
Student Success

ISSN: 2205-0795

Volume 9, Issue 2, pp. 13-24

March 2018



University student social media use and its influence on offline engagement in higher educational communities

Karen Sutherland, Cindy Davis, Uwe Terton and Irene Visser

University of the Sunshine Coast, Sippy Downs, Australia

Abstract

Previous research has emphasised social media adoption by students and the implementation of social media by educators, yet few studies have explored whether students are using it to facilitate engagement in offline environments with peers within university communities. Studies suggest engagement in educational communities and extra-curricular activities can reduce student attrition. This study surveyed 106 undergraduate students to investigate whether students using social media to interact online with their university felt: (i) connected to the broader university community, and (ii) social media helped them engage offline by meeting up with peers and attending university events. The results indicated that the majority (82%) never or rarely used the technology to facilitate offline engagement within their academic communities. Fourth year students were most likely to use social media to engage offline (66.7%). However, more than half of students (52.8%) felt that university social media profiles helped them to feel part of their academic community.

Please cite this article as:

Sutherland, K., Davis, C., Terton, U., & Visser, I. (2018). University student social media use and its influence on offline engagement in higher educational communities. *Student Success*, 9(2), 13-24. doi: 10.5204/ssj.v9i2.400

This article has been peer reviewed and accepted for publication in *Student Success*. Please see the Editorial Policies under the 'About' section of the Journal website for further information.

Student Success: A journal exploring the experiences of students in tertiary education



This work is licensed under a [Creative Commons Attribution 4.0 International Licence](https://creativecommons.org/licenses/by/4.0/). As an open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings. ISSN: 2205-0795

Introduction

Public relations and marketing within the higher education sector rely on the cultivation and management of relationships with prospective and current students and alumni (Constaninides & Zinck Stagno, 2011) and social media has become an important tool to assist universities in managing these relationships (Mattson & Barnes, 2009). However, the literature places emphasis on how universities are using social media to attract future students rather than using the technology to strengthen relationships with current students (Constaninides & Zinck Stagno, 2011; Hou & Macnamara, 2017). Some studies have suggested that social media can be used to help new students successfully adjust to university life (Lampe, Wohn, Vitak, Ellison & Walsh, 2011; Liccardi et al., 2007; Madge, Meek, Wellens, & Hooley, 2009). Other studies have shown that social media can increase social capital within university communities (Ellison, Steinfield & Lampe, 2007, 2011) and reduce feelings of loneliness for students (Mattanah et al., 2010). However, alternative studies have found the opposite, attributing social media to an increase in withdrawal from offline interactions and an upsurge in feelings of loneliness and isolation. Wohn and LaRose (2014) reported that the use of Facebook did not influence feelings of loneliness felt by first year students.

There is limited discussion about the potential influence social media has on encouraging university students to engage offline in their university community. Berger and Wild (2016) acknowledged that the higher education sector uses social media separately from the offline student experience. However, with the widespread use of social media by students, its potential as an offline connector is an unexplored area worthy of inquiry. Online interactions are based on the use of computer technology whereas offline social interludes are dependent on face-to-face exchanges (Yao & Zhong, 2014). This study explores how social

media can be used to influence university students to engage in offline face-to-face interactions with other students in the university community. While there are countless variations of face-to-face interactions that can occur within a university community, this study specifically focuses on in-person meet ups with peers and student attendance at university-organised social events.

University students' social media use

Social media use by undergraduate university students has increased rapidly in the past 10 years. Among adults living in the United States of America (USA) aged between 18 and 29 years, social media use has grown from 12% in 2005 to 90% in 2015, consistent with the adoption of smartphone technology (Perrin, 2015). A research study conducted across 15 countries identified students in higher education as being responsible for increasing the use of mobile computing devices, such as tablets and smartphones, with 67% attributing the technologies as being a factor in their academic success (Dahlstrom, Walker & Dziuban, 2013). Facebook is the social media platform most commonly used by university students. A study of 3000 university students found that 90% used Facebook (Dahlstrom, Grunwald, de Boor, & Vockley, 2011). Facebook's popularity with university students was further confirmed in a 2015 study in the United Kingdom by the organisation, Joint Information Systems Committee (Jisc) that reported 85% of students used the social networking platform (Parr, 2015). Sharma, Joshi and Sharma (2016) highlighted that the most influential determinants of Facebook usage by university students was resource sharing followed by perceived usefulness, perceived enjoyment, collaboration and social influence. While research has explored adoption rates and motivations behind social media use by undergraduate university students (Dahlstrom et al., 2011; Sharma et al.,

2016), there is limited information with regard to how students use social media to facilitate offline engagement within higher educational communities.

