative consequentialism construct the morally correct action will produce an outcome that has limited bad effects and not necessarily a good effect.

Applied ethics revolves around the morals and values applied to specific controversial cases but which generally impacts a large proportion of society e.g. abortion. Applied ethics cases can be classified by grouping them according to certain common characteristics, e.g. business ethics, environmental ethics and biomedical ethics etc. Generally the principles from normative ethics are applied to the cases hence applied ethics.

2.4.3 Ethics in the Medical / Paramedical Profession

The Hippocratic Oath is one of the earliest and most well-known guidelines in medicine. There are many texts that deal with medical ethics, however the guidelines for the medical ethics of the past 50 or so years are grounded on Beauchamp and Childress's four principles of ethics; Respect for autonomy, Non-maleficence, Beneficence & Justice (Beauchamp & James F. Childress, 2001). The ethics grid (1998) developed by Dr David Seedhouse helps to explain the complex levels of ethics in the health system. The British Medical Association (British Medical Association, 2011) has set out an ethical guide for medical students and doctors in practice. They discuss many issues that are generic but apply them specifically to the medical field because of the heightened sensitivity around patient confidentiality. There is a difference between healthcare system ethics, bioethics and medical ethics (Seedhouse, 1997) and, by extension, to professional paramedic ethics.

MacDonald, Sohn and Ellis (2010) allude to four ethical challenges viz. : "boundary issues in the patient-physician relationship, privacy and confidentiality, implications of the nature and scope of information available online, and physicians' self-presentation online". Medical students are susceptible to the same challenges. Medical Students are unclear about how to follow SM guidelines from the professional association (British Medical Association, 2011). Cheston, et. al. (Cheston et al., 2013) reported from Shore et. al. that the most concerning issues on medical student SM profiles were evidence of excessive consumption of alcohol, violation of patient privacy and confidentiality, the use of potentially offensive language, nudity, illegal behaviour and association with groups that

may have political, religious or offensive content". Anson Au (Au, 2017) uses a case study to illustrate the deficiency of policy and prescripts for the ethical use of SM by doctors in private practice. In this case a social media presence, cultivated by the medical doctor, led to innocuous postings from the patient's compliments escalated to posting about individual patient's medical conditions without revealing their names. The inappropriate ethical decisions in the case were compounded by the lack of recognized SM ethics training in medical education and clinical practice.

Paramedics pledge professional allegiance to moral conduct and ethical behaviour via a paramedic oath which is similar to the Hippocratic Oath. Beauchamp and Childress's four principles of Respect for autonomy, Non-maleficence, Beneficence & Justice also form the foundation of the paramedic approach to ethical practice. Most of the guidance for paramedic SM ethics is extrapolated from the standards operating protocols of the local entity that primarily are in place for paramedic clinical practice. The National Association of Emergency Medical Technicians (NAEMT, 2020) have this statement pertaining to SM in their ethic code "To use social media in a responsible and professional manner that does not discredit, dishonour, or embarrass an EMS organization, co-workers, other health care practitioners, patients, individuals or the community at large". Factors affecting a paramedic student's personal ethical stance may include, community values, religious background, school education, formal ethics training and informal adoption of societal norms. The paramedic students' overall ethical attitude has a high potential to

be significantly influenced during academic life by formal ethics training and the ethical principles of the medical profession.

The paramedic's moral code of ethics may be subjected to an inordinate amount of subjectivity due to the nature of the job as they face the prehospital ethical dilemmas on their own without any direct support from other sources. This is in stark contrast to the hospital setting where the patient has a healthcare team, nurses, doctors, therapists, bioethics specialists, psychiatrists, chaplain services and family support staff, whom all contribute to the ethical process and share the burden of ethical decision making. Paramedics are more exposed to non-routine ethical matters such as issues of implied consent, professional-personal confidentiality, and termination of pregnancy, end of life issues and application of different medico-legal frameworks (Torabi, Borhani, Abbaszadeh, & Atashzadeh-Shoorideh, 2018). Paramedics also face other; professional, patient-based, and relationship conflicts (Sandman & Nordmark, 2006) which are unique to their job. The central idiom is the best interests of the patient which is conflicted by values from the patient (right to self-determination, paramedics professional versus professional ethics and influence of family, significant others and bystanders. This is further impacted by professional-personal identity, the influence of other healthcare professionals (Jiménez-Herrera & Axelsson, 2015), organization inputs and societal values. The paramedics in clinical practice in the prehospital setting are exposed to many dynamic influences that constantly tests their ethical limits

Paramedics may not be able to respond consistently and equally, in all situations, due to the very nature of the job and the difficult circumstances it presents. Paramedics often work in high-pressure prehospital emergency settings, e.g. at the scene of a motor vehicle accident on a busy motorway, which are highly uncontrolled environments as opposed to the relatively safe and controlled hospital setting (Torabi, Borhani, Abbaszadeh, & Atashzadeh-Shoorideh, 2019).

Working in uncontrolled environments can sometimes cause ethical responses to be made under great duress. Ethical decision making becomes very complex in emergency settings (Jiménez-Herrera & Axelsson, 2015) and creates inter-professional conflict. This has the potential to produce inconsistent ethical decisions and therefore Standardized Ethics guidelines (Armstrong et al., 2017) have a very important role in paramedic practice. Many of the ethics research in paramedic practice has been done on the issue of consent to treatment (Armstrong, Langlois, Siriwardena, & Quinn, 2019) to the detriment of other important areas of ethics concern.

Paramedics, like other professionals, are also active on social media in various capacities. They do however work in high-pressure environments in the public eye. Consequently, it is much easier to make a 'mistake' and post something on SM, when they are under pressure, and later regret the post. This increases the probability of paramedics inadvertently sharing on the job content, on SM platforms, which can leak out of the professional circle.

2.4.4 Social Media Ethics in education

The guidelines for the Use of Social Media in Online education (Department of Education Western Australia, 2020) for students incur various risks including access to inappropriate or restricted materials, commercial exploitation of students while on the internet through advertising, breach of copyright law through the unlicensed downloading and use of material from the internet.

The best practice for the use of SM in paramedic education may be to set expectations at the beginning and maintain the principles. This will help students to avoid falling into unethical situations. Curate a responsible SM image from the outset as this affects their employment opportunities and can carry on into their professional lives. Paramedic education involves clinical practicum which entails working in the industry with other professionals and dealing directly with patients. So paramedic students need to be cognizant of professional SM ethics from the outset.

2.5. Theory & Theoretical Frameworks related to Social Media in education

2.5.1. Introduction

Theoretical frameworks are underpinned by dominant well-accepted theories. Theory as defined by Kerlinger (Kerlinger, 1986) is a “set of interrelated concepts, definitions and propositions that present a systematic view of phenomena by specifying relations among variables with the purposes of explaining and predicting phenomena”. De Vos. et. al. (De Vos, Delport, Fouche, & Strydom, 2011) state that unfortunately there are few theories

that meet all of these criteria and it is difficult to find theories that apply. The break theories down into three categories, viz. grand theories, mid-range theories and low-level theories. Grand theories are widely accepted however finding a theory that is a tight fit for a specific study is part of the researcher's challenge. There is more than one 'grand' theory that overlaps in this dissertation but not all of them will have a direct significant bearing on the research objectives and methods. The first and dominant theory seems to be that of the social contract. The second theory is power relations theory.

2.5.2. Theories related to Social Media

The Social Contract Theory (SCT) is relevant to SM as it is meant for a social purpose and there are certain societal expectations in terms of actions and behaviour. The proponents of contemporary SCT argue that free and equal individuals of a particular determination will come together to form a specific society. Each will give up some of the individual interests to the collective whilst assuming some of the collective interests. Thus the individual's rights are transferred into the collective with the expectation that it will be equally returned (Mouritz, 2010).

The power relations theory (PRT) is based on the power that is exerted by: the institution on educator; institution on students; educator on students and to lesser extent students on the educator. With control and authority comes the concept of power. The intersection of SCT and power is contrasted, in three different writings which are summarized, in *Theories of Power*, (Clegg & Haugaard, 2000) where Foucault's treatise

on power is expanded around the Hobbe, Locke and Rousseau themes. It becomes clear that power relations are abundantly complex and it is not easy to determine where power may be exerted. Who has the power and the extent of that power is a quintessential element of the SCT. The relationships between entities of power lead to power dependence (Emerson, 1962). An archetypal contemporary scenario in education is that educators have power over the students, the school management has power over the educator, the parent governing body has power over the school management and finally, the students exert power on their parents. So the conundrum is: who has the power, what type of power is it, to what extent is the power applied and on who is the power exerted?

Coming back to the current scenario there is a lack of specific ethical guidelines for SM use in paramedic education. In the current context, there are the features of power relations theory and the constituents of SCT. There are significant pressures from institutions on educators to use technology, whilst there is pressure from students on the educator to use modern and contemporary means such as SM and portable devices to enhance their collaboration.

2.5.3. SM Theoretical Frameworks

Ngai (Eric W.T. Ngai, Spencer S.C. Taa, 2015) investigated the various theories and constructs used in social media research. They found that approximately 15 models or frameworks were applied to studies that were within their set parameters for their research. These models and theories constituted three broad themes viz; social

behaviour, personal behaviour and mass communication. They noticed, within the ambit of their study, that there was a major focus on user attributes and a limited focus on organization attributes. This current dissertation of SM ethics has directed a very basic inquiry into the social media ethics of educational organisations.

2.5.4. Theoretical Lens for this dissertation

This research activity uses the Social Media Technology Policy Framework (SMTPF) based on the work of Brady et. al. (2015) as the theoretical lens to view the problem, search for information and collect data. Brady et. al. developed this as an ethical framework to investigate the development of SM policies in social work education. In this case, the original Competing Values Framework (CVF) for policy analysis has been adapted to display the student, instructor, education institution and the Professional dimension and the possible barriers and enablers thereto. The broad theme in each dimension of the (SMTPF) is the perspectives and values that are exerted, by the actors of each dimension, on the use of SM in education. The implementation of SM tools in paramedic education will also need to satisfy competing values of the curriculum, educational aims, learning outcomes, pedagogy, student learning profiles and associated technological considerations. This frames the dissertation as we are trying to find out how the different domains influence the ethical dimension when using SM in paramedic education.

Each of these domains has its own set of values and principles which may differ in some aspects as compared to the other dimensions. The boundaries of each dimension overlap

based on the level of interaction and values may complement each other or clash. Brady et.al.(2015) cite Cramer & Brady (2013) who theorize that competing values can exert pressure on the interactions between actors in the different dimensions thereby causing difficulties in the relationship and hampering progression. They elaborate on these tensions and competing interests and state that is at one of the highest levels when social media is involved. They describe the social work educator's need to use SM to promote social work competing against the social work educator's need to protect the students' privacy and confidentiality as one of the competing values.

The student dimension will be introduced by using the example of the SM values of a student and his educational institution. The student has his own intrinsic values which translate into ethical principles and this informs his ethical decision making and eventually his action. Sometimes when the student has to make a decision the student will find that his values and or principles may compete with the existing set of values or principles from the institution. There does not have to be a wrong and right circumstance just competing interests. The student now has different ethical values competing with each other in his decision-making process which has the ability to create a strain or disrupt the way in which he and the institution interact. Students need to determine their own personal versus their academic SM boundaries. They have to navigate the plethora of SM technologies to distinguish between personal, professional and academic SM tools. The student must balance institutional guidance with educator preferences and personal expectations to optimise the SM tools used for educational activities.

The paramedic educator falls in the Instructor Dimension and they have multiple competing values that affect their attitudes and impact their actions. The instructor in paramedic education is still a focal point for the student. Emergency medical care cannot be learned in textbooks alone, there are also the strong elements of practical skills and competencies. The paramedic educator borrows a lot from his clinical experience to enhance the student's academic development. The paramedic educator's SM values will be shaped by the professional dimension (paramedic and education), their clinical experience, the institution's requirements, student behaviour and their own personal SM preferences and competencies. Brady et. al (2015) state that educators must regularly reflect on the above mentioned, and other values that may apply, to provide the SM educational tool in the optimal and most appropriate manner for students within the institutional framework.

The institution is a complex dimension that generally revolves around the policies, procedures and systems. Institutions are also externally influenced by competing values from institutional licensure, accreditation and education bodies as well as national ministries. In some circumstances, institutional procedures are often binding upon the educator and the student. These are generally seen to discourage or restrict the use of SM tools in the classroom or institutional environment (Reamer, 2013). Other institutions have flexible policies and promote the use of educational SM tools and encourage responsible SM activities. Systems issues such as educational technology departments, administrative platforms and learning management systems also play a major role in

enabling or discouraging the application of SM. Quite often SM tools are abandoned because they cannot interface with the learning management system.

The Last dimension in the SMTPF is the professional dimension, in this case, the medical and paramedical professional associations and regulatory bodies. Sometimes professional associations are international, the law is national and the policy is local and therefore SM guidance may be ever so slightly different. Prescripts from the Ministry of Health and other government ministries place the use of SM under the ambit of specific and also indirect regulations. This may conflict with the guidance from a professional association and thus create competing values. Values that are encapsulated in the professional dimension impact the paramedic student from the outset because the student is exposed to the professional identity and culture in the clinical practicum phase of their education programme.

Table 1: An Ethical Framework for Consideration when Developing Social Media Policies in Social Work Education

	Instructor Dimension	Student Dimension	Institutional Dimension	Professional Dimension
Dimension Defined	Values and perspectives held by social work instructors about social media, technology, and teaching/learning that may promote or hinder the implementation of social media use in the classroom.	Values and perspectives held by social work students related to social technologies, boundaries, education, and learning style that may promote or hinder acceptance of social media use in the classroom to varying degrees.	Values, policies, organizational culture, and capacity of organizations, schools, departments, and institutions related to social media technology use in the classroom.	Values and ethics related to professional social work and social work education (NASW, CSWE) that could be promoted or threatened through using social media in the classroom.
Competing Values	Innovation vs. Resistance to change	Expanded learning milieu vs. Role confusion	Risk management vs. Student engagement	Duty to protect vs. self-determination; social justice vs. obeying policies; Confidentiality and perceived privacy vs. Importance of human relationships Respect of student autonomy vs. Access to learning opportunities
Guiding Questions	<ol style="list-style-type: none"> 1. How do you feel about using social media in the classroom? 2. What is your own comfort level with various social media technologies? 3. In what ways do you see yourself using social media in your classes, for what purpose, and with what anticipated learning outcomes for students? 4. What concerns do you have about using social media technologies in social work classes? 5. Are your concerns applicable to the digital world and common practices in communications there? 	<ol style="list-style-type: none"> 1. What is your personal comfort level with social media technologies? 2. How do you, if at all, make use of various types of social media technology in your own life? 3. What has been your experience with using social media in educational settings? 4. What concerns do you have, if any, about having social media used in a social work class? 5. Have you ever used or thought about using social media technology in the context of professional social work, if so, how do you envision using it? 	<ol style="list-style-type: none"> 1. Does your institution, school, or department have formal policies related to social media/technology use in the classroom? 2. What is the institutional culture like in regards to social media use in the classroom? How do your colleagues and administrators seem to feel about social media use in the classroom? 3. How much of the curriculum for each class and overall is pre-determined or mandated by the school (How much freedom do you as an instructor have to revise, change, and create assignments)? 4. How much does your institution use social media technology? 	<ol style="list-style-type: none"> 1. How might some uses of social media technology in social work courses potentially violate social work ethics/policy? 2. How do you see social media technologies in social work classes helping to prepare professional social workers? 3. What professional social work values could be in conflict with one another in a social media classroom policy? 4. How might you negotiate or resolve these potential conflicts between professional values in order to create a useful and ethical policy for using social media in the classroom?

Table 1 The Social Media Technology Policy Framework (SMTPF) (Brady, et al., 2015)

3. Chapter 3 Research Methodology

3.1.1 Introduction

This dissertation aims to describe the ethical considerations for the use of SM in paramedic education in the UAE. The dissertation does not seek causality but, rather intends to elicit experiences and attitudes toward SM use in education. The dissertation is descriptive and exploratory in nature. The overarching design in this dissertation is based on the INTERPRETIVIST-positivist paradigm, using a case study strategy for inquiry whilst employing a mixed-method approach to data collection and analysis. The first phase of data collection is conducted with the Paramedic educator using semi-structured interviews. The second phase of data collection is conducted with paramedic students using a descriptive, non-experimental cross-sectional survey method.

