



A comparative study of social media networks among higher education students

Al Musawi, Ali¹

Bylieva, Daria²

Osman, Mohamed³

Ahmad, Abdulrahman⁴

Al-Moqbali, Asma⁵



(✉ Corresponding Author)

^{1,3,4}Instructional and Learning Technologies Dept., Sultan Qaboos University, Oman.

¹Email: asmusawi@squ.edu.om

³Email: mosman@squ.edu.om

⁴Email: abdoelhaj@squ.edu.om

²Department of Social Science, St. Petersburg State Technical University, Russia.

²Email: bylieva_ds@spbstu.ru

⁵Ministry of Education, Oman.

⁵Email: s63376@student.squ.edu.om

Abstract

This study aims to compare how students perceive and use social media networks (SMNs) in both Omani and Russian higher education institutions. An extensive literature survey was conducted through which the content of the questionnaire was compiled in English, validated for its content, clarity and accuracy by Russian and Omani reviewers and then translated. Data was collected from 837 undergraduate Russian and Omani students using online Google Forms. The results indicate a moderate level of SMNs use in both Higher Education Institution (HEIs) contexts with cross-platform mobile applications at the top of list of the SMNs used by both groups for social connections and multimedia sharing. The overall perceptions towards SMNs seem to be neutral among Russian and Omani students followed by positive perceptions. The study recommends that teachers in both countries provide 'attractive' academic content through a social and multimedia design approach.

Keywords: Higher education, Omani/Russian contexts, Perceptions, Social media networks, Use.

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Contents

1. Introduction	514
2. Literature Review	514
3. Methodology	516
4. Study Findings	517
5. Results and Discussion	518
6. Conclusion and Recommendations	518
References	519

Contribution of this paper to the literature

This study compares two different higher education settings namely the Russian and Omani universities. It contributes to improve the academic use of social media networks effectively in different instructional settings and helps decision makers in both studied environments to glean from each other's data and findings presented here.

1. Introduction

Modern youth' lives are unthinkable without social media networks. Technology serves as an entraining tool to be fully integrated into every aspect of life. It also has a significant impact on academics as it offers teachers and students many opportunities for accessing information and various resources (Yadav & Rahman, 2017). It also allows them to communicate easily with one another (Alenezi & Shahi, 2015) and to share content, ideas, opinions, beliefs, feelings and personal, social and educational experiences (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). However, the question of what role SMNs' information and communication can play in the life of a student is worthy of investigation.

2. Literature Review

2.1. Social Media Networks

Social Media Networks (SMNs) are defined as internet applications that permit users to create and exchange information, content and knowledge (Kaplan & Haenlein, 2010). According to Hartshorn (2010), SMNs are communication tools that enable users to communicate with a large audience. In other words, it is "the platform that gives individuals the opportunity to interact and use two-way communication. Anyone who has online account can share their opinions with other social media users" (El-Badawy & Hashem, 2015).

There are many types of SMN tools that are available for users to use for different purposes. For example, Facebook, LinkedIn and WhatsApp are used for social communication whereas Google Docs are used educationally to support students' collaborative projects. Similarly, Twitter, Flickr, SlideShare and YouTube are used for sharing content where students can search for information that is relevant to their learning. All these SMN tools are designed as mobile applications for convenience and portability. They allow users to have open membership to freely create their own personal profiles connect with other users and add them as social friends.

2.2. Students' Use

Higher education students are using SMNs despite a certain unwillingness on the part of the academic community to adopt them into the learning process (Sn & Thippesh, 2023). They use them for leisure activities and informational searches. Many instructors create WhatsApp groups to encourage students to communicate, discuss concepts and reflect on practice while others arrange virtual classes and assignments using Edmodo and Google Classrooms and create links to webinars and Slide Share presentations. Most students have their own profiles and pages on Instagram, Facebook, Twitter and other communication media and use these profiles to connect with their colleagues (Sn & Thippesh, 2023).

From an academic perspectives, SMNs can create many opportunities for improving students' academic learning (Apuke & Iyendo, 2018). Bylieva, Hong, Lobatyuk, and Nam (2021) found that "students have their own goals and strategies and use these resources for development" as it allows them to interact with each other, engage in discussions, collaborate to solve problems, exchange ideas and sustain good relationships with each other and with their instructors (Celestine & Nonyelum, 2018). In addition, SMNs can support students who want to study at their own pace and style. Such tools encourage communication, knowledge creation and sharing and confidence in situations when their capabilities support better performance without investing in e-learning systems.