Student engagement

There is much speculation as to what constitutes student engagement but there are three different levels: behavioural, emotional and cognitive (Finn & Rock, 1997; Fredricks, Blumenfeld & Paris, 2004; Kahu, 2013). Behavioural engagement relates to the concept of participation in academic, social and extracurricular activities and is applicable to our study of student behaviours, which uses social media as a bridge to facilitate offline engagement with peers and within their university community (Fredricks et al., 2004; Finn & Voelkl, 1993; Finn & Zimmer, 1995). Kahu (2013) suggested that student engagement is a multifaceted concept whereby each component is dependent on the others, potentially affecting enthusiasm for course content and a sense of belonging to the organisation (Kahu, 2013).

Participation in out-of-class activities is considered an important facet of student engagement and is included in the national surveys of student engagement studies conducted in the USA and Australasia (Zepke, 2015). Some research suggests a positive association between participation in extracurricular activities and student retention (Markwell, 2007). Ekstrom, Goertz, Pollack and Rock (1986) found that high-school students who discontinued their studies displayed lower rates of behavioural engagement in extracurricular activities, possibly reducing opportunities to motivate educational pursuits (Holland & Andre, 1987). The study of high school students can help to inform higher education research due to the general closeness in age of students from both cohorts (mature-age students as the exception) and the potential for similar patterns of behaviour relating to disengagement from their respective

educational communities. A study conducted by Finn and Rock (1997) did not find any relationship between behavioural engagement and student retention. Pascarella, Terenzini and Feldman (2005) confirmed the Ekstrom et al. (1986) findings and suggested that educational attainment and degree completion is directly linked to on-campus friendships, engagement in university-sponsored activities, participation in extracurricular activities, and interactions with peers. Exploring social media as a potential conduit to increase offline student interaction in university communities instead of a replacement should provide insights into its contribution to strengthening student engagement.

Influence of social media on students' offline engagement

Before the advent of social media, a university could assess the strength of student engagement in the wider university community through offline participation in student clubs and societies (Berger & Wild, 2016). However, the emergence of social media has increased the complexity surrounding the measurement of student engagement, and the limited research that has explored social media's influence on offline student engagement has found mixed results. While some findings have confirmed that students are using social media in ways that can influence (or be influenced by) engagement in offline environments (Junco, 2012), the strength of that relationship has not been determined. For example, Tufekci (2008) found that the use of social media increased weekly offline contact with friends compared with non-users and Junco (2012) found that the amount of time spent on Facebook directly correlated with the time spent offline engaging in the university community. In studies by Heriberger and Harper (2008) and Hurtado (2007) users of social media reported a higher rate of participation in student groups and associations (Junco, 2012).

Historically, internet users have been reported to have fewer offline interactions with others (Nie, 2001). Many studies have suggested that less trust is placed in relationships that have been formed online, with internet users viewing such relationships as less reliable and valuable (Haythornthwaite, 2002; Mesch & Talmud, 2006). Furthermore, Berger and Wild (2016) found that social media groups, such as on Facebook, rarely encourage offline interaction between members. Zhong (2014) reported that offline civic participation did not influence online participation and *vice-versa*. However, using social media to bond and bridge social capital was positively associated with online civic involvement but was unrelated to offline civic behaviours. Civic participation has been described as volunteering and/or fundraising for a non-profit organisation or cause (Park, Kee & Valenzuela, 2009). However, others (Park et al., 2009) found a positive relationship between the intensity of involvement in a Facebook group and levels of offline civic participation.

Barnes (2017) explored the experiences of 26 first year students through their Facebook statuses at four key points during their transition into university: orientation week, first assignment, end of first semester, end of academic year. The study focused on how first year students used Facebook to navigate their social integration into university. Social integration is best defined as the level at which students feel connected to members of their university community (peers, academic and professional staff), and to the environment and the extent at which they are involved in university activities. The Barnes study found that Facebook played a key role for participants navigating their first year of university, similar to a student by Stephenson-Abetz and Holman's (2012). However, participants utilised the advice from their existing networks to assist with their social integration rather than using the social networking site as a tool to create new connections. The study outlined here differs from the Barnes study because the sample is not limited to first year university students, uses a

survey as a research method and does not focus on one specific social media site. Furthermore, this study addresses a gap in the literature by exploring whether undergraduate university students are using social media as a tool to assist them in engaging offline with their peers through the organisation of face-to-face meetings or through the attendance of university-organised social events. This cross between online and offline was not a focus in the Barnes study.