3.1.2 Research Philosophy

This dissertation will be conducted in Roy Baskar's Critical Realism paradigm as described by Lucy Gilson (2012) which lies between positivism and relativism. Positivism views phenomena as independent of the human experience and perception and determines cause and effect through hypotheses testing. Relativism is based on the premise that phenomena are not independent of the human factor, rather the human factor influences the phenomena. It seeks to understand this construct instead of explaining cause and effect. It accepts that phenomena can exist independently but also allows for the influence of human factors on the phenomena. Critical realism lies in between these two epistemological views and a detailed expository is beyond the scope of this dissertation.

3.1.3 Research Design

The purpose of this dissertation is to explore the baseline application of SM as an educational tool, and associated ethical perceptions, amongst paramedic educators and paramedic students in paramedic education, within the United Arab Emirates. The mixed-method approach has been selected for this dissertation as combining the strengths of each method is recommended for complex social science research (Creswell, 2003). There are two dimensions namely teaching and learning so this implies the educator and the students. There are two populations of interest and correspondingly two units of analysis specifically the paramedic educator interviews and the paramedic students' survey. This is a descriptive not experimental study and therefore there are no interventions and the researcher's direct involvement is mainly centred on the data collection for the interviews, which is minimal. The study timeline is 12 months which includes the required clearances, institutional permissions, pilot studies, multiple data collection phases, questionnaire development and the final write-up.

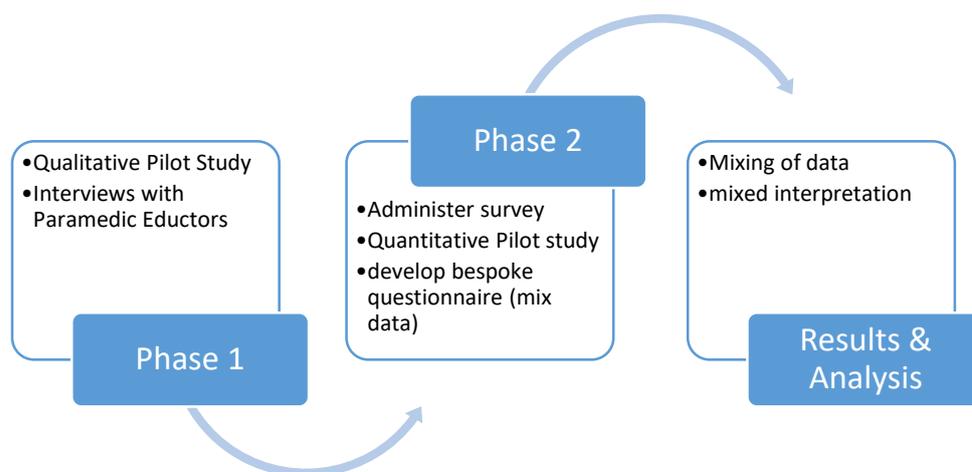


Figure 5 The research design & flow

3.2.1 Research Approach

Mixed Methods Research (MMR) combines both the qualitative and quantitative approaches in one study. MMR is a developing research strategy that is gaining significant traction as opposed to the traditional qualitative or quantitative single method. It is important to make a distinction at this point between multi-method research and MMR. Multi-Method as the name suggests is to use more than one method but usually in one paradigmatic approach, either quantitative or qualitative. Sometimes there has been confusion about how these terms have been applied. But the current convention is that MMR uses both approaches and multi-method uses one approach. This dissertation employed a mixed-methods design as opposed to a multi-method approach.

The research design is based on an exploratory mixed-method design. It is structured to start with the qualitative phase of data collection and then proceed to the quantitative stage. This approach is intended to gather relevant information in the qualitative phase and then use that information to construct the quantitative data collection instrument. This dissertation uses the QUAL-quan MMR denomination (Morse, 1991). This "QUAL" implies that the qualitative approach is slightly more dominant. The qualitative data collection precedes the quantitative data collection which is sequential symbolized by →. This is a sequential exploratory design (De Vos et al., 2011) with a view to exploration and description as opposed to identifying causality and explaining in the explanatory quan→qual design or the concurrent quan+qual design.

There main reasons for this in this dissertation is actually mixing the approaches for triangulation rather than just use extra methods for triangulation. The main reason for mixing data was to facilitate the creation of a bespoke questionnaire. In this instance, mixing took place in phase two of the data collection process i.e. the construction of the questionnaire. This mixing of data informs and significantly strengthens construct validity. Thus looking at the construct of how SM is applied led to the determination of the time, platforms and purpose factors. Factor and item validity were also enhanced as in the example of SM purpose factor. Here it was further broken down into communication, collaboration, content transmission and other items which were informed by the qualitative phase. Secondly, data was mixed in the analysis stage to provide a holistic and summative view of the findings in relation to the overarching problem statement.

Triangulation has advantages and disadvantages. There four key benefits of triangulation in this dissertation. Measurements are taken from more than one viewpoint which has the potential to increase the accuracy of measurement (Braun, Clarke, Hayfield, & Terry, 2019). Secondly, it strengthens the validity and reliability of data collection and analysis. It is used as a form of methodological output triangulation (Cohen, Manion, & Morrison, 2007) such that it may strengthen the research output and create more confidence in the results. Additionally, the triangulation also assists in deepening the researchers understanding of the context and phenomena (Thurmond, 2001)

3.2.2 Role of the researcher

The researcher's role in this study is limited to data analysis and interpretation as this is an exploratory descriptive study. The researcher was not trying to investigate lived experiences nor conduct observations of phenomena. Rather the researcher was attempting to elicit rich data from the participants' own experiences. Thus a semi-structured approach was taken to allow participants to express themselves and guided questions were asked when appropriate to explore seminal issues when it was not covered.

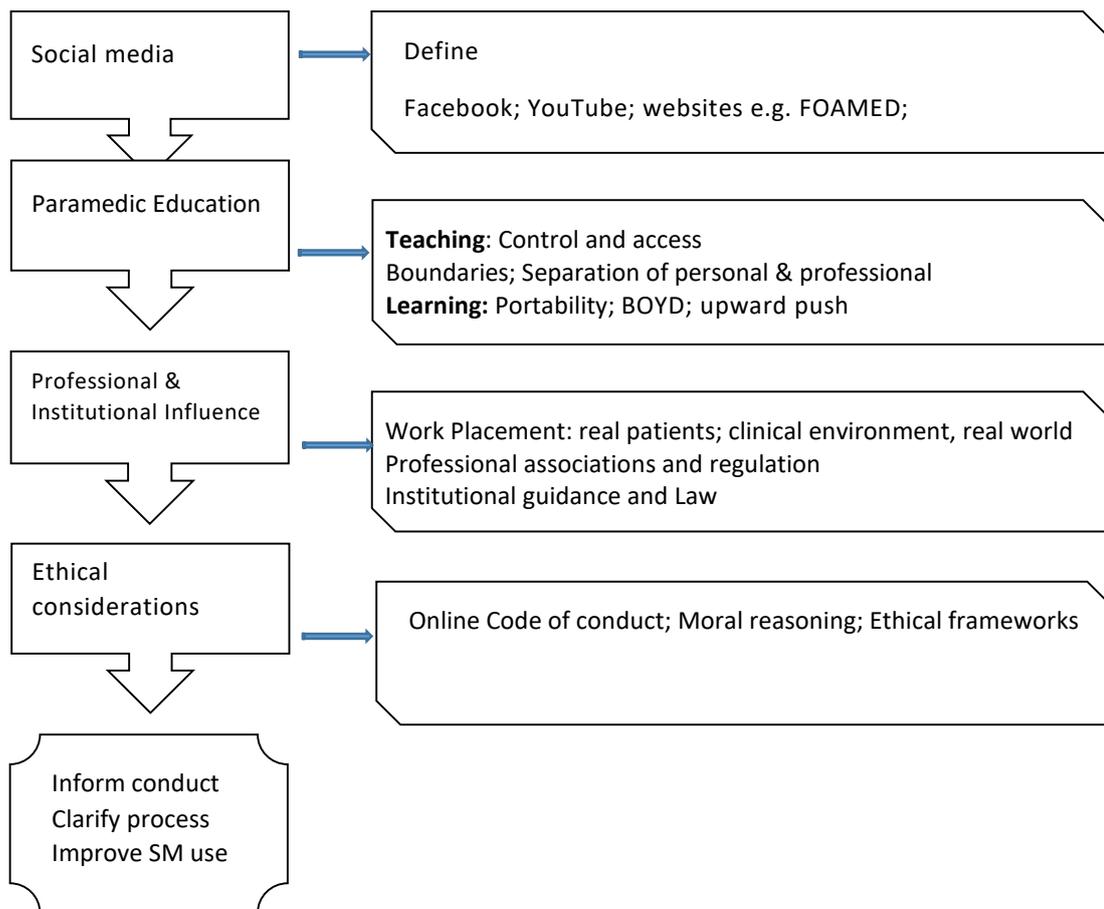


Figure 6 The researcher's Conceptual Framework

The researcher analysed the qualitative data to create the bespoke questionnaire which was then objectively administered and analysed on its own merits. Then the data was mixed in the interpretation stage. There is quite a risk for researcher bias in this dissertation as there is a single researcher who is deeply involved with the data and findings. This risk is mitigated by using data analysis tools like NVIVO in the qualitative aspect and using the statistician in the quantitative phase.

3.2.3 Dissertation Ethics

Ethical considerations for this research will follow conventional research ethics in educational settings. The researchers endeavour to protect the rights and confidentiality of the participants at all times. Data safety and confidentiality will be maintained following institutional provisions. The researcher and assistants will pursue organisational consent and permissions from all relevant stakeholders.

The participant recruitment process sought voluntary participation ,especially with students, to avoid the power relationship between educator and students (Foot & Sanford, 2004). The power relationship that exists between educator and students is not a high consequence in the structure and nature of this dissertation. The researcher will intend to reduce any such effects of the power relationship by using privacy and confidentiality strategies so that neither student nor educators were informed of who is being interviewed or surveyed. The survey method will also assist to reduce any negative effects of the power

relationship as there is no direct contact between educator participants and student participants.

No participant felt compelled nor was anyone coerced into the study at any stage. All participants were asked for consent and were allowed to leave the study at any time if they wished to do so. Informed consent information was embedded in the data collection document in sufficient detail. Participants were assured of the confidentiality of their individual responses and they were also informed that research results and outputs from the research could be published. Specific information and demographic (identifiable) data from participants were strictly confidential and not shared with institutions or educators. Participants were not exposed to any interventions and there was no element of causing physical or psychological harm. Educator participants' will be maintained by using numbers rather names or positions/titles in the reporting documents.

The rules and regulations of the academic institution were applied at all times. The correct process followed through the ethics committee guidelines to obtain ethics approval. An official letter was requested from the administration that was presented to organisations and participants showing that it was a proper and approved study. A low-level ethics clearance process was followed and obtained.

Permission was requested from participating organization to collect data, publish findings and to use the research output derived from the data. Data security and confidentiality will be maintained on a secure stand-alone drive. The confidentiality of the institution is maintained

throughout, as requested, and also not open access to identify student participants as they wish to remain anonymous. There are no financial incentives nor apparent disadvantages in this study. There were no deceptive practices in this study.

Data safety and confidentiality will be maintained following institutional provisions. The researcher and assistants will pursue consent and permissions from all relevant stakeholders. Participants will be assured of the confidentiality of their individual responses however, they will be informed that research results may be supplied to their institutions and that outputs from the research could also be published.

3.3 Phase 1: Qualitative Process - Paramedic Educator Interviews

3.3.1 Phase 1 Method & Data Collection Tool

The case study method is chosen in this phase with the case being paramedic educators who are bounded by a local setting (UAE paramedic education) by the geographical location where they currently work. The paramedic educators should be mainly based in the UAE, however, they can have other interests. Phase one of the dissertation is investigations on the teacher's perspectives are and this phase will use the semi-structured interview format. The interview method will be used to generate rich data with thick descriptions. The interviews will also be based on constructs generated from the literature review. Some biographical data will be captured to enhance the value of information and check for cursory associations. The educator will be prompted using the classical 5W's technique (What, Who, Where, When and Why).

3.3.2 Qualitative Pilot study

There is limited research-based content in the area of ethical considerations for SM in paramedic education. A preliminary inquiry to establish the baseline was required to establish the feasibility and viability of further formal inquiry and further research activity. A brief exploratory excursive narrative was conducted in the early conceptualization phase of this research ambition with the aim of searching for the substance of this topic within a prevailing cohort of students. This activity aimed to conduct an exploratory inquiry to ascertain the students' perceptions on the use of SM as an educational tool, gauge their knowledge of harms and benefits as well as their ethical considerations.

The qualitative method of enquiry was chosen with the view of exploring the current status quo of SM use. The intention was to collect rich data to obtain the big picture and gain a deep understanding of SM by students. The case study approach was used in this activity. The unit of analysis was defined as a module in the higher education institution. The research design selected for this activity was arranged to collect data from the students using semi-structured focus groups taking into account the numbers in the class and the level of study. The students were not aware of the enquiry but informed post facto to maintain an element of a-priori confidentiality. The population (N) started out as the entire module complement in the institution (name not mentioned for confidentiality). There were elements of purposive and convenience sampling in this activity. A further element of convenience was that the data collector had easy access to the students. A meeting was held with the department manager who gave permission to do the activity. The student focus group was conducted in a classroom

using and informal layout. The basic nature of the research activity and the need to detract from the teacher-student repertoire allowed the researcher latitude to dispense with the services of a moderator. The students' permission was requested to record the dialogue and use the data for the activity.

The students reported the use of SM as mainly for social purposes. The commonly used SM platforms that were mentioned are WhatsApp, Snapchat, Instagram, Facebook, Twitter and YouTube. They used SM in the education context mainly for instructive communication and less so for actual learning. There was the mention of YouTube which according to them was mostly educator driven. The use of blogs and professional or open access education was not mentioned at all. Whilst the students were surprised that email could be construed as SM they had no issues or comments on the use of institutional mail and institutional resources. Furthermore, they stated that most students will also change their mobile numbers after they leave university. Generally, the students feel that they are safe when using SM and that they are of the opinion that the UAE SM laws are very protective. They also stated that they can block unwanted followers etc. on SM.

The students' educator was interviewed on a casual, relaxed basis with a view to eliciting baseline information. The educator suggested that there was a need for further research in this area. This was reinforced by the limited scholarly content returned in the literature review. There is definitely a strong need for "some" type of framework or guideline for SM use. Furthermore, there is a need to explore the use of SM, in paramedic education, in a larger

and wider population. It was also suggested that it may be useful to quantify and compare actual and assumed usage patterns and metrics for the use of SM in paramedic education.

The activity showed the ethical use of SM in paramedic education warrants further investigation and that such a study was viable. The activity revealed that there was minimal depth or breadth of information to be gained by conducting interviews or focus groups with the student cohort. This also informed the decision to go with the survey methodology in the main research. Simon (1998) recommends that researchers venture into qualitative pilot activities to test their design and also enhance their interviewing skills whilst at the same time testing the prospective interview logistics and process. Bremer, et. al. (Bremer et al., 2015) conducted qualitative pilot studies in their research on paramedic ethics for similar reasons and it was especially helpful with the logistics of the focus groups as there were different geographical locations with slightly different paramedic systems. This activity also served as a qualitative pilot venture for this dissertation.

3.3.3 Phase 1 Sample

The participant recruitment strategy called for a non-random, purposive sample with an element of convenience. The demographic of paramedic educator in the UAE was very advantageous for this dissertation as we have professionals from around the world. The HAAD recognizes the licensure and education of paramedics from certain countries that are at the forefront of paramedic education. This is reflected in the demographic of the paramedic educator in the UAE. The profile of paramedic educator in the UAE is enhanced

by their previous teaching experience in international settings. They generally have experience as students themselves, as paramedic practitioners and as paramedic educators in various international environments. Thus they as paramedic educators they bring this collective international experience to bear in the course of their teaching.

This dissertation will employ the use of an international paramedic education institution as a comparator. The educator who is actively teaching the cohorts that participated in the student study will be included and the rest will be excluded. The selected participants will be invited to the research process. An exemplar of the interview template will be distributed to the participant after the participant has accepted the invitation and agreed to participate in the interview. This would enable the participants to provide the rich thick data that is required, from an informed perspective. It would also allow for considered responses in complicated aspects and will promote dependability.