An important factor is why SMNs are used. Junco notes that using Facebook for collecting and sharing information is a positive predictor of overall Grade Point Average (GPA) while chatting on Facebook is a negative one (Junco, 2012). Some studies indicate that youth use SMNs for entertainment and friendship rather than educational purposes (Madge, Meek, Wellens, & Hooley, 2009; Murray, 2008). However, students believe that SMNs such as Facebook would be convenient for educational purposes (Roblyer, McDaniel, Webb, Herman, & Witty, 2010). Most users of SMNs sites are more likely to have positive perceptions of using them for educational purposes and students who already have experience feeling like they are part of a SMN community were very likely to be in agreement that SMNs sites could be used for educational purposes (Richardson, Abraham, & Bond, 2012). Other studies found that 36.3% of the Ghanaian students use SMNs technologies for learning, 45.4% use them for searching for knowledge and 73.6% of them agree that SMNs has made a positive influence on their academic performance (Quansah, Fiadzawoo, & Kuunaagmen, 2016). In addition, 77% of Turkish students using Facebook for educational purposes (Toker & Baturay, 2019). Neier and Zayer (2015) found that students believe that the strongest potential to enhance learning is for professional-focused SMNs (the average value on a 5 point scale is 4.23), for video content and sharing sites (4.09), than for question and answer sites (3.80), SMNs (3.44), micro blogging (3.32), social bookmarking (3.20) and photo sharing sites (3.19) (Neier & Zayer, 2015).

2.3. Comparative Studies

However, it should be noted that the attitude towards the use of SMNs for educational purposes can differ in various educational centers. SMNs are used worldwide and their participation in the educational process is different. For example, American universities have orientation on Facebook that is available for students at American universities (Tian, Yu, Vogel, & Kwok, 2011). Students enjoyed social learning experiences on Facebook but academic learning experiences are relatively less reported (Tian et al., 2011) despite the fact that SMNs are widely used in Hong Kong (Au, Lam, & Chan, 2015). A comparative study shows that the effect of SMNs on learning outcomes showed changes in attitude and values in Mexico. However, in South Korea the "ecology of learning" of students has undergone a change as a result of the development of meanings and discourses through the use of new media through the internet (Castro-Romero, 2015). In another comparable study, Malaysian

students showed a significantly higher emphasis on academic reasons and barriers when using SMNs as compared to their Australian counterparts. Malaysian students use SMNs community to share and learn the academic content of their studies while Australian students regard SMNs primarily as a networking site for socializing without constricting its use to the pursuit of academic knowledge (Balakrishnan, Teoh, & Liew, 2017).

During COVID-19, Al Balushi, Al-Busaidi, Malik, and Al-Salti's (2022) studies revealed that the opportunities yielded through the creative use of SMNs paved the way for higher educational institutions to amplify the outcomes of their online learning. This literary evidence was echoed by Papademetriou, Anastasiadou, Konteos, and Papalexandris (2022) and Sobaih, Salem, Hasanein, and Elnasr (2021) who show that the SMNs used in these institutions positively influence the instructional process by supporting learning, encouraging learners to participate and connecting them to the academic community which has a positive impact on their conceptual composition and critical thinking. However, these studies also show that the SMNs' active role in the learning process is impeded by lack of defined policy which is manifested by the instructors' lack of support and feedback.

2.4. Perceptions towards SMNs

Traditionally, there was a cautious attitude towards SMNs as they were considered time consuming and harmful to students. Similarly, addiction was connected with a high level of distress, fatigue, difficulty concentrating and impairments in daily activities (De-Sola Gutiérrez, Rodríguez de Fonseca, & Rubio, 2016). Kalpidou, Costin, and Morris (2011) revealed that first-year students who used Facebook struggled both personally and academically (Kalpidou et al., 2011). It was noted that such problems as impaired performance of tasks requiring cognitive control and overcoming irrelevant information (Ophir, Nass, & Wagner, 2009), poor grammar and spelling, late submission of assignments, less study time and poor academic performance (Mingle & Adams, 2015), lower overall GPA (Glass, Prichard, Lafortune, & Schwab, 2013; Junco, 2012; Kirschner & Karpinski, 2010) and distraction of students especially when the learning tasks are deemed less important (Gupta & Irwin, 2016). However, contrary data suggests that Facebook use has no relationship with students' academics (Pasek, More, & Hargittai, 2009). Many studies argue that using SMN technologies provides social support and contributes to well-being (Burke & Kraut, 2016; Verduyn, Ybarra, Résibois, Jonides, & Kross, 2017). The relationship between using SMNs, stress and life satisfaction is also questioned (Verduyn et al., 2017).

Nevertheless, today's attitude towards SMNs in universities is positive. SMNs are considered a learning tool that offers a win-win (Quansah et al., 2016). One of the main arguments for using SMNs is establishing relationships with students (Hamid, Waycott, Kurnia, & Chang, 2015; Roblyer et al., 2010; Sobaih & Moustafa, 2016). Moreover, studies remark that SMNs could enhance communication skills, widening participation, social engagement and collaboration, encouraging peer support and review and creating learning interest (Greenhow, 2011; Gülbahar, 2013; Jones, Blackey, Fitzgibbon, & Chew, 2010; West, Moore, & Barry, 2015).