The study closest in focus to our research is that of Berger and Wild (2016) who explored the influence of social media on encouraging offline engagement by students in university-led event. Berger and Wild discovered that that setting up a Facebook group (that attracted more than 500 students) then encouraging students to attend an offline event was an unsuccessful method of encouraging offline interaction within a university community. However, a more effective approach was to organise a regular event that was popular with students and that resulted in the formation of Facebook groups that were "parasitic on the relevant live interaction group activity" (Berger & Wild, 2016, p. 8). Therefore, it was offline engagement that initially encouraged social media interaction, resulting in increased engagement in both offline and social media spaces. Berger and Wild's study demonstrated the benefits of students being guided and encouraged to use social media as a conduit to build new offline connections with university peers. In comparison, the Barnes (2017) study suggests that using online interactions via social media as a replacement for offline connections can result in students remaining within their existing online social groups rather than cultivating new connections within their university community.

Our study differs from that of Berger and Wild (2016) because it surveys students directly and then aims to determine if there is a relationship between specific characteristics of the sample and the students most likely and least likely to

use social media as a tool to engage offline in their university community.

Community

Creating a strong university community as both a prompt and product of student engagement has been recognised as both a priority and a challenge for Australian tertiary institutions (Krause, 2005; McGowan & Partridge, 2014). Social media has also been identified as being used to build and strengthen campus community by actively encouraging student involvement and participation in university activities (Davis, Deil-Amen, Rios-Aguilar & Canche, 2012). McGowan and Partridge (2014) suggested that students can make greater sense of their educational environment by forming links with the wider university community through membership to peer groups. Yet, previous research has suggested that student participation is low in offline university community events, diminishing the development of a community with a high level of social capital (McGowan & Partridge, 2014).

Consequently, social media is now seen as an integral part of the building of university campus communities, strengthening social capital and increasing opportunities for student-to-student interaction (Davis et al., 2012; Selwyn, 2007; Goode & Woodward, 2016.). Some aspects of social media have been compared to a well-functioning educational community such as facilitating peer feedback, providing similar learning and social contexts, and enabling the formation of groups with shared interests which, in turn, create online knowledge communities (Selwyn, 2007). Unofficial (or student-initiated) social media spaces, such as Facebook, can provide students with opportunities for casual engagement and community building (Woodward & Goode, 2016). Goode & Woodward (2016) suggested that, because students are spending more of their time online, universities need to engage more with what is a digital extension of their campuses. Yet, a range of theoretical

approaches seem to be lacking in the literature that proposes the facilitation of seamless student engagement online and on-campus.

A possible approach to digital engagement and community building was proposed by Sutherland (2016) who suggested that, instead of keeping social media and offline engagement as separate activities, taking a propinquity approach to social media may be more beneficial. Propinquity, a component of Kent and Taylor's (2002) dialogic theory, refers to an organisation's extension of dialogue to issues that affect its stakeholders and vice versa. The three key characteristics of propinquity, ('immediacy of presence, temporal flow and engagement') require that i) issues affecting both parties must be discussed in the present rather than after decisions have been made, ii) both parties understand the history of the relationship, and are committed to maintaining it in the present, and the future, and iii) both parties are willing to actively participate in the dialogue (Kent & Taylor, 2002, p.26). Within the context of our study, propinquity relates to the interaction and dialogue that occurs between universities and their student stakeholders via social media and offline. Adopting a propinquity approach to social media would involve blending social media and offline environments to simultaneously address interactions in both spaces (Sutherland, 2016). Sutherland (2016) proposed that social media has the technological capabilities to facilitate the realisation of all three propinquity components, because it can: i) facilitate dialogic interactions between parties in real-time, ii) be used to build new and strengthen existing relationships, and iii) provide a mechanism to execute engagement between both parties. Therefore, adopting a propinquity approach to social media by blending social media and offline environments has been suggested to increase engagement and strengthen organisational stakeholder relationships, but this approach has not yet been tested within a student engagement context.

As such, the scarcity of research and diversity of results to better understand social media's influence on university students' offline engagement in higher educational communities have led to the development of the following research questions:

Research Questions

RQ1. How often do students connected with official or unofficial university social media profiles use social media technology to engage offline in higher educational communities and what factors are related this usage?

RQ2. Does being connected with official or unofficial university social media profiles make students feel part of a broader higher educational community, and what factors are related to this feeling of connection to community?