3.3.4 Phase 1 Data Collection

The interviews were planned to be conducted at the interviewee's convenience and at a time when the interviewee would be relaxed and comfortable. This was anticipated to be at a mutually agreed venue, preferably away from the participant's workplace. All the interviewees chose off days and times of their convenience. The COVID-19 pandemic and subsequent restrictions ruled out face to face interviews. Correspondingly the interviews were conducted online and using appropriate video conferencing technology. The interviewees chose to be interviewed at home. The technology, software and Wi-Fi

worked well, there were no technical issues and there were no apparent deficits from using the online platform. The interview was recorded to the cloud using the feature on the software program and a voice recording was also taken separately as a back-up. Interviewees gave informed consent for the recording. Ethical considerations for this research followed conventional research ethics in educational settings. Participants were not be coerced into the study and had the choice to exit at appoint. The researcher endeavoured to protect the rights and confidentiality of the participants at all times.

Taking notes during the interview was useful but it is difficult to make notes, listen with attention and make highlights at the same time. One mitigation strategy is to have the interview recorded. This also benefitted the interviewee in case of member checking to enhance credibility. The researcher marked the times of interesting opinion, important quotes and vital information snippets. The voice recording was used further used as a backup where the researcher could refer back to these moments in time and reanalyse the interviewees' tones and inflections, body language etc. which could be suggestive and add to the meaning. The process of transcription is very laborious in qualitative research (Halcomb & Davidson, 2006). Machine transcription is useful and there are many online programs and free to use software that can assist with this process. The researcher chose manual transcription, which was done by a third party, and also manual data analysis. The reasons for this were that the researcher preferred to be closer to the data, the sample was fairly small, the interviews were single person and the interviews were generally not very long. Early transcription was very useful as it allowed for fresh review of the data,

supported the overall process sequence and flowed easily into the development of the questionnaire. Data from the interview subset were analysed separately and then mixed together with data from the survey subset in the discussion section.

Phase one data was collected by voice recording the interviews and transcribing the data to text. Participants were afforded the opportunity to review their responses in the text format. Data analysis will commence once they agree with the text format of their responses. The data was analysed using the traditional qualitative method of coding and thematic aggregation as well as free to use qualitative software.

3.3.5 Phase 1 quality and credibility

Qualitative validity refers to the process of ensuring trustworthiness and is based on Lincoln and Guba's model (1995), and also as discussed by Denzin (2002). It proposes four criteria: credibility, dependability, conformability and transferability.

Credibility: The researcher will attempt to maintain the consistency of the study by using the online ethical framework as the base for discussion. The interviews will be based on constructs generated from the literature review and the framework. Member checking of transcripts as well the summary of post-analysis results will enhance the credibility of the interview data and enhance the overall credibility of the dissertation.

Transferability: The constructs from the literature review and the factors of the ethical framework will be cross-tabulated in a matrix format. This matrix is used to develop, frame and contextualise the questions for the interviews. The interview strategy was peer-reviewed, compared against the pilot test version and revised.

Dependability: The researcher will use external personnel to transcribe the interviews from voice to text as an aid to avoid researcher bias during transcription. The possibility of qualitative analysis software will enhance the coding and thematic aggregation which will contribute to the trustworthiness in the qualitative phase.

Conformability: Mixing of qualitative and quantitative data as well as employment of data from student and educator perspectives formed the basis of data triangulation and also served to strengthen overall findings. The researcher maintained a systematic document collection as described in Polit & Beck (2006) from the qualitative phase which can be available for external audit.

3.3.6 Phase 1 Interview Results

A priori coding is to sort the data into pre-set categories (Schaik et al., 2007) which was used to a certain extent in this dissertation. A priori codes were informed by the dimensions of the SMPTF framework. Most of the themes that were fleshed out from the interviews were allocated according to the a priori code whilst other themes also

emerged inductively, e.g. to use SM in postgraduate study and pedagogical SM training for optimum educational benefit, and were coded as such.

Aggregated themes

Some general themes emerged from the interviews that were common to all interviewees. All proposed that there is a need for SM ethics training. All noted the need for a specific SM ethics guideline in paramedic education. The feasibility and benefit of SM in continuing medical education were noted by all interviewees but the ethical aspects were not that well expounded in this regard. SM was proffered to be very advantageous in clinical practicum as most students were remote to the instructor. Most interviewees stated that it has significant benefits in postgraduate studies and all stated that it should be used in undergraduate studies but more control and guidance are required there. Separate personal and professional boundaries and profiles were a must. Internationally there were contrasting institutional experiences especially around institutional acceptance of SM. SM greatly enhanced ease of access and transcended basic boundaries, some interviewees expanded on this in further detail. Students must be taught how to optimize SM in paramedic education.

Interviewee 1 – UK perspective (Implementer of SM)

The interview highlighted very informative key points for the use of SM in undergraduate paramedic education. The UK University was very supportive of using social media in paramedic teaching and learning. The university supported the students and faculty with policies and regulations to keep within the laws. The university further reminded faculty

and students to abide by the policies of the platforms that they used (e.g. The Facebook rules of Use). That was the first step in the process. The university had a system of monitoring online activities. SM was also trialled for post-graduate Continuing Medical Education (CME) for paramedics. It was very well received and well utilized.

SM stimulates critical thinking “an element of constructivism”

“One way to separate the boundaries is to use different platforms for professional and private use, I use twitter as my platform for professional activities.”

“Some people have Separate professional vs private ethics.”

Interviewee 2 – USA Broad Themes (Experienced with SM)

The interviewee is a seasoned paramedic educator who is currently well established in various educational roles. The interviewee is also well experienced in online teaching and methodology. The flipped classroom approach has worked well with some of the modules at the said America Institution. The institutions have also integrated online technology, SM and electronic learning management systems to optimize the educational experience. Most of the didactic is online with in direct contact time directed towards the skill and preceptorship sections. The interviewee enumerated the advantages and disadvantages of SM in paramedic education with the imperative to have good control.

“Controlling SM is like riding a wild horse, if you can’t control it, it will run away from you”.

Notable points included data analytics from SM, SM use in CME, SM transcends traditional barriers specifically the geographic, economic and social factors.

Interviewee 3 – Local based (uncomfortable with SM)

The interviewee personally does not like social media and prefers not to use it. Noted that the use of WhatsApp is very popular amongst students. Raises the possibility of student accounts being hacked and stated that there are means to restrict access and create closed groups in certain SM, although not fool proof. Ethics training is very important and urgently required as many students say that they know how to ethically use SM but it may be different in practice.

“WhatsApp groups very effective for learning, posting links and group discussions, especially for the clinical practicum stage. Allows students to shine within their study circle. It is also easy to operate and manage.”

Interviewee 4 – South Africa (Active with SM in CME)

Interviewee 4 stated there definitely is a need for ethics training, ethics tools and guidelines on how to evaluate information received. Student posts can cause major damage to themselves, the profession and their institutions. The repercussions of posting personal activities may have moral or ethical implications. Appropriate evidence-based content from SM is acceptable, however, inexperienced students may misinterpret anecdotal information as facts. Some FOAMED types of platforms are opinion not reviewed facts. *“Power balance between educator and student, Inter-educator power relationship and student perception affects student’s use of information where they take the opinion of the educator they prefer over the one they like less.”*

Interviewee 5 – Australia (Lessons Learned with SM)

Enjoys using SM especially after “the lessons were learned”. The trick is to find the right information & resources. Undergraduate students sometimes need “textbook learning” as opposed to learning from other professional’s opinions on SM platforms. *Vital to conduct an orientation to SM & online education. General module content about how to use SM in education include Bot accounts, How to spot fake accounts, filtering False from true information, How to critique information from SM, What to use & not to use and What to do when you see something that is validly promoted on SM but local guideline does not allow you to use. Posts from the past can still hurt you affect your employment. Interviewee’s Maxim on boundaries and identities: “Personal and professional is the same thing.”*

3.4 Phase 2: Quantitative Process – Paramedic Student Survey

Phase two of the data collection used the survey method from the quantitative point of view to generate data from the paramedic student population. The qualitative pilot project discovered that there was minimal additional depth or breadth of information to be gained by conducting interviews or focus groups with the student cohort. This coupled with the need to primarily generate data from a larger number of paramedic students in a shorter time frame reinforced the choice of using the survey method. The survey was used for descriptive statistics, not correlations and causation and therefore it is non-experimental and there are no interventions. The objectives of the research were broken down into specific research questions. The postulate is that students apply SM as educational tools and they are aware of the ethical considerations.

Quantitative Research Questions

Objective 3: To describe how paramedic students use SM as an educational tool, and the extent to which it is applied, in paramedic education.

3.1 How much time and which platforms do paramedic students' use for SM in PE?

3.2 What specific purposes is SM used for in PE?

Objective 4: To determine the paramedic students' awareness of SM challenges and ethical considerations

4.1 Which SM policies are paramedic students' aware of in PE?

4.2 What SM harms and challenges are paramedic students' aware of in PE?

3.4.1 Phase 2 Data Collection Tool

The survey was designed to measure the student's usage patterns for SM, purposes of use and related ethics awareness. Few questionnaire tools deal directly with SM ethics in paramedic education. The information was scarce and therefore the construction of the survey depended largely on the literature review, pilot study and interviews with paramedic educators. This informed the development of the questionnaire in a sequential but iterative manner until the sections were completed. The literature review was used as the baseline which fed into the paramedic educator interviews e.g. Grudz et al. (2018) who identified six factors for educators to use SM effectively in teaching. The cumulative information was summarised to capture the

main points and fed into the survey pilot study focus group. The output from the pilot study was additive to all the information and used to draft the questionnaire.

The first three questions were demographic and question one enquired about the nationality of the participants as the UAE has a diverse populations with people from many different countries. Question four was significant as there was a need to establish frontline clinical exposure, which is an important aspect of paramedic education. A short description of SM was inserted into the survey to clarify the platforms and applications that could be used as educational tools, and also to dispel any confusion, at the outset. Questions 6 to 14 were based briefly on how SM was applied in the education context. Questions 15 to 20 looked at awareness of the different levels of SM policy. The awareness of SM ethics and potential harms 21 to 30. Question 31 checked the student's happiness to use SM and Question 32 was an open text box for additional comments.

Due to the relatively small numbers, the survey will be sent to all students. The students received a bespoke questionnaire in electronic format compiled using Google Forms channelled through the WhatsApp SM platform.

3.4.2 Phase 2 Sample

Convenience sampling which is a nonprobability sampling strategy was chosen for this survey. The researcher purposefully wanted to survey students who were taught by the educators that were part of the interview process. The following inclusion criteria were

used for the recruitment of the student participants in this dissertation. Paramedic students must have been engaged in study at a recognized and accredited training institution. The students must have been registered in that academic study term. All students who were registered for at least one paramedical module were included in the dissertation. It was also preferable that students had previous clinical exposure, especially in an industry work placement context. Alternately the training course should include a clinical practicum phase. The students should preferably have been taught (somewhere in the module) by an educator who was interviewed in phase one.

Exclusion criteria meant that students who are exclusively studying general or common year studies were omitted. Postgraduate students were not included in this stage of the dissertation. The dissertation did not include CME activities as part of the criteria for a paramedical training module. Students who had not commenced a paramedic module were excluded.

The population (N) comprises of paramedic students who are engaged in active study at a CAA accredited or HAAD / DHA recognized training organisation in the UAE. The active available paramedic student population was calculated to approximately 100 at the time of the survey. The population number was limited due to the effects of the coronavirus pandemic effects on society at large. A sample size calculator (Qualtrics, 2020) was used to generate the actual number required. Thus sample size (n) is 41 paramedic students using a 90% confidence level and a 10% margin of error.

3.4.3 Phase 2 Validity & Reliability

The pilot study is an important part of any research project and provides many valuable insights whilst at the same time exposing potential design flaws and mistakes. The aim of the pilot study was to check the suitability and viability of the questionnaire. The questionnaire draft was sent to a panel of experienced paramedic educators for review. The criteria set to determine the paramedic educator's experience were; at minimum 10 years of cumulative experience in a paramedic education environment, relevant master's degree, exposure to international paramedic education and experience of having taught different academic year levels. The expert panel reviewed face and content validity. Face validity is important because it can highlight basic flaws which the researcher may overlook. This could happen due to subjectivity or because the researcher is too close to the project and misses the opportunity to zoom out and get a bird's eye view. The panel was also asked to review the content validity to ensure the items were appropriate to measure the constructs. The panel provided valuable feedback which was incorporated into the revised draft.

The revised draft was then sent to a local research officer who reviewed the document and provided specific insights into the layout, grammar, semantics and correction of ambiguities. The survey was planned to be conducted in English and Arabic languages however the research officer recommended the English version as the students' official medium of instruction was English and there was the possibility of multiple nationalities participating in the survey. The study was piloted with a limited sample set and there were no

recommendations of note. The survey was deemed appropriate and ready to be administered to the prescribed participants.

3.4.4 Phase 2 - Survey results

Phase two was the quantitative analysis of the survey results. The pilot study data and information from the literature review were used to consolidate content validity. Face validity was covered by means of a review of the survey tool by an expert panel. This panel will be convened after stage one is completed. Reliability was reinforced via the use of expert panel review and the pilot study.

The data output was automatically generated by the latest version of Google Forms and the related software. The data generated was supplied in Google Sheets and on a Google Forms graphics display. The survey data was transferred from Google Sheets to Microsoft Excel for further analysis, consolidation and to generate the required descriptive statistics such as frequencies, cross-tabulations, associations and correlations. The numerical data and statistics were used to describe the patterns of SM use, ethical awareness and ethical considerations in the paramedic student population. Most questions were fully answered by all 40 respondents except Q1–35 Responses, Q7–38 Responses, Q13–39 Responses, Q14–39 Responses, Q17–39 Responses and Q18–38 Responses. The results are presented below in text and selected visual graphs have been included for ease of use. Refer to the appendix for the full graphical output of the data.

Results from Specific Questions

A brief description of selected and significant survey data is presented in this results section. A more detailed analysis of the results and mixing of the data sets analysis, to improve findings, are detailed in the discussion section. The student population can be stratified according to local and international. The respondents were split with 67.5% being local Emirati students and 32.5 % being expatriate students and 12.5% of the sample did not respond to this question. 5 out of 40 respondents did not complete this question, which may skew the interpretation of this data in some instances. The nationality question was open-ended as there are many nationalities represented in the UAE and choices or drop down was not feasible in this survey tool. The local students responded with the terms Emirates, Emirati, "UAE" and "Uae" which all mean the United Arab Emirates. 70 % were male with 57.5% of all students being in the 20 to 25 year age group. 77.5% of students had some type of work placement experience in an ambulance before undertaking this survey.

5. Which social media applications do you use for personal use?

40 responses

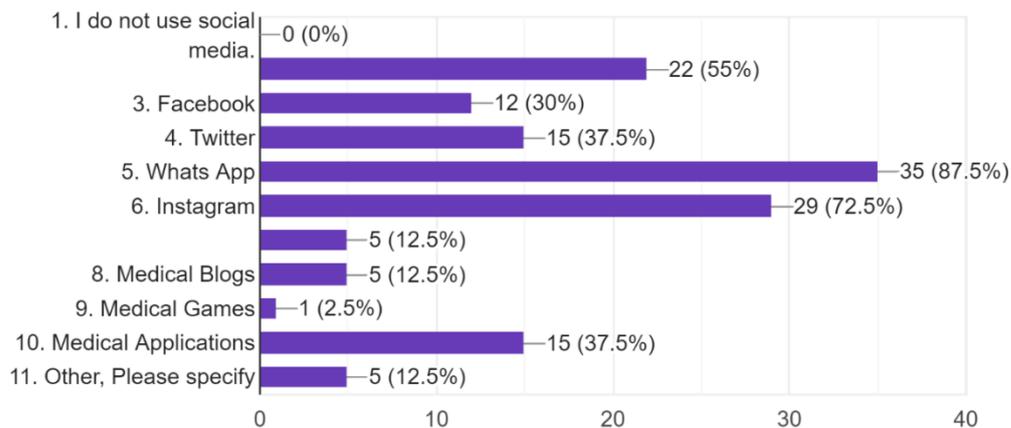


Figure 7 Social Media Apps for personal use

The most highly used SM apps for personal use were WhatsApp (87.5%), Instagram (72.5%) YouTube (55%), Twitter (37.5%) and Facebook (30%). it was interesting to note the 1 respondent in this cohort was actually using medical gaming applications for recreation use.