Material and Methods

An online SurveyMonkey survey, with descriptive and analytic elements, was distributed within lectures and via email, Blackboard announcements, and social media (Twitter and Facebook) to 647 undergraduate students enrolled in seven courses across five disciplines: advertising, design, public relations, public communication and psychology (Walter, 2010). The rationale behind using this largely quantitative approach was to explore habits and attitudes relating to social media's influence on students' offline engagement. This is a standardised method of gathering uniform empirical data that can assist in describing and contrasting variable relationships (Axinn & Pearce, 2006; Berger, 2000; Weerakkody, 2008). Four reminders were sent to students throughout the 30-day data gathering phase using the same communication channels (lectures, email, Blackboard and social media). The overall survey attracted a response rate of 17.2% or (n = 111), 66% (n = 73) were female, 33% (n = 37) were male and 1% (1) person identified as other. The survey asked students

the two research questions about their social media habits and attitudes towards its use as an educational tool, as well as three related questions to investigate different aspects relating to engagement in higher educational communities in order to provide ample data for analysis.

These three questions were:

1. *How often have you attended an event or other offline activity after seeing it on an official/unofficial USC social media profile?*
2. *How often do you use social media to organise in-person meet ups with members of the USC community?*
3. *Being connected to USC official and/or unofficial social media profiles makes me feel part of the broader USC community.*

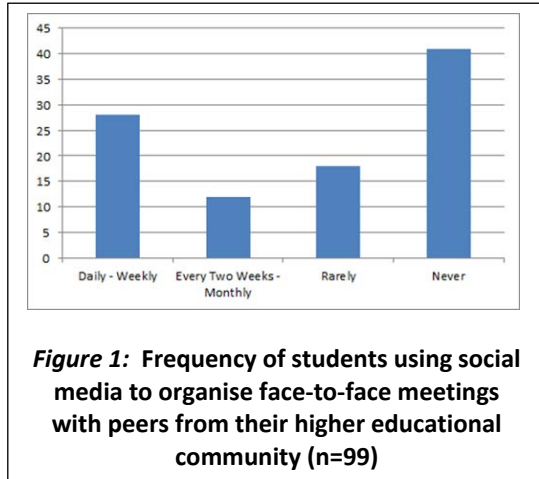
The response rate to these three questions in comparison to the overall sample of 111 participants ranged between 90.1% (100) Q 2 and 70.3% (78) Q 3. Five respondents were removed from the data because they answered that they did not use social media. Cross-tab analysis was performed on the data from each of the three questions to explore relationships between the variables: age, gender, year level, and course. A Pearson Chi-Square test was applied to measure the strength of any association between the variables.

Results

RQ1. How often do students connected with official or unofficial university social media profiles use social media technology to engage offline in higher educational communities and what factors are related this usage?

Survey participants were asked to state the frequency at which they used social media to organise face-to-face meetings with other

members of their higher educational community (Figure 1).

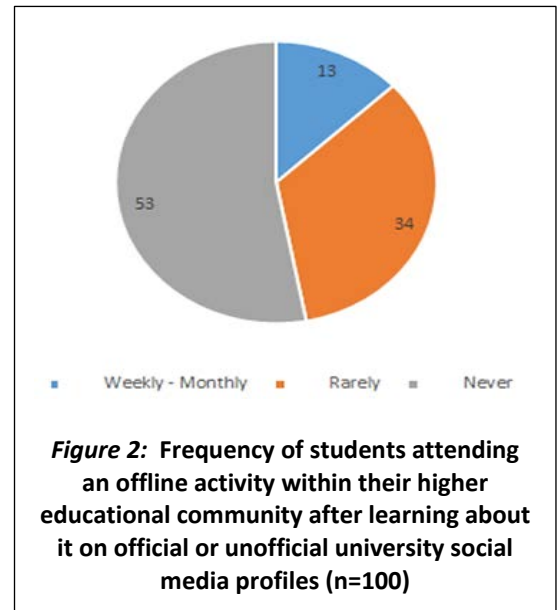


The results indicate that most students (59, 55.7%) rarely (18, 17%) or never (41, 38.7%) use social media to organise face-to-face meetings with their peers. More than a quarter of participants (28, 26.4%) use social media regularly (daily to weekly) and 12 (11.3%) (every two weeks to monthly) to meet up in-person with their peers.

Data analysis determined that there was no significant relationship between the frequency of university students using social media to organise face-to-face meetings with university peers based on gender ($\chi^2(8)=7.73$, $p=.460$) or age ($\chi^2(8)=13.06$, $p=.110$). However, there was a statistically significant association between the organisation of face-to-face meetings and both the year of study ($\chi^2(16)=27.37$, $p=.038$) and the course of study ($\chi^2(24)=46.32$, $p=.004$). Approximately one third of 2nd year (31.8%) and 3rd year (38.1%) students were the cohort most likely to use social media on a daily to weekly basis to organise in-person meetings with their university peers. Nearly half of first year students (48%) had never used social media for this purpose. Advertising students (50%) and public relations students (47%)

were most likely to use social media to organise meetings with their university peers.

Participants were also asked how often they attended offline events at university after learning about them via official or unofficial university social media channels (Figure 2).

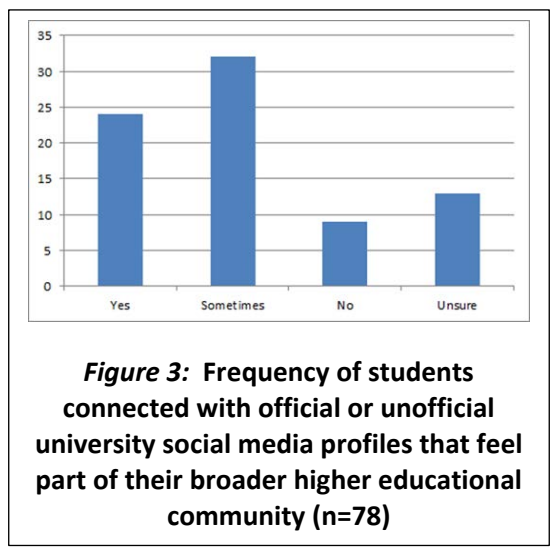


Most participants (87, 82%) have never (53, 50%) or rarely (34, 32%) attended an offline event within their university community after seeing it on social media. Only 13 participants (12.3%) answered that they have attended an offline event after learning about it through university-related online social networks. There was no statistically significant relationship based on gender ($\chi^2(6)=6.04$, $p=.418$) or age ($\chi^2(6)=7.56$, $p=.272$) but a relationship between year of study ($\chi^2(12)=28.66$, $p=.004$) and course of study ($\chi^2(18)=32.23$, $p=.021$) was significant. The majority of 1st year university students (64.3%) had never attended a university event after seeing it on social media. Fourth year students (66.7%) were the most likely cohort to attend

offline university events after learning about them on social media. Students studying Typography (29.4%) were the least likely and Public Health students (42.9%) the most likely to attend a university event after seeing it on social media.

RQ2. Does being connected with official or unofficial university social media profiles make students feel part of a broader higher educational community?

Participants were asked to indicate whether being connected to their university’s official or unofficial social media channels provided them with a sense of belonging to the broader higher educational community (Figure 3).



The results (Figure 3) indicate that more than half of participants (56, 52.8%) definitely (24, 22.6%) or sometimes (32, 30.2%) felt part of their broader university community as a result of being connected with university social media profiles. A small percentage of participants (9, 8.5%) did not or felt unsure (13, 12.3%) about the connection.

Student year of study ($\chi^2(16)=27.55, p=.036$) was the only variable with a statistically

significant relationship to feeling part of their broader higher educational community. More than half of 3rd year students (52.4%) and half of 2nd and 4th year students answered yes to the statement: *Being connected to USC official and/or unofficial social media profiles makes me feel part of the broader USC community*. Only 28.6% of first year students answered ‘yes’ to this question. Gender ($\chi^2(8)=6.51, p=.590$), age ($\chi^2(8)=12.12, p=.146$) and course ($\chi^2(24)=25.64, p=.372$) had no statistically significant relationship to students feeling part of the broader higher education community from being connected to their university’s social media profiles.

Discussion

This study demonstrates that the majority of university students do not use social media as a tool to engage offline with their higher educational community, and that age and gender does not influence this behaviour. This finding differs from studies conducted by Junco (2012), Tufecki (2008), Heriberger and Harper (2008) and the Hurtado (2007) who found the amount of time spent using social media directly correlated to offline participation rates in university communities. While most students fail to use social media as a tool to interact offline, the majority still feel connected to their university community as a result of following university social media profiles. This finding supports the attempts being placed on social media as a tool to strengthen university communities and their social capital (Clark, Fine & Scheuer, 2017; Davis et al., 2012; Ellison et al., 2007; Ellison et al., 2011; Raza, Qazi & Umer, 2016;).

The most important finding in our study is that students in the later years of their undergraduate degree programs felt a stronger connection to their university community from following their university on social media and used social media frequently as a tool to engage offline with their university community. This may be because students in the final years of

their courses have had more time to develop relationships with university peers and a feeling of connection within their university community but it may also be because first year students have not yet learned how to use social media other than in a social context within their existing networks. Supporting this notion is a study of first year students by Lodge (2010) who found online social networks to be used predominantly for socialising, "...it is the students' realm so students are under no obligation heed any incursions by the institution into this space and therefore messages are being ignored." (p. 104)