6. Which Social Media do you use in your EMT studies?

40 responses

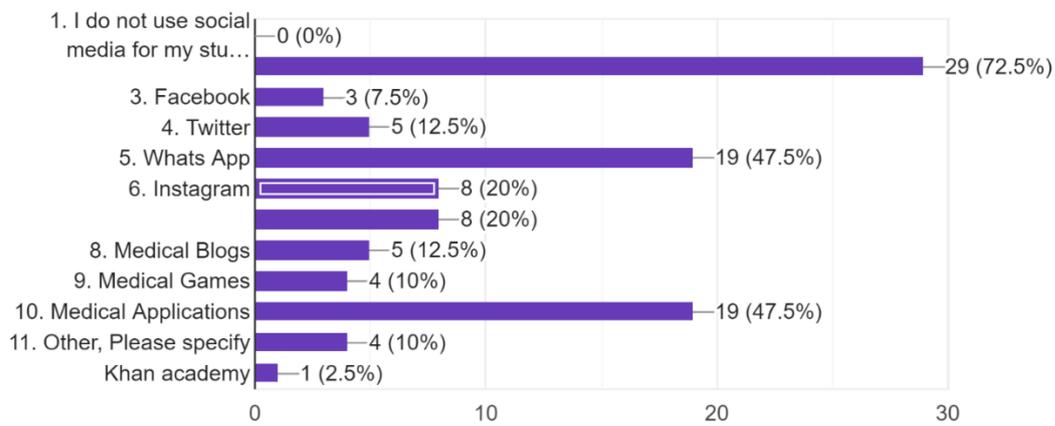


Figure 8 Social Media Apps for paramedic education

All students used SM in their paramedic studies. The most highly used SM apps by paramedics in their studies use were YouTube (72.5%), WhatsApp (47.5%), Medical applications (47.5%), Instagram (20%) and Free Open Access Medical (FOAMed) sites (20%). 10 % used medical gaming and a smaller than expected (as compared to common results from the literature review) number use Twitter (12.%) and Facebook (7.5%) respectively. This relates well to the use of TouTube as expressed in the literature review section and also reflects the use of WhatsApp for easy quick communication.

7. Which Social Media does your instructor use for your EMT studies?

38 responses

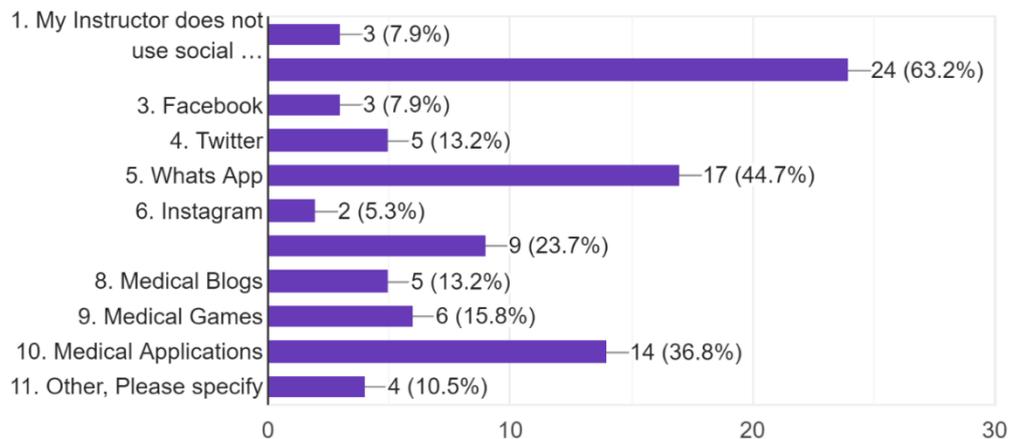


Figure 9 Social Media the instructor uses

The most highly Instructor used SM apps for EMT studies use was YouTube (63.2%), WhatsApp (47.7%), Medical applications (36.8%) and Free Open Access Medical (FOAMed) sites (23.7%). Again Facebook (7.9%), Twitter (13.2%) and Instagram (5.3%) had rather low usage percentages.

All students use SM every day in this cohort (Q8 & Q9). 7.5% (1) person used SM less than 60 minutes for private purposes whilst 45% used SM less than 60 minutes for study purposes. 42.5% of students used SM for the duration of one to two hours for private purposes whilst 32.5% used SM for the duration of one to two hours for study purposes. 50% of students used SM more than two-hour duration for private purposes whilst 22.5% used SM less than 60 minutes for study purposes.

10. For which purposes do you use Social Media in your studies? Select all that apply.

40 responses

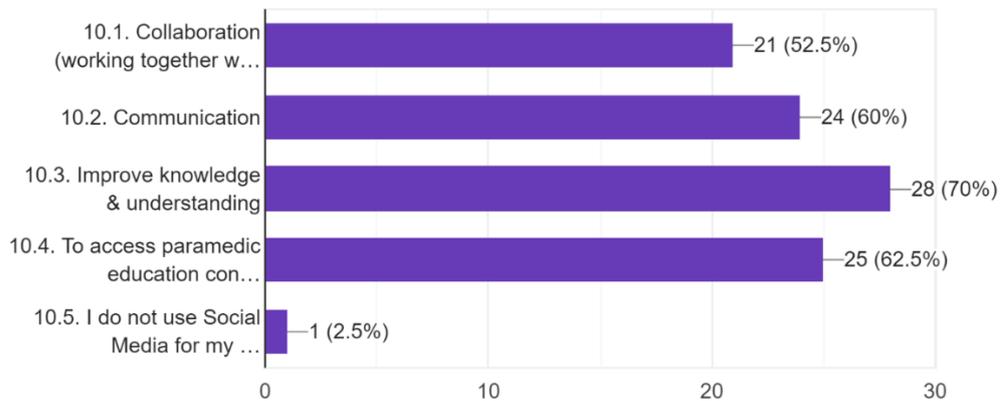


Figure 10 Purpose for which Social Media is used in studies

70% of paramedic students used SM to improve their knowledge and understanding which is the highest frequency, as compared to collaboration at 52.5% which was the lowest. Communication for study purposes was 60% which was closely related to looking for paramedic education content at 62.5%.

11. For which Collaboration purposes do you social media? Select all that apply.

40 responses

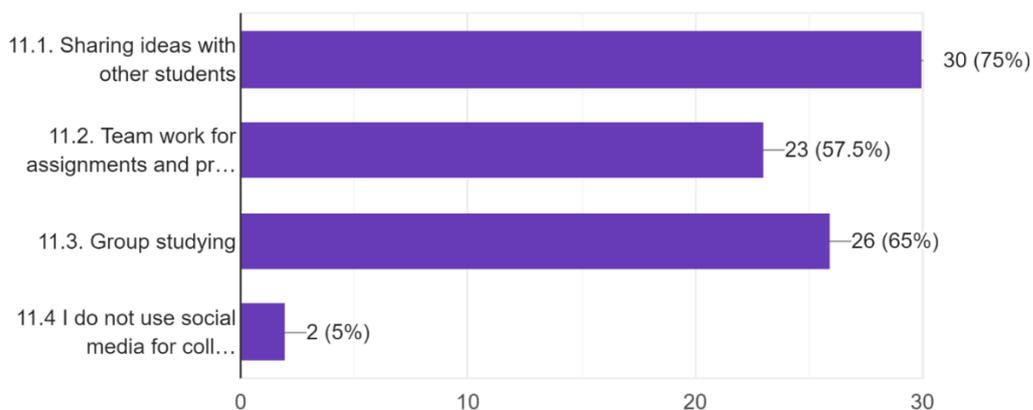


Figure 11 Purpose for which Social Media is used in studies

In terms of collaboration, 75% used it for sharing ideas whilst 65% used it for group studying and 57.5% used it for assignments and project teamwork. Sharing ideas with other students is a form of constructivist learning and this appears to be a highly beneficial pedagogical factor for paramedic education.

12. For which communication purposes do you use social media in your studies? Select all that apply.

40 responses

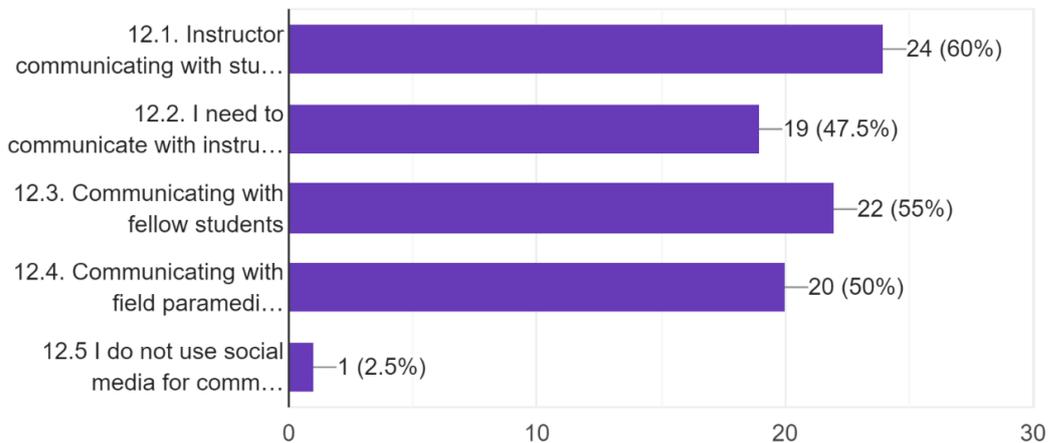


Figure 12 Communication Purpose for which Social Media is used in studies

In terms of the direction of communication flow, the instructor communicating with the student is highest at 60% whilst the student needing to communicate with the instructor is 47.5%. The student to student communication was reported by 55% of the student population with 50% reporting communication with field medics. This seems to reflect poorly on the current organisational communication channels. All role-players seem to prefer instant

messaging on commonly used applications which are used widely across multiple spectrums of the students' environment.

13. Knowledge & Understanding purposes. Select all that apply.

39 responses

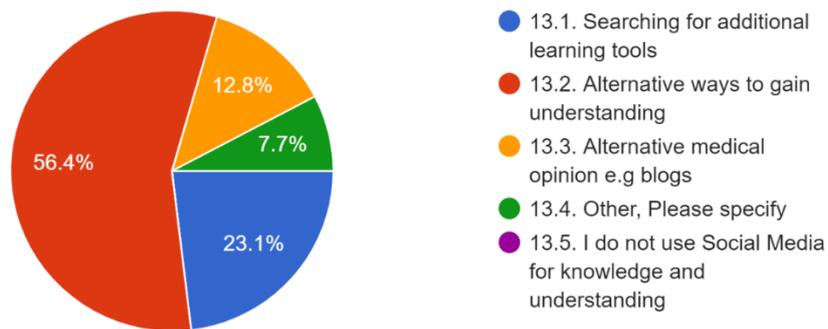


Figure 13 Knowledge & understanding purposes

The overwhelming majority (56.4%) of students' in this category used SM to find alternative ways to understand a topic or concept in their paramedic studies. 23% searched for additional learning tools whilst almost 13% looked for alternative medical opinions.

14. Paramedic education content. Select all that apply.

39 responses

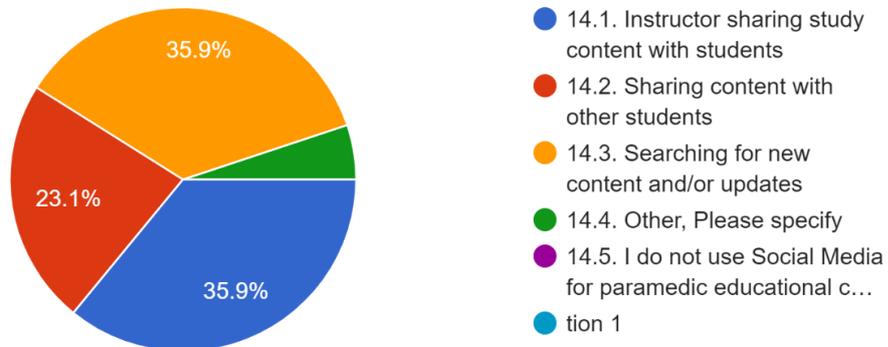


Figure 14 Knowledge & understanding purposes

In terms of content sharing, approximately 36% of the usage was for instructor sharing content with students whilst inter-student content sharing was at 23%. Searching for new and or updated content was also significant at almost 36%.

15. There is a Social Media ethics policy in my college.

40 responses

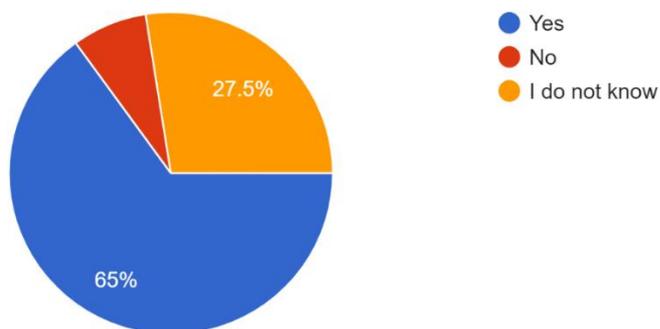


Figure 15 Social media policy in college

16. I understand the Social Media ethics policy in my college.

40 responses

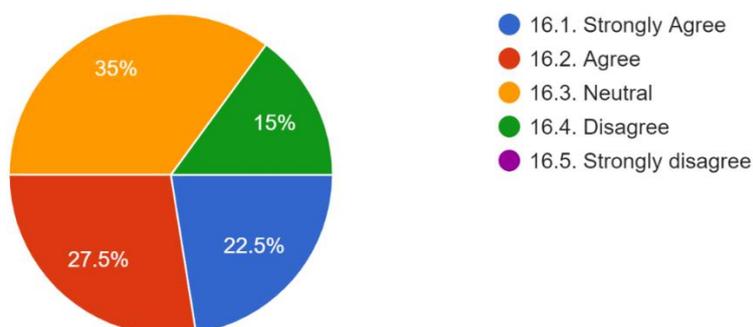


Figure 16 Understanding the social media policy in college

Q15 to Q20 probed the awareness and understanding of SM policy across three domains. At least 64% of all students are aware of the SM policy at the educational institution, profession and country domains. 87.5% of respondents reported awareness of a SM policy in the country domain which was the highest awareness level of the three. Understanding the SM policy was reported with lower frequencies respectively across all three domains. 50% of respondents understood the SM policy at the college/educational institution domain. This increased to 60% at the professional domain and 77% in the country domain which, again, was the domain with the highest level.

21. I know the risks if Social Media is used unethically during paramedic education.

40 responses

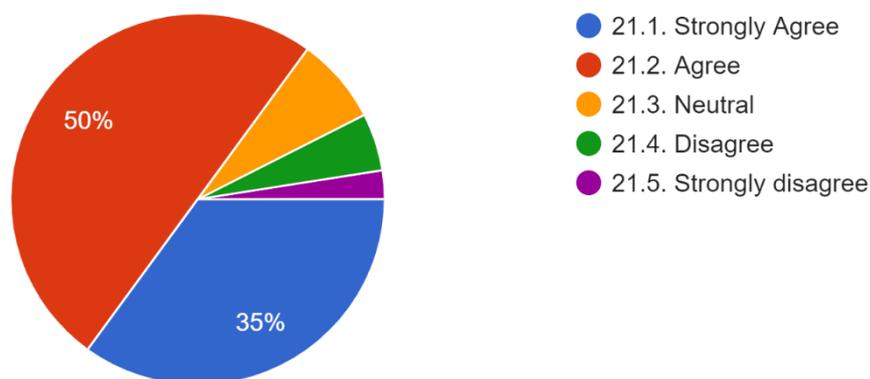


Figure 17 Knowing the risks of social media

Q21 to Q29 investigated the students' awareness levels of the harms of SM on paramedic education. 85% of all respondents stated that they knew the risks of unethical SM use in paramedic education. 55% of students agreed that student and instructor boundaries can become mixed up (Q24). 50% of students responded that the cyberstalking (Q25) is possible in paramedic education. 45% reported that harming a person's character (Q26) is possible in paramedic education while 52.5% agree that online harassment (Q27) is also possible in this context. Q22 & Q23. 52.5% of students were in agreement that the student's loss of privacy is a concern (Q22) whilst 50% of students responded that the instructor's loss of privacy (Q23) was also a factor. 55% of students also agreed that a patient's loss of privacy is a concern during paramedic education (Q28, See figure 18 below).