Students in the final years of their degrees may have had time to acquire the skills (and to experience the possible benefits) of using social media as a bridge between online and offline interactions in their university community; this is defined as a propinquital approach by Sutherland (2016). The minimal use by first year students of social media as a tool to connect and engage both online and offline with their university community may be due to a skill deficiency or a lack of understanding from first year students about how to use social media technology in this way. Or, as demonstrated in the Barnes (2017) study, first year students may be connecting with people outside of the university about university matters on social media rather than building new connections with fellow students and university staff. Universities are encouraged to introduce initiatives to directly address this issue. Berger and Wild (2016) found that encouraging students to connect via social media at a regular (and popular) offline event, resulted in higher rates of engagement (via social media and offline) in their university community. However, for some students, the organised offline events in the Berger and Wild study may have also been the conduit for friendships to be formed between peers after meeting elsewhere in the university and conducted online until their next face-to-face interaction.

Berger and Wild's (2016) initiative supports the propinquital loop theorised by Sutherland (2016). A propinquital loop occurs when social media interactions between organisations and stakeholders are encouraged (and supported) in moving between social media and offline spaces on a regular basis. These behaviours create a loop of activity which keeps the stakeholder in close proximity to the organisation (Sutherland, 2016, p. 82). Rather than assuming first year students will follow university social media profiles and use the technology to engage offline, it is recommended that relevant university staff are strategic and proactive in educating this cohort about the wider benefits of using social media. Discovering the types of offline events that are of most interest to first year students may be the first step in achieving wider participation. Providing first year students in particular with regular, accessible, enjoyable and interesting opportunities to make offline connections may assist in improving student engagement. Using offline events to encourage attendees to connect with the university (and each other) on social media would support the development of students' relationships within their university community. Finally, first year students should be provided with regular incentives to keep driving their activity between university social media profiles and the offline community, with the aim of strengthening feelings of connection in the process.

One in five university students discontinue their studies within the first year of their course (Australian Government Department of Education and Training, 2015). Therefore, employing social media in more proactive and strategic ways to improve the student experience may reduce this economic and academic inefficiency. Using a propinquital approach to increase first year students' connection to their university communities and peers may reduce the time it takes for this cohort to adjust to and integrate with all aspects of university life (Lampe et al., 2011; Liccardi et al., 2007; Madge et al., 2009) and in turn, reduce

attrition rates (Ekstrom et al., 1986; Holland & Andre, 1987; Markwell, 2007; Pascarella et al., 2005).

Conclusion

This study explored student social media use and its influence on offline engagement within the broader university community. While this study was limited to one higher educational institution, the key finding is that students in the later years of their courses use social media to engage offline in their university communities more frequently than do first year students. This disconnect may be a significant factor contributing to the high first year attrition rates. Further research is required firstly to gain a greater insight into why first year students do not use social media to broaden their interaction with the university community. Additionally, investigation is also necessary to formally test the impact of adopting a propinquital approach to social media in the context of university student engagement (Sutherland, 2016). Undertaking such research would require working closely with university marketing and student support staff to develop and implement a proactive strategy that embodies a propinquital approach, then evaluating students' (particularly first year students') levels of offline and social media engagement, and feelings of belonging to their university community. Overall, the aim of our study, and future research, is to increase students' feelings of belonging to, and engagement with, their university community to reduce attrition rates.

References

- Australian Government Department of Education and Training (2015). *Selected Higher Education Statistics – 2015 Student data*. Retrieved from <https://www.education.gov.au/selected-higher-education-statistics-2015-student-data>
- Axinn, W. G., & Pearce, L. D. (2006). *Mixed method data collection strategies*. University of North Carolina, Chapel Hill: Cambridge University Press.
- Barnes, N. (2017). Navigating social integration into university on Facebook: Insights from a longitudinal study. *Student Success*, 8(1), 1-11. doi:10.5204/ssj.v8i1.362
- Berger, D., & Wild, C. (2016). Turned on, tuned in, but not dropped out: Enhancing the student experience with popular social media platforms. *European Journal of Law and Technology*, 7(1). Retrieved from <http://ejlt.org/article/view/503>
- Clark, M., Fine, M., & Scheuer, C. (2017). Relationship quality in higher education marketing: the role of social media engagement. *Journal of Marketing for Higher Education*, 27(1), 40-58. doi: 10.1080/08841241.2016.1269036
- Constantinides, E., & Zinck Stagno, M. (2011). Potential of the social media as instruments of higher education marketing: a segmentation study. *Journal of Marketing for Higher Education*, 21(1), 7-24. doi: 10.1080/08841241.2011.573593
- Dahlstrom, E., Grunwald, P., de Boer, T., & Vockley, M. (2011). ECAR National study of students and information technology in higher education, 2011. *EDUCUASE Center for Applied Research*. Retrieved from <https://library.educause.edu/resources/2011/10/ecar-national-study-of-undergraduate-students-and-information-technology-2011-report>
- Dahlstrom, E., Walker, J., & Dziuban, C. (2013). *ECAR study of undergraduate students and information technology: 2013*. Retrieved from <https://library.educause.edu/~media/files/library/2014/10/ers1406.pdf>
- Davis III, C. H., Deil-Amen, R., Rios-Aguilar, C., & Canche, M. S. G. (2012). *Social Media in Higher Education: A literature review and research directions*. Retrieved from <https://works.bepress.com/hfdavis/2/>
- Ekstrom, R., Goertz, M., Pollack, J., & Rock, D. (1986). Who drops out of high school and why. *Teachers College Record*, 87, 356-373.
- Ellison, N., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168. doi: 10.1111/j.1083-6101.2007.00367.x
- Ellison, N., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. *New Media & Society*, 13(6), 873-892. doi: 10.1177/1461444810385389
- Finn, J., & Rock, D. (1997). Academic success among students at risk for school failure. *Journal of Applied*