28. Loss of a patient's privacy is possible when Social Media is used in paramedic education.

40 responses

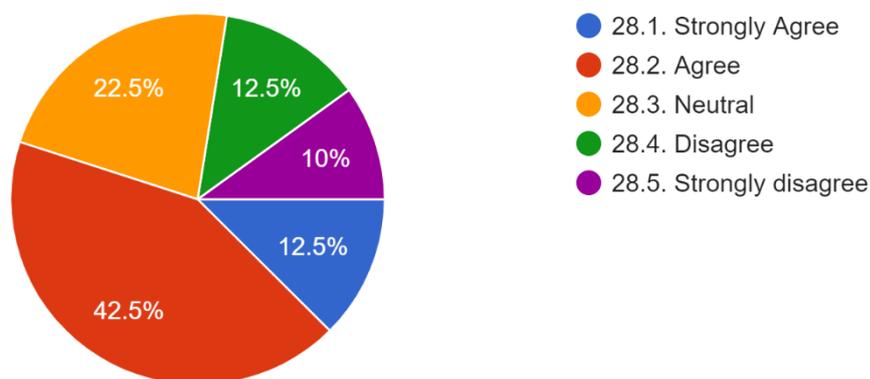


Figure 18 Possibility of loss of a patient's privacy

Questions 29 to 32 (see selected figures below) looked at the students' self-assessment of ethical behaviour and willingness to use SM. 77.5% of students say that they know how to behave ethically when using SM for paramedic studies (Q29, See figure 19 below). 90% of students were happy to use SM in their paramedic studies. 60% of the respondents feel that there is a need for SM ethics training in paramedic education and 90% of students want to use SM for their paramedic studies (Q31). Only 3 additional comments (Q32) were received with none having any significant or new information to add to the existing data set.

29. I know how to behave ethically when I use Social Media for my current studies.

40 responses

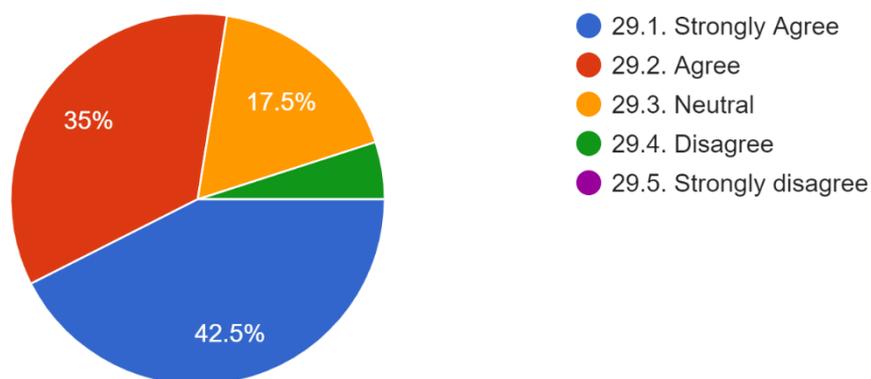


Figure 19 Knowing ethical behaviour for social media in studies

30. There is a need for ethics training to use Social Media in paramedic education.

40 responses

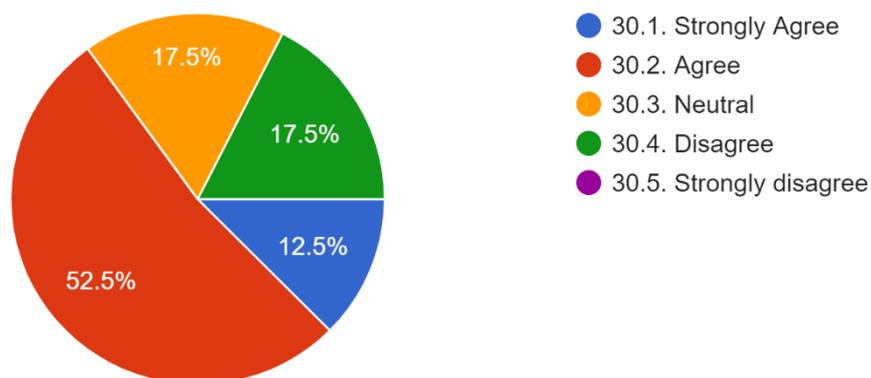


Figure 20 Need for social media ethics training in paramedic education

4. Chapter 4 Discussion

SM is used primarily for the transmission of content and communication in paramedic education. Educational tools must have the ability to transform a student or transform the learning process. The actual transformation is currently more evident in the change away from print media to online media and the ways in which content is shared. If anything the transformative effect is more laxity and less responsibility with more consequences. Are paramedic students transforming into better clinicians, more independent learners, more reflective? In which way are paramedics students transforming and in which ways are they staying the same.

Paramedic educators are aware of the advantages that SM brings to paramedic education and accept that it is currently easier to implement for CME and postgraduate studies. Paramedic educators are cautious to fully implement SM due to existing barriers and acknowledged that stakeholder support and is required. There is a recognized need for training to use SM as an educational tool.

Paramedic students actively use SM as educational tools (in decreasing order of incidence); to gain further understanding, trying to search for additional medical content, for collaborative learning and for connecting with others to share information. They generally spend a fair amount of time on SM for educational purposes 60% of students spend from 30 minutes to just under two hours, whilst almost 23% spent more than two hours for educational reasons.

The most commonly used applications are YouTube, WhatsApp, medical applications & Instagram.

Students reported spending quite a bit of time on SM. Most of the time was used for communications, social loafing and other personal activities however, a significant proportion of this time was spent on using SM for their studies. This supports one point of view that encourages harnessing SM for beneficial use in education. The reported data for time spent on SM for personal use was significantly lower in this cohort as compared to the figures generally reported in other studies that were used in the literature review. This could be due to the nature of paramedic studies which is very intensive and also has a strong focus on practical competencies which leaves the student with very little spare time. There is also the element of perception, in the study students reported on their perceived usage rather than actual hard data. Hard data could have been obtained via mobile applications on the students' device or actually asking students to record their usage times (not feasible). Variances in real-time versus perceived time can be quite wide. The fact that 42.5% of the respondents in this group were older than 25 years could also play a role in this finding as younger students tend to spend more time on SM.

Questions 6, 7 & 10 related to platform and purpose usage patterns. YouTube was the most used SM application by students (72.5%) and by paramedic educators (63.2%). This linked very well with students reported usage purposes for improving knowledge & understanding (70%) and to access further paramedic content (62.5%). Students also reported that searching for alternative ways of understanding (Q13) at 56.4%. These correlate well as these types of usage

are supported by YouTube videos, lectures and other visual resources. Surprisingly FOAMed and similar medical sites were not so frequently used.

WhatsApp usage frequency for paramedic education purposes was almost the same for students (47.7%) and paramedic educators (44.7%). Again this is closely associated with the student to student communication (reported at 55%) and the student wanting to communicate with educator which was at 47.5%. Interestingly students reported that educators wanting to communicate with students were highest at 60%. Educator student directional communication could have multiple factors such as unplanned updates, supplementary content, ease of access to students' in clinical practicum etc. Future research should search for additional factors, explore and compare the usage frequencies of SM against traditional communication, like email and institutional LMS, and investigate which is preferred and why.

The WhatsApp statistic in this dissertation also correlates well with the students' usage for collaboration (52.5%) purposes. In terms of Collaboration (Q11), group studying (65%) and sharing ideas with other students (75%) had the highest incidence. In the collaboration item the 'sharing ideas with other students' factor ties in with the connectivism and communities of practice paradigms which informs the constructivist mode of learning. This appears to be a highly advantageous pedagogical feature for paramedic education.

62.5% of students used SM for paramedic education content (Q10). In terms of paramedic education content purposes (Q14) 35.9% of respondents used SM for content that was shared by the instructor. Instructors use Medical applications (36.8%) and Free Open Access Medical (FOAMed) sites (23.7%) as well so this correlates well with the time the students' spent for content on SM. It is worth noting that another 35.9% of the time was spent looking for new or additional content and updates to the existing content. This implies that either the content is not enough or that students want more content to further their understanding. It is highly unlikely that that content is insufficient as generally there are multiple resources in paramedic education. This bears further investigation to understand exactly why students require further

In terms of content sharing (Q14) approximately 23% of the usage was for students sharing content with other students. In hindsight, not adding user-generated educational content in the selected responses for this question was a shortfall. User-generated content is one of the hallmarks of SM for personal use and it would have been interesting to see if this trend continued on the track of educational use. It would have been interesting to determine what type of self-generated content could have been shared and to try and deduce the pedagogical value thereof.

Q15 to 20, 29 & 30 looked at SM policy awareness and students' self-assessment of ethical behaviour. There seems to be a fairly high percentage (at least 35%) of students who are not fully aware of the SM policy in the institutional and professional domain. This is a cause for concern and requires attention as part of the recommendations of this dissertation. Only

12.5% reported not being aware of the country's SM policy. This demonstrates an increased awareness at the macro level as opposed to the micro-level which is odd. The SM policy in the UAE however, is well publicized in the government notices and in the general news media, which could explain this high awareness. There was also an almost 2:1 ratio of local to expatriate respondents in the response data which could have skewed the results. This implies that more needs to be done at the institutional and professional domains to increase awareness of SM policies.

Paramedic educators (from Paramedic educator interview data) seemed to think that most students knew their ethical responsibilities but the survey data is showing contrasting results. 50% of the respondents did not fully understand the SM policy in the educational institutional domain as compared to 40% in the professional domain. Again these numbers are high and suggest a deficiency. Paramedic educators did, however also recognize the need for further training with respect to SM ethics. 77.5% of students stated that they knew how to behave ethically when using SM for their studies but 60% of the same students (question 30) also stated that they required further SM ethics training. Whilst there are levels of awareness and understanding it seems that the greater need is actually how to apply the SM ethics policy in paramedic education. The actual application of the SM ethics policy may have greater implications for all concerned stakeholders and role-players and requires further investigation.

Q21 to Q28 investigated the students' awareness levels of some of the harms and risks of SM on paramedic education. The participants responded with high awareness levels on this front for most of the risks however there were lower levels of agreement around the 50% mark for the possibility of cyberstalking, character defamation and online harassment taking place in paramedic education. This requires further investigation to ratify the veracity and generalizability of these statistics. 85% of all respondents stated that they knew the risks of unethical SM use in paramedic education while 77.5% of students say that they know how to behave ethically when using SM for paramedic studies and 90% were happy to use SM in their paramedic studies. These are all quite high percentages Q22 & Q23. 52.5% of students were in agreement that the student's loss of privacy is a concern (Q22) whilst 50% of students responded that the instructor's loss of privacy (Q23) was also a factor. 55% of students agreed that student and instructor boundaries can become mixed up (Q24). 50% of students responded that the cyberstalking (Q25) is possible in paramedic education. 45% reported that harming a person's character (Q26) is possible in paramedic education while 52.5% agree that online harassment (Q27) is also possible in this context.

Data analysis from the interview phase showed that Paramedic educators were also aware that students generally know how to ethically use SM for educational purposes. They theorize that students are also aware of some of the potential dangers, however, the paramedic educators recognized the need for specific SM ethics training to fully close the loop. They also stated the need for monitoring and some level of control. Students are generally well aware of the dangers of using SM and they are cognizant of the privacy issues. Most students

are also generally familiar with the contemporary SM ethics guides and state that they understand it quite well, however, the students also recognize that further training is required. This implies that the policies may need revision or that the training that is provided may be inadequate.

5. Chapter 5: Conclusion, Limitations & Recommendations

5.1. Conclusion

There is a need for

SM greatly enhances the ease of communication and access to information. Students have readily adopted SM into their learning practices. The potential for the formal inclusion of SM into paramedic education is significant. SM has is highly advantageous in clinical practicum environment but more SM ethics training and the need for a specific SM and associated ethics guideline. Currently, SM is widely used for continuous medical education and deemed as very useful for PG students. It should be used in undergraduate study but more control and guidance are required. There is a need for separate personal and professional boundaries and profiles. Students must be taught how to optimize SM in paramedic education. Internationally there are contrasting institutional experiences with respect to acceptance of SM in paramedic education.

This dissertation has identified a strong need to increase student guidance on how to optimise the use of SM in their paramedic studies including clinical practicum, postgraduate and continuous medical education. The development and implementation of a Social Media ethics guide and associated SM ethics training specifically for paramedic education may be advantageous to paramedic students, educators and all roleplayers. There is a strong need for further research in this area, within the local and international context.

5.2. Limitations of the dissertation

Institutional Permission to access the students for the survey and obtain approval of the survey instrument was a challenge at one particular institution. The continuous delays impacted so much in the dissertation that it prompted a change in the composition of the student sample and that cohort was excluded from the student data collection phase. This impacts on the generalizability of the findings and the sample is not as inclusive as it could be.

The qualitative phase collected data from participants using the interview method. These participants had exposure in countries that are prominent in paramedic education and that are accredited by HAAD for EMS licensure in the UAE. A more inclusive dissertation could extend from individual interviews to focus groups. The focus groups with combined faculty from different institutions and grouped according to the spectrum of paramedic education, e.g. all clinical practicum paramedic educators in one focus group and so on, could have produced very interesting results and formed a more solid body of knowledge.

Representation from the institutional management, academic affairs and education technology departments has the potential to add value to this dissertation's outcomes. The scope, depth and breadth of these domains are beyond the scope of this master's dissertation. A more extensive literature review and further research are required to thoroughly address these three domains and their relationships with, and influence on, each other.

The basic of the survey construction could be enhanced e.g. Item 30 required a single response but had 41 responses instead of 40 which implies that one person selected more than one response. Thus questions that only required a single response should have been electronically controlled to allow only one selection. Certain of the open-ended response items e.g. question one about nationality could have had some commonly selected responses and then an 'other' option. This is because certain known categories have a higher proportion of students in the overall student population, e.g. Emirati, Indian & Filipino.

5.3. Recommendations

A larger-scale study is needed to investigate the feasibility and pedagogical benefit of incorporating SM tools (or elements thereof) into the curriculum. There is a need to also investigate the barriers and enablers to SM application in educational institutions and integration into the institutional learning management systems. There is a need to investigate ethical decision making when using SM for education purposes across the spectrum of paramedic education. This spectrum should cover the classroom setting but must especially consider the personal learning environment, the communities of praxis, the clinical practicum environment and also the milieu of continuing medical education. The paramedic education fraternity is fairly small and therefore collaborative research within the international context is highly recommended. Combining output from

students, leading faculty and systems of major paramedic education institutions from prominent countries would strengthen the body of knowledge for paramedic research.

There is a need for a distinct SM ethics training module specifically for paramedic education. There are many guidelines for SM ethics but these commonly fall into the “dos and don’ts” type of documents with generalised statements. It seems that there is a general assumption that these are universally understood by all. What has become apparent from this dissertation is that students want to know how to practically apply these guidelines in the paramedic education setting. This requires further research for development and implementation as SM and paramedic education are rapidly changing. In the current climate.

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7. Appendices

7.1. Appendix 1 - Interview Questionnaire

Institution	British University in Dubai		
Faculty	Education	Department	Postgraduate Studies
Research	Ethical Considerations for the use of social media in paramedic education		

RESEARCHER DECLARATION: I agree to:

- Maintain confidentiality where and when required or as stipulated by the interviewer at this time.
- Provide feedback to the participant using the relevant information when requires.
- any further conditions as attached to this form (delete if not applicable);
- Other, specify.

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Name		Signature		Date	
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Participant DECLARATION. I agree to:

Please tick ✓

willingly participate in the research	
advise the researcher should there be any significant change during the process;	
reserve the right to withdraw my input prior to the information being disseminated;	
any further conditions as attached to this form (delete if not applicable);	
Other, specify.	

*** OPTIONAL – at your discretion**

Name		Signature		Date	
-------------	--	------------------	--	-------------	--

Introduction

The purpose of this dissertation is to research the ethical considerations of Social media in Paramedic teaching and Learning. Your responses will be treated with the strictest of confidence. You do not have to write your name or any other form of identification on this form, however you may do so if you want to. Your sincere effort is highly appreciated. Thank you for your valuable time.

Guiding Questions

Social Media is defined more as “a group of Internet based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content” (Kaplan & Haenlein, 2010).

SM tools like You Tube, Facebook & Instagram are highly used in education. Even emails are considered SM.

Instructor Domain

Values and perspectives held by Paramedic instructors about social media, technology, and teaching/learning that may promoter hinder the implementation of social media use in the classroom.

Innovation vs. Resistance to change. Power relationships: teacher student & institution

Teacher

1. How do you feel about using social media in the classroom?
3. In what ways do you see yourself using social media in your classes, for what purpose, and with what anticipated learning outcomes for students?
4. What concerns do you have about using social media technologies in Paramedic classes?