- Psychology*, 82(2), 221. doi: 10.1037//0021-9010.82.2.221
- Finn, J., & Voelkl, K. (1993). School characteristics related to student engagement. *The Journal of Negro Education*, 62(3), 249-268. doi: 10.2307/2295464
- Finn, J., & Zimmer, K. (2012). Student engagement: What is it? Why does it matter? *Handbook of Research on Student Engagement* (pp. 97-131): Springer. doi: 10.1007/978-1-4614-2018-7_5
- Fredricks, J., Blumenfeld, P., & Paris, A. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109. doi: 10.3102/00346543074001059
- Goode, L. & Woodward S. (2016). Digital Campus Culture: Diversity, Inclusivity and Social Media. *MEDIANZ*.
- Haythornthwaite, C. (2002). Strong, weak, and latent ties and the impact of new media. *The Information Society*, 18(5), 385-401. doi: 10.1080/01972240290108195
- Heriberger, G., & Harper, R. (2008). Have you Facebooked Astin lately? Using technology to increase student involvement. *New Directions for Student Services*, 2008(124), 19-35. doi: 10.1002/ss.293
- Holland, A., & Andre, T. (1987). Participation in extracurricular activities in secondary school: What is known, what needs to be known? *Review of Educational Research*, 57(4), 437-466. doi: 10.3102/00346543057004437
- Hou, J., & Macnamara, J. (2017). Beyond a "spectator sport": Social media for university engagement and community building. *Asia Pacific Public Relations Journal*, 18, 102-119.
- Hurtado, S. (2007). College freshmen and online social networking sites. *Higher Education Research Institute (HERI) Research Brief*. Retrieved from <https://heri.ucla.edu/PDFs/pubs/briefs/brief-091107-SocialNetworking.pdf>
- Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58(1), 162-171. doi: 10.1016/j.compedu.2011.08.004
- Kahu, E. (2013). Framing student engagement in higher education. *Studies in Higher Education*, 38(5), 758-773. doi: 10.1080/03075079.2011.598505
- Kent, M., & Taylor, M. (2002). Toward a dialogic theory of public relations. *Public Relations Review*, 28(1), 21-37. doi: 10.1016/S0363-8111(02)00108-X
- Krause, K. (2005, 21-22 September). *Understanding and promoting student engagement in university learning communities*. Paper presented at the Sharing Scholarship in Learning and Teaching: Engaging Students, Townsville. Retrieved from http://melbourne.cshe.unimelb.edu.au/_data/assets/pdf_file/0007/1761523/Stud_eng.pdf
- Lampe, C., Wohn, D., Vitak, J., Ellison, N., & Wash, R. (2011). Student use of Facebook for organizing collaborative classroom activities. *International Journal of Computer-Supported Collaborative Learning*, 6(3), 329-347. doi: 10.1007/s11412-011-9115-y
- Liccardi, I., Ounnas, A., Pau, R., Massey, E., Kinnunen, P., Lewthwaite, S., ... Sarkar, C. (2007). *The role of social networks in students' learning experiences*. Retrieved from <https://dl.acm.org/citation.cfm?id=1345443.1345442>
- Lodge, J. (2010). Communicating with first year students: So many channels but is anyone listening? A Practice Report. *The International Journal of the First Year in Higher Education*, 1(1), 100-105. doi: 10.5204/intfyhe.v1i1.23
- Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: 'It is more for socialising and talking to friends about work than for actually doing work'. *Learning, Media and Technology*, 34(2), 141-155. doi: 10.1080/17439880902923606
- Markwell, D. (2007, January). *The challenge of student engagement*. Paper presented at the Teaching and Learning Forum. University of Western Australia.
- Mattanah, J., Ayers, J., Brand, B., Brooks, L., Quimby, J., & McNary, S. (2010). A social support intervention to ease the college transition: Exploring main effects and moderators. *Journal of College Student Development*, 51(1), 93-108. doi: 10.1353/csd.0.0116
- Mattson, E., & Barnes, N. (2009). *Social media and college admissions: The first longitudinal study*. Retrieved from <http://corporateenvelope.com/SocialMediaAndAdmissions.pdf>
- McGowan, W., & Partridge, L. (2014). Student Engagement and Making Community Happen. *Educational Philosophy and Theory*, 46(3), 237-254. doi: 10.1111/j.1469-5812.2011.00815.x
- Mesch, G., & Talmud, I. (2006). The quality of online and offline relationships: The role of multiplexity and duration of social relationships. *The Information Society*, 22(3), 137-148. <https://doi.org/10.1080/01972240600677805>
- Nie, N. (2001). Sociability, interpersonal relations, and the Internet: Reconciling conflicting findings. *American Behavioral Scientist*, 45(3), 420-435. doi: 10.1080/01972240600677805
- Park, N., Kee, K., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behavior*, 12(6), 729-733. doi: 10.1089/cpb.2009.0003
- Parr, C. (2015, February 26). One in four students uses social media to contact university staff. *Times Higher*