Student Dimension

1. What do the students use SM for?
2. Is there a need to keep up with students' use of technology?
3. What types of SM did the students use?
4. Did you notice any disadvantages for students?
5. Ethical dilemmas?
6. Is there a need for SM ethical training for students?
7. Students recording in class, teacher or other students?

Institutional Dimension

Values, policies, organizational culture, and capacity of organizations, schools, departments, and institutions related to social media technology use in the classroom.

Risk management vs. Student engagement

1. Does your institution, school, or department have formal policies related to social media/technology use in the classroom?
2. What is the institutional culture like in regards to social media use in the classroom?
3. How do your colleagues and administrators seem to feel about social media use in the classroom?
4. How much of the curriculum for each class and overall is predetermined or mandated by the school?

5. How much freedom do you as an instructor have to revise, change, and create assignments)?

6. How much does your institution use social media technology?

Professional Dimension

Values and ethics related to medical profession and medical institutions that could be promoted or threatened through using social media in the classroom.

1. How might some uses of social media technology in Paramedic courses potentially violate medical ethics/policy?

2. How do you see social media technologies in Paramedic classes helping to prepare professional social workers?

3. What professional Paramedic values could be in conflict with one another in a social media classroom policy?

4. How might you negotiate or resolve these potential conflicts between professional values in order to create a useful and ethical policy for using social media in the classroom?

Thank You

7.2. Appendix 2 - Survey

7.2.1 Google Forms – Electronic version: <https://forms.gle/pyhbVR5nmo5vxf3P8>

7.2.2 Survey in word Format:

Institution	British University in Dubai		
Faculty	Education	Department	Postgraduate Studies
Research	Ethical Considerations for the use of Social Media in paramedic teaching & learning		

RESEARCHER DECLARATION: I agree to:

- Maintain confidentiality where and when required or as stipulated by the interviewer at this time.
- Provide feedback to the participant using the relevant information when requires.
- any further conditions as attached to this form (delete if not applicable);
- Other, specify.

Name		Signature		Date	
-------------	--	------------------	--	-------------	--

Participant DECLARATION. I agree to:

Please tick ✓

willingly participate in the research	Y	N
advise the researcher should there be any significant change during the process;	Y	N
reserve the right to withdraw my input prior to the information being disseminated;	Y	N
any further conditions as attached to this form (delete if not applicable);	Y	N
Other, specify.		

*** OPTIONAL – at your discretion**

Name		Signature		Date	
-------------	--	------------------	--	-------------	--

Introduction

- The purpose of this study is to improve paramedic education
- Your responses will be treated with the strictest of confidence.
- Your sincere effort is highly appreciated.
- Thank you for your valuable time.
- I willingly participate in the research

1. My nationality is:

2. My gender is:

- a. Male
- b. Female

3. My age group in years is:

- a. Less than 20 years
- b. 20 to 25 years
- c. More than 25 years

4. I have work placement exposure on the ambulance or in the hospital:

- a. Yes
- b. No

Social Media is a set of internet based applications such as Facebook, Instagram, Twitter, WhatsApp and YouTube etc that allows for the creation and exchange of user generated content.

5. Do you use Social Media in your personal time?

- a. No (If No go to Q8)
- b. Yes (If yes go to 7.3)
- c. Please choose all that apply
 - i. You Tube
 - ii. Facebook
 - iii. Twitter
 - iv. WhatsApp
 - v. Instagram
 - vi. Other, Please specify

6. Do you use Social Media in your EMT studies?

- 1. I do not use social media
- 2. You Tube
- 3. Facebook
- 4. Twitter
- 5. Whats App
- 6. Instagram
- 7. Free Open access Medical Education sites
- 8. Medical Blogs
- 9. Medical Games
- 10. Medical Applications
- 11. Other, Please specify

7. Does your instructor use Social Media for your EMT studies?
- a. No (Go to Q10)
 - b. Yes. If yes (If yes go to 9.3)
 - c. Please choose all that apply
 - i. You Tube
 - ii. Facebook
 - iii. Twitter
 - iv. WhatsApp
 - v. Instagram
 - vi. Group Emails
 - vii. Free Open access Medical Education sites
 - viii. Medical Blogs
 - ix. Other, Please specify
8. On average, how much actual time do you spend on **Social Media** per day for **personal use**?
- a. 0 minutes
 - b. Less than 60 minutes (1 Hour)
 - c. 1 to 2 hours
 - d. More than 2 but less than 4 hours
 - e. More than 4 hours
9. On average, how much time do you spend on **Social Media** every day **for your studies**?
- a. 0 minutes
 - b. Less than 30 minutes
 - c. 30 to 60 minutes
 - d. More than 1 hour but less than 2 hours
 - e. More than 2 hours

10. For which purposes do you use Social Media in your studies? Select all that apply.

- a. Collaboration (working together with fellow students) [if selected open Q.13]
- b. Communication [if selected open Q.14]
- c. Improve knowledge & understanding [if selected open Q.15]
- d. To access paramedic education content [if selected open Q.16]
- e. Other, Please specify
- f. I do not use Social Media for my studies. [if selected go to 17]

11. For which Collaboration purposes do you social media? if selected in Q.12

- a. Sharing ideas with other students
- b. Team work for assignments and projects
- c. Group studying
- d. Other, Please specify

12. Communication, if selected in Q.12

- i. Instructor communicating with students
- ii. I need to communicate with instructor
- iii. Communicating with fellow students
- iv. Communicating with field paramedics and preceptors
- b. Other, Please specify

13. Knowledge & Understanding, if selected in Q.12

- a. Searching for additional learning tools
- b. Alternative ways to gain understanding
- c. Alternative medical opinion e.g blogs
- d. Other, Please specify
- e. I do not use Social Media for

14. paramedic education content, if selected in Q.12

- a. Instructor sharing study content with students
- b. Sharing content with other students
- c. Searching for new content and/or updates
- d. Other, Please specify
- e. I do not use Social Media for

15. There is a Social Media ethics policy in my college.

- a. Yes (Go to Q 18)
- b. No (Go to Q 19)
- c. I don't know

16. I understand the Social Media ethics policy in my college.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

17. There is a Social Media ethics policy in the paramedic profession.

- a. Yes (Go to Q 20)
- b. No (Go to Q 21)
- c. I don't know

18. I understand the Social Media ethics policy in the paramedic profession.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

19. There is a Social Media ethics policy in my country.

- a. Yes (Go to Q 22)
- b. No (Go to Q 23)
- c. I don't know

20. I understand the Social Media ethics policy in my country.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

21. I know the risks if Social Media is used unethically for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

22. The **student's** loss of privacy is possible when Social Media is used for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

23. The **instructor's** loss of privacy is possible when Social Media is used for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

24. Student and instructor boundaries can get mixed up when Social Media is used for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

25. Cyberstalking is possible when Social Media is used for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

26. Insulting a person's character is possible when Social Media is used for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

27. Online harassment is possible when Social Media is used for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

28. Loss of a **patient's** privacy is possible when Social Media is used for paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

29. I know how to behave ethically when I use Social Media for my current studies.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

30. There is a need for ethics training to use Social Media in paramedic education.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

31. I am happy to use Social Media for learning.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

32. Any Additional Comments may be added here:

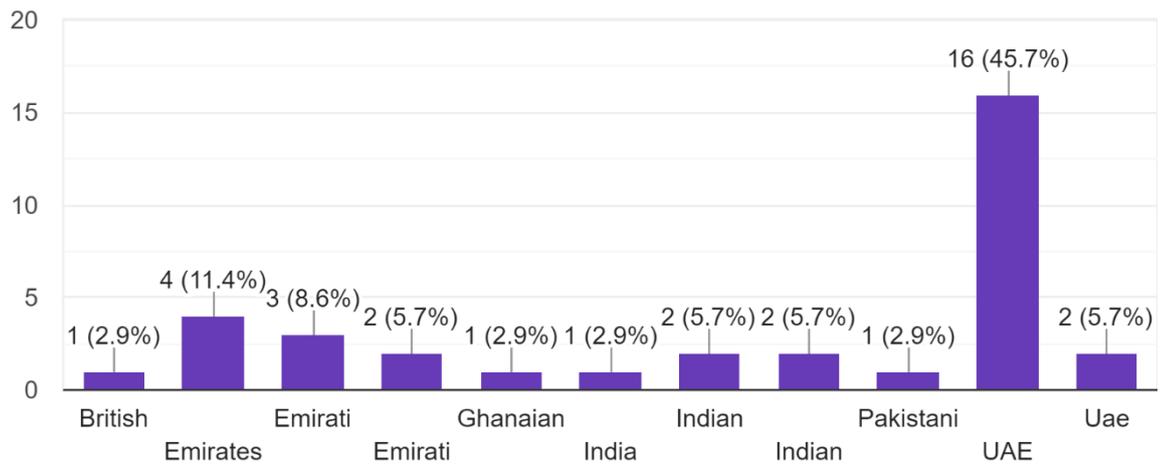
Thank You

7.2.3 Graphical Output of Survey results

Question 1.

My nationality is:

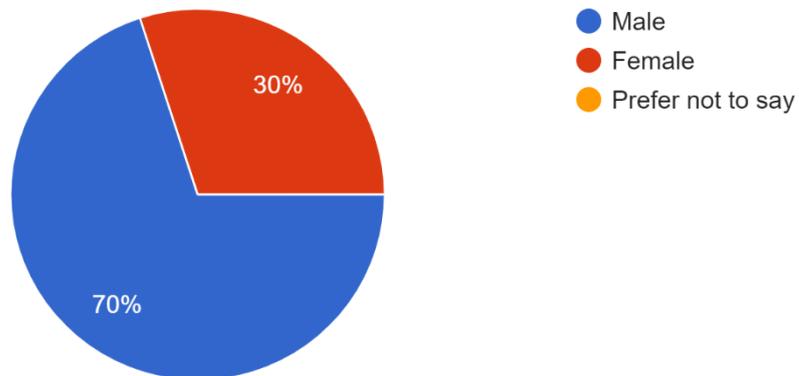
35 responses



Question 2

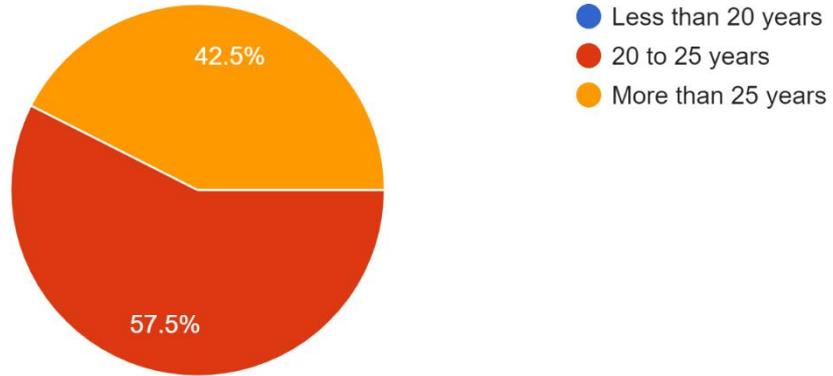
I am

40 responses



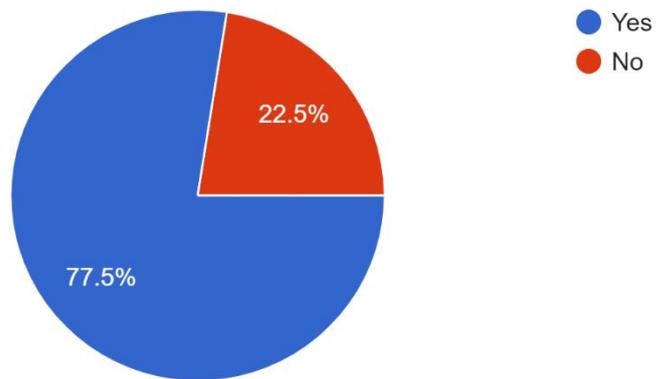
3. My age group in years is:

40 responses



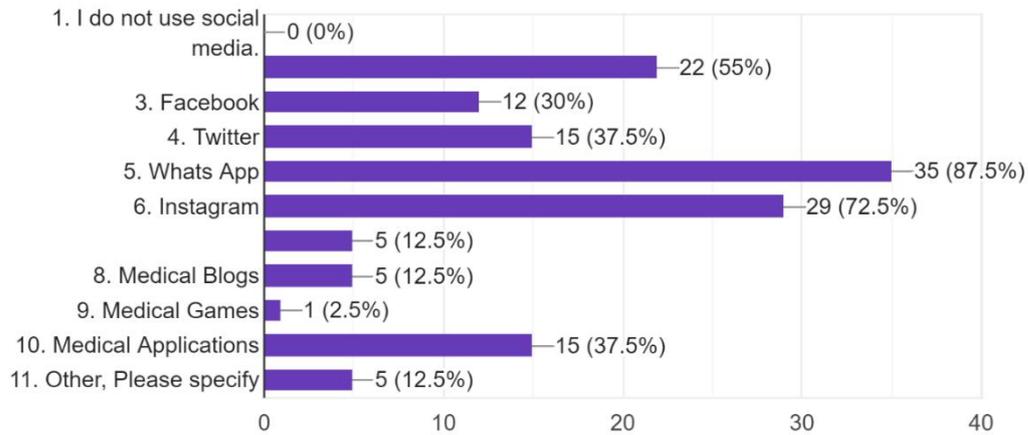
4. I have work placement exposure on the ambulance or in the hospital:

40 responses



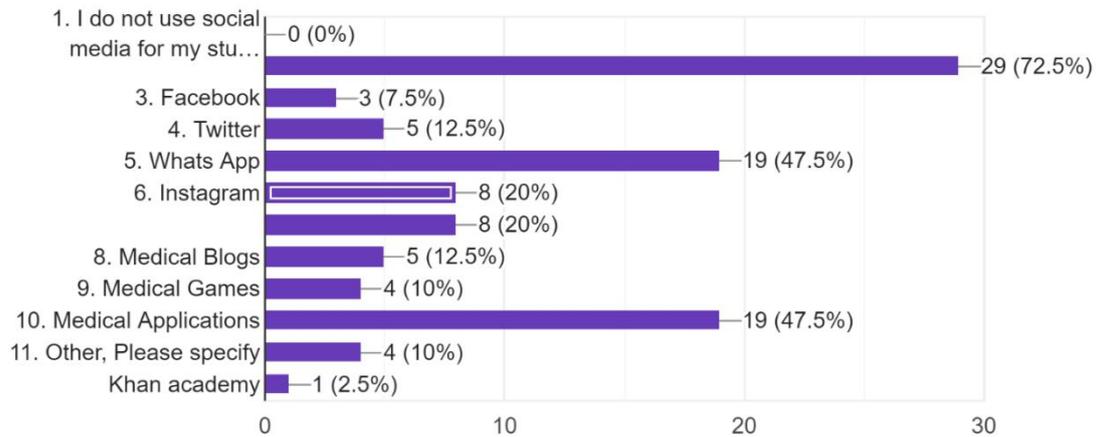
5. Which social media applications do you use for personal use?

40 responses



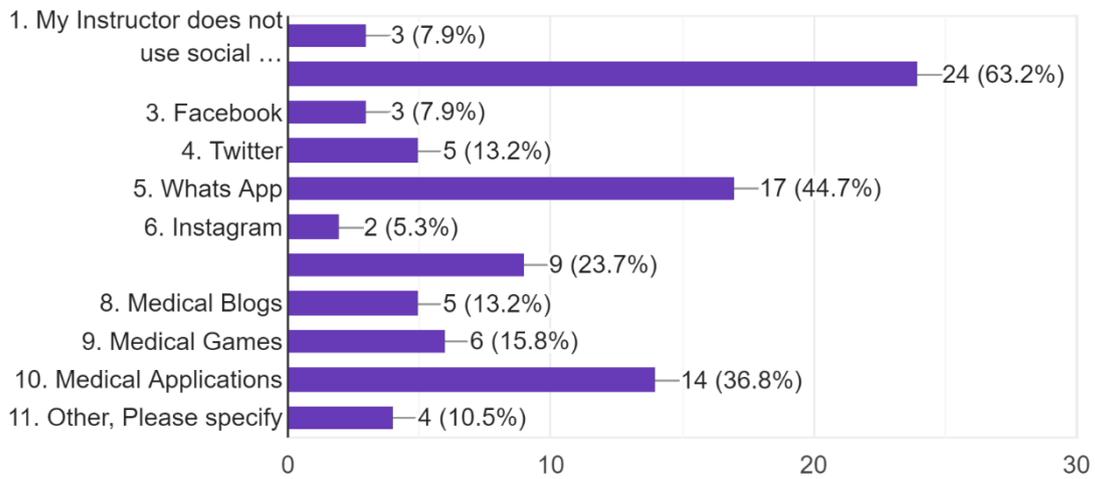
6. Which Social Media do you use in your EMT studies?

40 responses



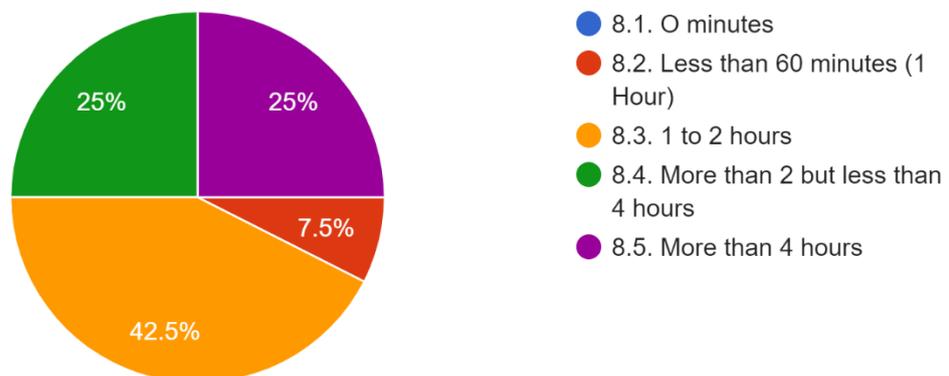
7. Which Social Media does your instructor use for your EMT studies?

38 responses



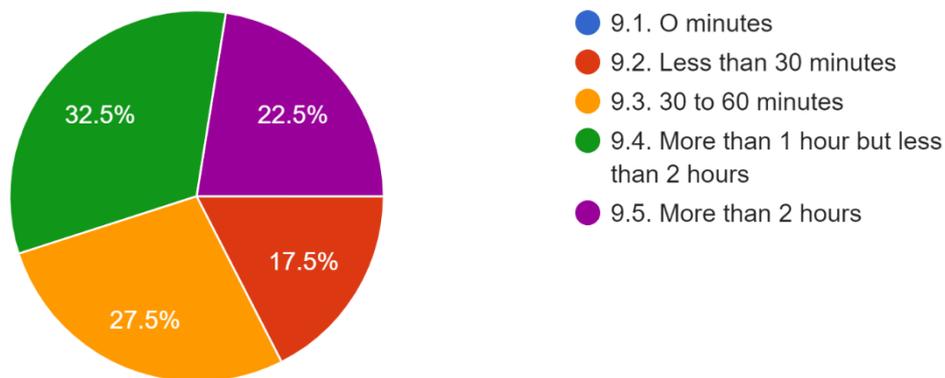
8. On average, how much actual time do you spend on Social Media per day for personal use?

40 responses



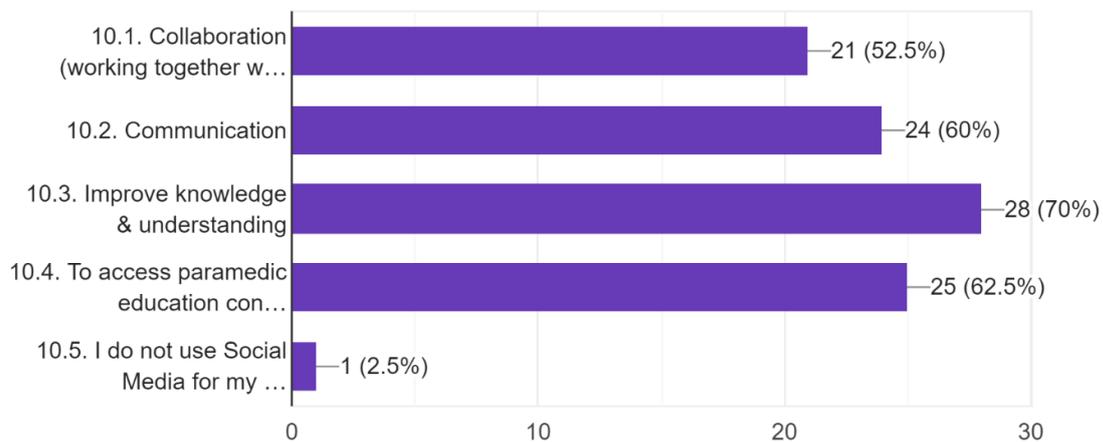
9. On average, how much time do you spend on Social Media every day for your studies?

40 responses



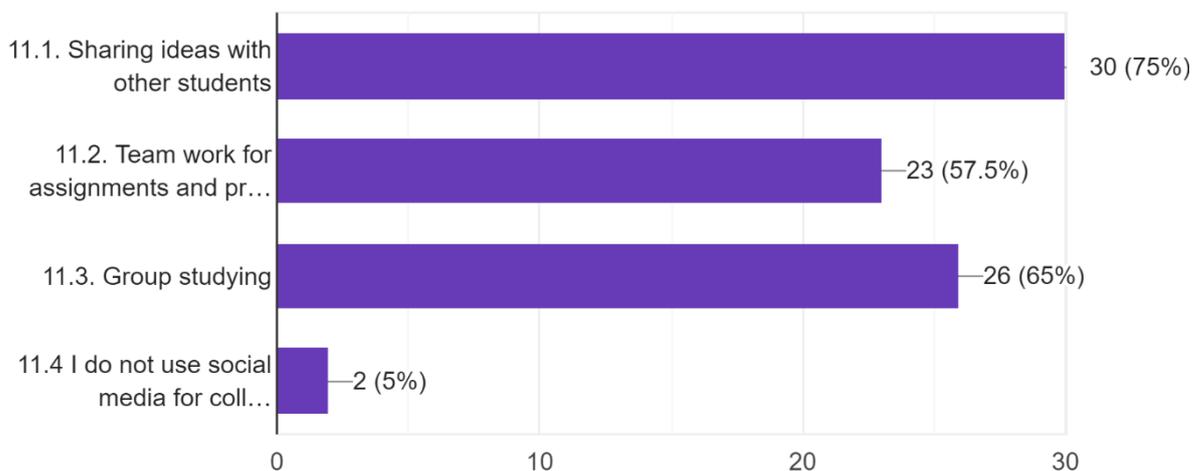
10. For which purposes do you use Social Media in your studies? Select all that apply.

40 responses



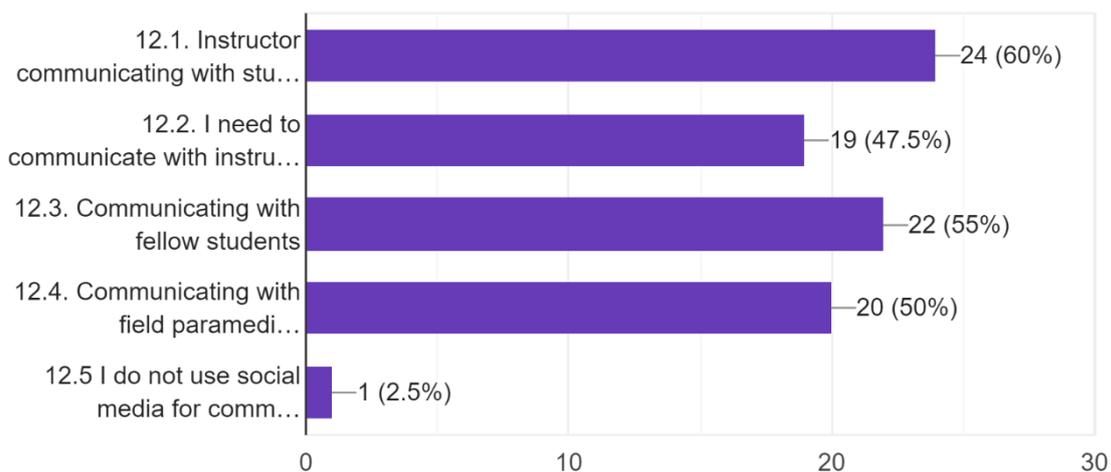
11. For which Collaboration purposes do you social media? Select all that apply.

40 responses



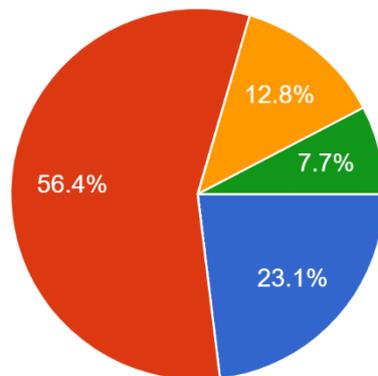
12. For which communication purposes do you use social media in your studies? Select all that apply.

40 responses



13. Knowledge & Understanding purposes. Select all that apply.

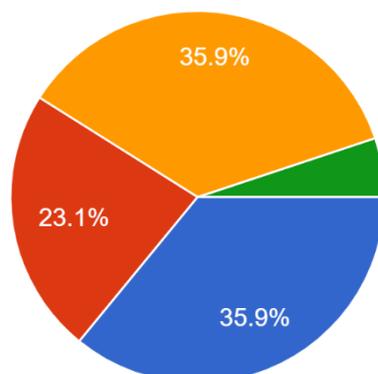
39 responses



- 13.1. Searching for additional learning tools
- 13.2. Alternative ways to gain understanding
- 13.3. Alternative medical opinion e.g blogs
- 13.4. Other, Please specify
- 13.5. I do not use Social Media for knowledge and understanding

14. Paramedic education content. Select all that apply.

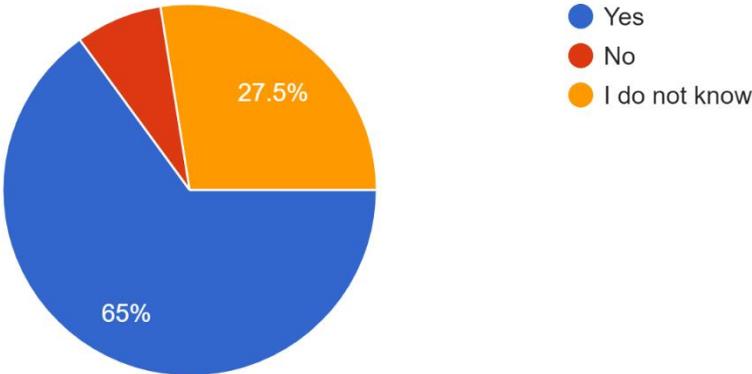
39 responses



- 14.1. Instructor sharing study content with students
- 14.2. Sharing content with other students
- 14.3. Searching for new content and/or updates
- 14.4. Other, Please specify
- 14.5. I do not use Social Media for paramedic educational c...
- tion 1

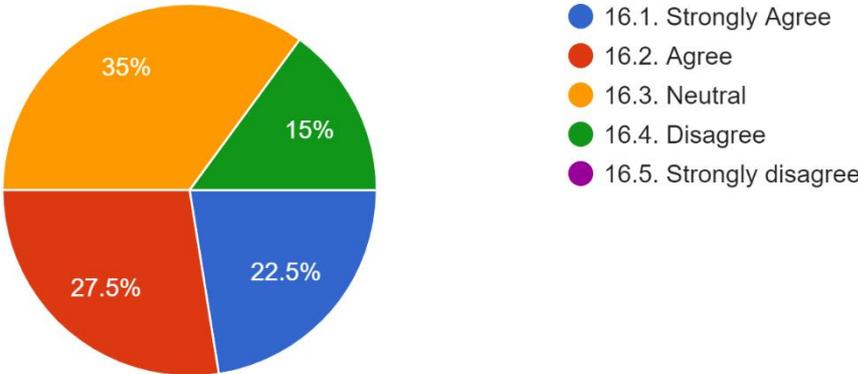
15. There is a Social Media ethics policy in my college.

40 responses



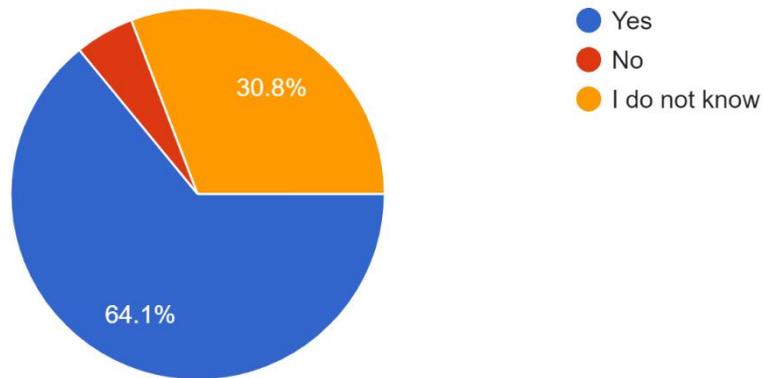
16. I understand the Social Media ethics policy in my college.

40 responses



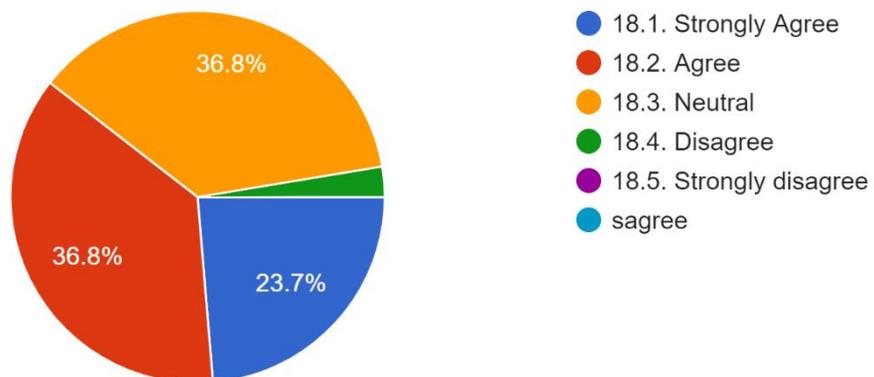
17. There is a Social Media ethics policy in my paramedic profession.

39 responses



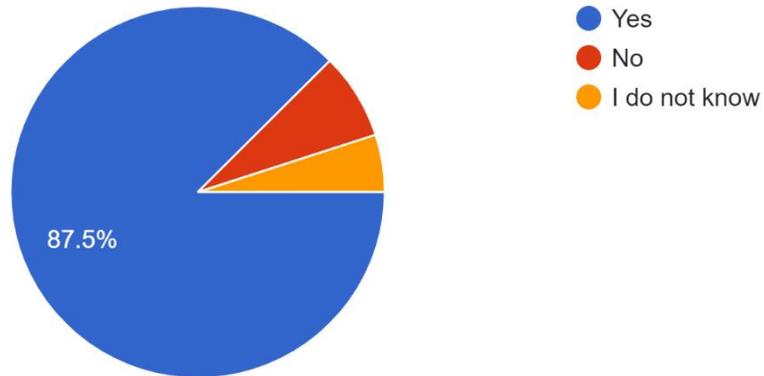
18. I understand the Social Media ethics policy in my paramedic profession.

38 responses



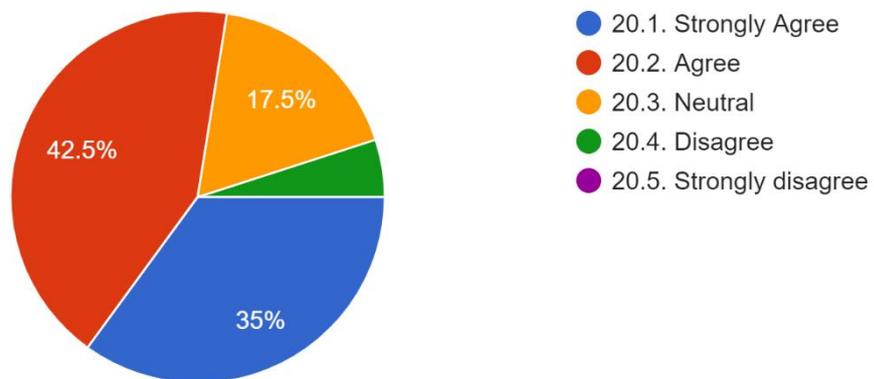
19. There is a Social Media ethics policy in my country.