- Education. Retrieved from: <https://www.timeshighereducation.com/news/one-in-four-students-uses-social-media-to-contact-university-staff/2018798.article>
- Pascarella, E., Terenzini, P., & Feldman, K. (2005). *How college affects students* (Vol. 2): Jossey-Bass San Francisco, CA.
- Perrin, A. (2015). Social media usage. *Pew Research Center*. Retrieved from https://static1.squarespace.com/static/56698c26e0327c6cd4b4a9c0/t/56cb504e356fb0ad1dc200dc/1456164942915/PI_2015-10-08_Social-Networking-Usage-2005-2015_FINAL.pdf
- Raza, S., Qazi, W., & Umer, A. (2016). Facebook is a source of social capital building among university students: Evidence from a developing country. *Journal of Educational Computing Research*, 55(3), 295-322. <https://doi.org/10.1177/0735633116667357>
- Selwyn, N. (2007, November 15). 'Screw Blackboard ... do it on Facebook!': An investigation of students' educational use of Facebook. Paper presented at the *Poke 1.0 - Facebook social research symposium*. Retrieved from <http://startrekdigitalliteracy.pbworks.com/f/2g19b89ezl6ursp6e749.pdf>
- Sharma, S., Joshi, A., & Sharma, H. (2016). A multi-analytical approach to predict the Facebook usage in higher education. *Computers in Human Behavior*, 55, 340-353. doi: 10.1016/j.chb.2015.09.020
- Stephenson-Abetz, J., & Holman, A. (2012) Home is Where the Heart is: Facebook and the Negotiation of "Old" and "New" During the Transition to College, *Western Journal of Communication*, 76(2), 175-193, doi: 10.1080/10570314.2011.654309
- Sutherland, K. (2016). Using propinquity loops to blend social media and offline spaces: a case study of the ALS Ice-Bucket Challenge. *Media International Australia*, 160(1), 78-88. doi: 10.1177/1329878X16651138
- Tufekci, Z. (2008). Grooming, gossip, Facebook and MySpace: What can we learn about these sites from those who won't assimilate? *Information, Communication & Society*, 11(4), 544-564. doi: 10.1080/13691180801999050
- Walter, M. (2010). *Social research methods*. South Melbourne, Victoria: Oxford University Press.
- Weerakkody, N. (2008). *Research methods for media and communication*. Oxford University Press.
- Wohn, D., & LaRose, R. (2014). Effects of loneliness and differential usage of Facebook on college adjustment of first-year students. *Computers & Education*, 76, 158-167. doi: 10.1080/13691180801999050
- Yao, M., & Zhong, Z. (2014). Loneliness, social contacts and Internet addiction: A cross-lagged panel study. *Computers in Human Behavior*, 30, 164-170. doi: 10.1016/j.chb.2013.08.007
- Zepke, N. (2015). Student engagement research: Thinking beyond the mainstream. *Higher Education Research & Development*, 34(6), 1311-1323. doi: 10.1080/07294360.2015.1024635
- Zhong, Z.-J. (2014). Civic engagement among educated Chinese youth: The role of SNS (Social Networking Services), bonding and bridging social capital. *Computers & Education*, 75, 263-273. doi: 10.1016/j.compedu.2014.03.005