40 responses



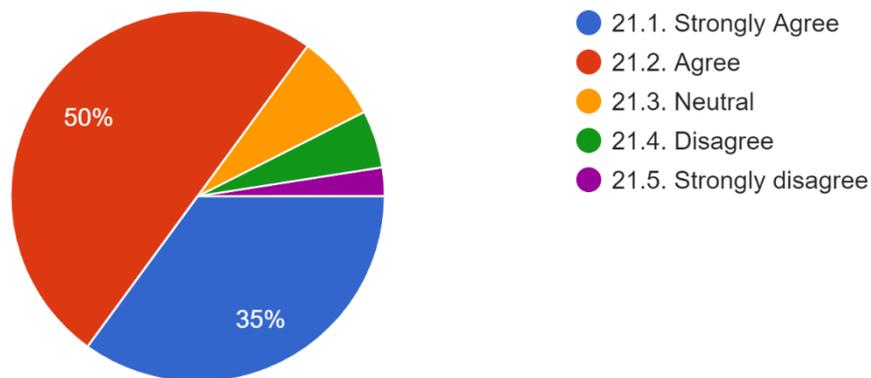
20. I understand the Social Media ethics policy in my country.

40 responses



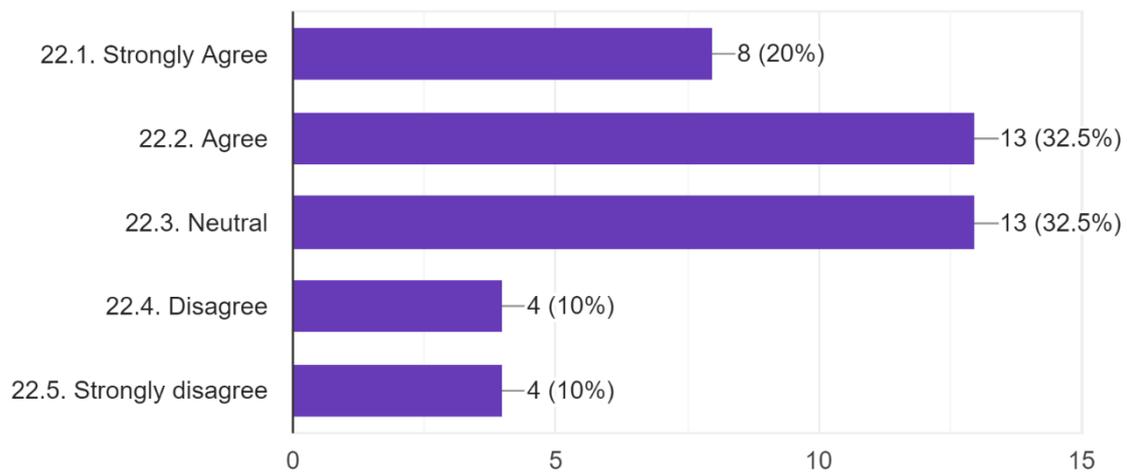
21. I know the risks if Social Media is used unethically during paramedic education.

40 responses



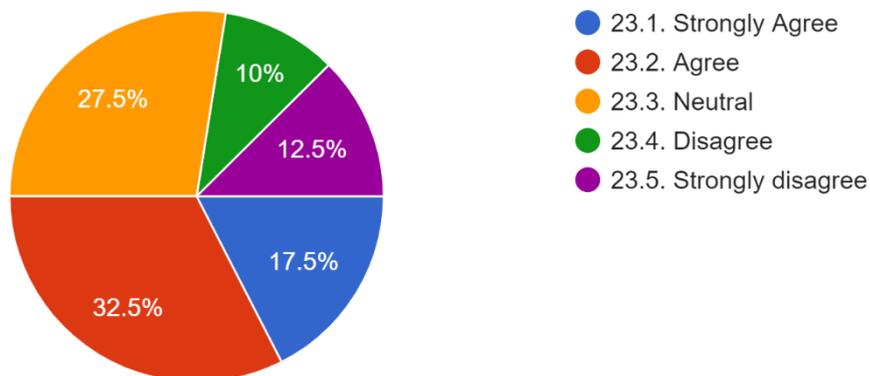
22. The student's loss of privacy is possible when Social Media is used in paramedic education.

40 responses



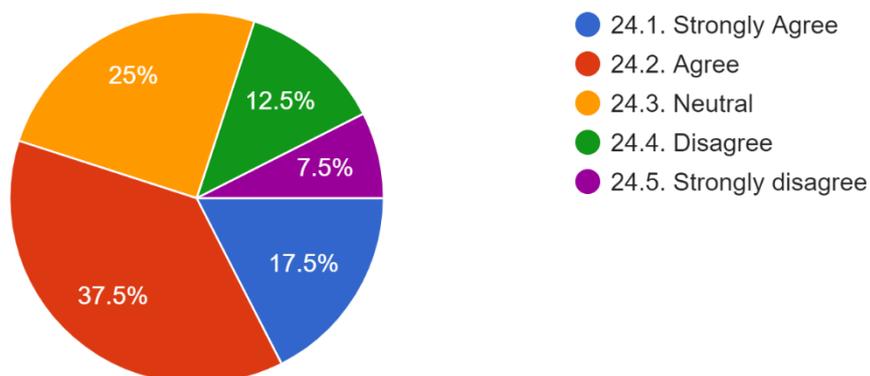
23. The instructor's loss of privacy is possible when Social Media is used in paramedic education.

40 responses



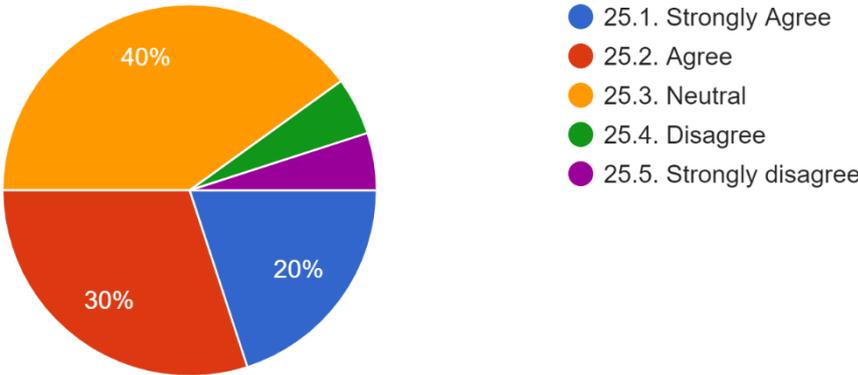
24. Student and instructor boundaries can get mixed up when Social Media is used in paramedic education.

40 responses



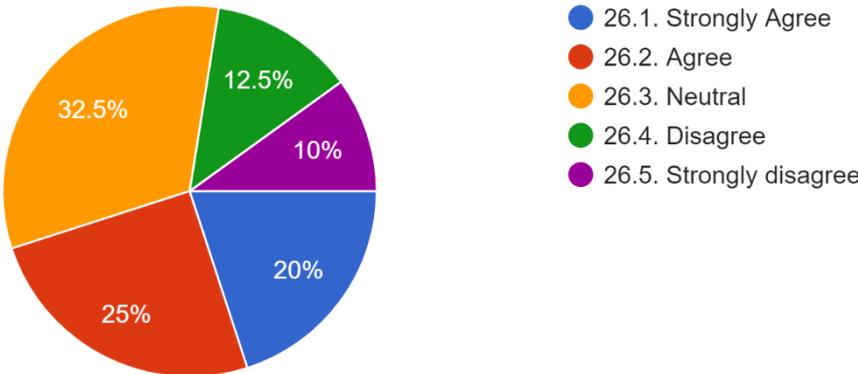
25. Cyber stalking is possible when Social Media is used in paramedic education.

40 responses



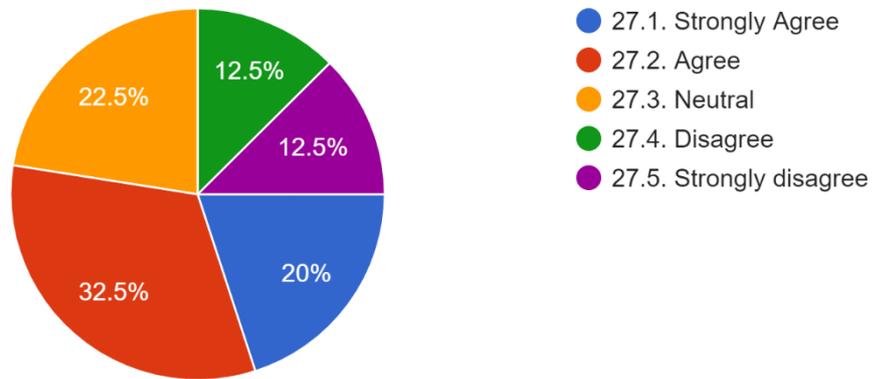
26. Insulting a person's character is possible when Social Media is used in paramedic education.

40 responses



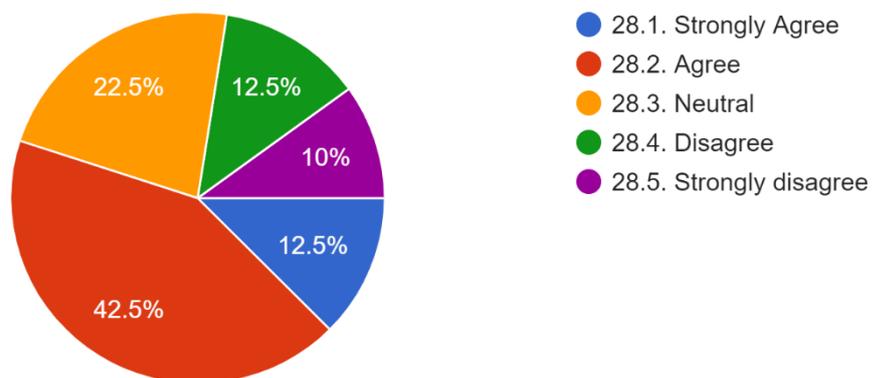
27. Online harassment is possible when Social Media is used in paramedic education.

40 responses



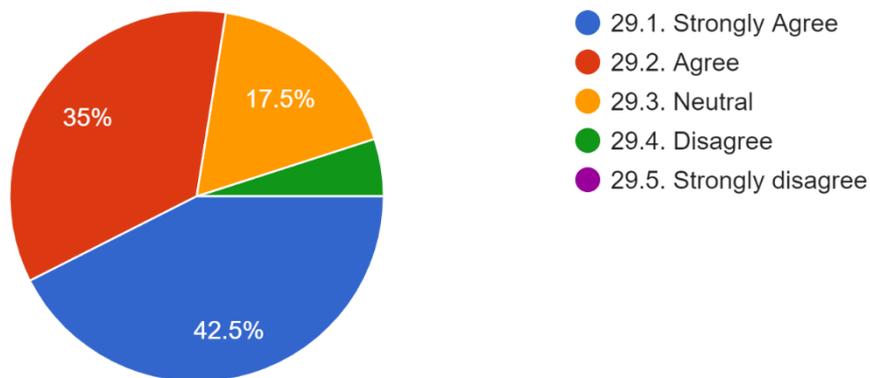
28. Loss of a patient's privacy is possible when Social Media is used in paramedic education.

40 responses



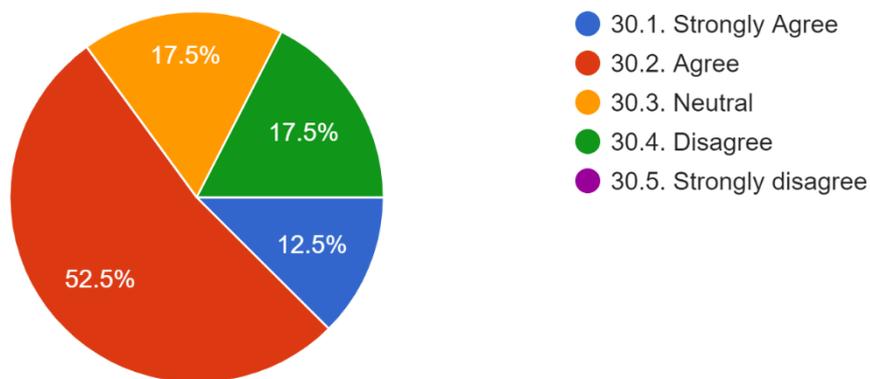
29. I know how to behave ethically when I use Social Media for my current studies.

40 responses



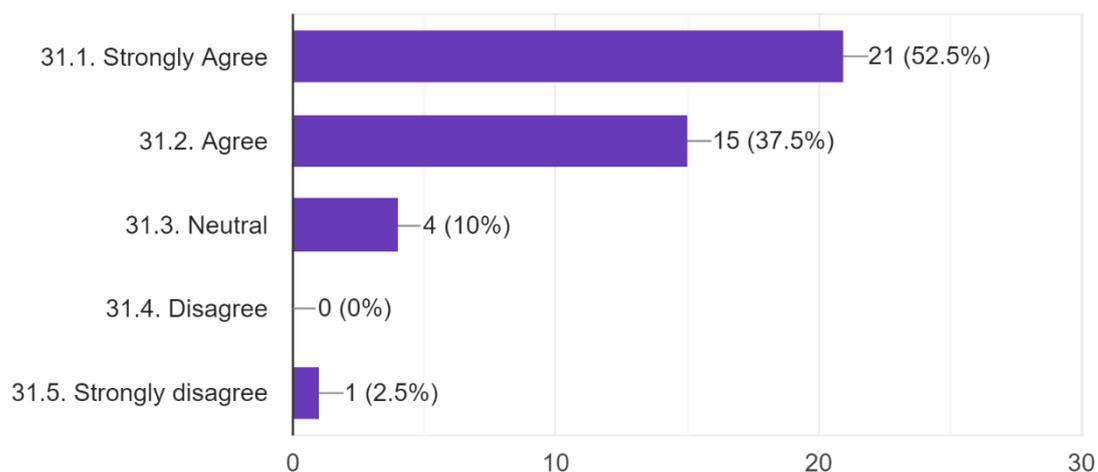
30. There is a need for ethics training to use Social Media in paramedic education.

40 responses



31. I am happy to use Social Media for learning.

40 responses



32. Make additional Comments here.

- *It's a smart idea to learn on social media apps and use the tools easily in contact in short time and clear the points and it's perfect because if we had same saturation we already will be ready by the use of social media and don't have any trouble in contact*
- *Social media is an effective tool not only in education, but in many other aspects of life.*
- *We can benefit a lot when using social media for study and education*

7.3. Appendix 3 - Ethics document



Research Research Ethics Form (Low Risk Research)

To be completed by the researcher and submitted to the Dean's nominated faculty representative on the Research Ethics Committee.

i. Applicants/Researcher's information:

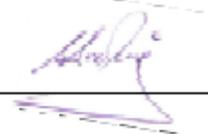
Name of Researcher /student	Sunil Sookraj
Research Title	The ethical considerations for the use of social media in Paramedic teaching and learning, in the UAE as compared to Ireland
Contact telephone No.	+97156 820 4432
Email address	20180476@student.buid.ac.ae
Date	2019/07/25

ii. Summary of Proposed Research:

<p>BRIEF OUTLINE OF PROJECT (100-250 words; this may be attached separately. You may prefer to use the abstract from the original bid):</p>	<p>The aim of this research project is to explore the ethical considerations for the use of social media in Paramedic teaching and learning, in the UAE as compared to Ireland.</p> <p>Social Media is widely used in teaching and learning but there is limited practice guidance specifically regarding the ethical considerations. There are many concerns which are generalised from other studies such as privacy, personal and professional boundaries, confidentiality consent and other social issues e.g. cyberbullying.</p> <p>The study will investigate how learners and teachers interact with social media in the academic and administrative domains and establish the need for a social media ethical practice guideline for teaching and learning.</p>
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Procedures Manual), as well as any other condition laid down by the BUiD Ethics Committee. I am fully aware of the timelines and content for participant's information and consent.

Print name: S Sookraj (20180476)

Signature:  Date: 2019/09/01

If the research is confirmed as not medium or high risk, it is endorsed HERE by the Faculty's Research Ethics Committee member (following discussion and clarification of any issues or concerns).....and forwarded to the Research Office to be recorded.*

I confirm that this project fits within the University's Research Policy (9.3 Policies and Procedures Manual) and I approve the proposal on behalf of BUiD's Research Ethics Committee.

Name and signature of nominated Faculty Representative: _____

Signature: _____ Date: _____

Name and signature of Dean of Research: Dr Khalid Al Marri

Signature: Khalid Al Marri Date: 15 October 2019

- iv. If the Faculty's Research Ethics Committee member or the Vice Chancellor considers the research of medium or high risk, it is forwarded to the Research Ethics Officer to follow the higher-level procedures.

* *If the Faculty representative is the DoS, the form needs the approval of the Chair of the Research Ethics Committee.*