There is a tendency for teachers to use SMNs for educational purposes. Studies on the use of SMNs by instructors and faculty members directly related to the delivery and assessment of courses. However, the situation when students are directly encouraged to use them in educationally relevant ways is fundamentally different from the use of SMNs. This was evident by research for Twitter (Al-Bahrani, Patel, & Sheridan, 2017; Coleman, Pettit, & Buning, 2018), Facebook (Munoz & Towner, 2009; Riquelme, 2014), blogs (Echeng, Usoro, & Ewuzie, 2016; Narayan, Herrington, & Cochrane, 2019; Osman & Koh, 2013) and WhatsApp (Al-Omary, El-Medany, & Isa, 2015; Suardika, Suhartini, & Pasassung, 2020; Zulkanain, Miskon, & Syed Abdullah, 2020). However, a systematic review of SMNs use in public education was conducted by Christine Greenhow and Askari (2017) and found that most published work in the previous ten years focused on their common uses rather than their effectiveness in learning. Al-Rahmi et al. (2022) study's findings indicate that to improve learners' performance using SMNs, teachers need to provide them with access to these networks and knowledge sharing opportunities and meet their learning expectations. They recommended designing learning at the higher education level by integrating SMNs for academic purposes supported by an instructor guided model.

2.5. The Omani Case

Al-Mukhaini, Al-Qayoudhi, and Al-Badi (2014) found that SMNs use for educational purposes by faculty members in Omani higher education institutions is minimal and has yet to be investigated. Al-Aufi and Fulton (2014) called for multi-disciplinary and qualitative research to understand how SMNs influence communication at higher education institutions. Al Kindi and Alhashmi (2012) found that Omani students frequently use SMNs to find information and share news while the inexperienced ones with less Information technology (IT) skills do not use them. Al Musawi and Ammar (2015) found that the internet and search engines are commonly used by university's learners for their education and that mobile device use is also rising. According to Abdelraheem and Ahmed (2018), the use of SMNs has less impact on the university learners' social lives. Al-Barashdi and Aldhafri (2020) found no significant differences between males and females in terms of SMN addiction among students but there were significant differences in terms of number of use hours, GPA, and monthly income. In a later study, these researchers also verified the reliability of the psychometric properties of an SMN addiction scale (Al-Barashdi & Aldhafri, 2020).

2.6. The Russian Case

Feshchenko (2016) found that SMNs are the de facto learning that is initiated by the learners and offered by teachers, grabs their attention to the learning process. Semenova, Lebedeva, and Polyakova (2018) found that Russian students prefer VKontakte (VK), Instagram and Facebook with VK only used for learning purposes. It was also noted that the students are very interested in using SMNs to improve their public and professional profile. Perovskik, Zarifullina, and Anchugova (2019) found that Russian students perceived SMNs very positively and most of them use them on a daily basis. This study showed that they use them for communicating, media sharing and information exchange and supported the previous study's findings in that the most frequently visited SMNs are VK, Instagram and YouTube. On the contrary, Mukhametgaliyeva, Gura, Dudnik, and Khudarova (2022) found that Instagram is the most popular network used by students followed by VK and Facebook and they are more active as compared to their instructors and more content with distance learning as well. Tolokonnikova, Dunas,

and Kulchitskaya (2020) substantiated this finding explaining that Russian students nowadays are more satisfied with digital learning which has become their 'natural habitat' due to its interminable prospects to realize their needs. For example, Rekhter and Hossler (2020) found that Russian undergraduate students used SMNs to help them decide whether to transfer to other universities abroad.

2.7. Study Importance

It is envisaged that this study will support the literature volume on comparative studies that can perhaps improve the academic use of SMNs effectively in different instructional settings. It can also help decision makers in both studied environments look into designing new approaches to use SMNs instructionally within their higher education institutions gleaned from each other's data and findings presented here.

2.8. Research Problems and Questions

The development of information and communication technologies is changing. Young people are the most active network users and transmit the most important aspects of their existence. Hence, the purpose of this study is to compare students' perceptions and purposes of the use of SMNs. It aims to explore the status of using SMNs for learning at Omani and Russian higher education institutions. The study investigates the students' inclinations towards SMNs for teaching and learning purposes. It specifically seeks to answer the following questions:

1. To what extent do university students frequently use SMNs?
2. What are SMNs preferences for university students?
3. What are the purposes for which SMNs are used?
4. What are students' perceptions of SMNs?

3. Methodology

3.1. Research Method and Design

This research is quantitative and follows the descriptive comparative research design that is "used to determine the relationship among variables of the study and describe the differences among groups in a population without manipulating the independent variable especially when both groups of students are undergraduates, even though from different routes of entry (Cantrell, 2011). A comparative study is used to determine the relationship between two or more variables by observing different groups. A comparative study looks at two or more similar groups, individuals or conditions by comparing them. Descriptive comparison aims at describing and explaining the invariance of the objects. It does not aim at generating changes in the objects. On the contrary, it usually tries to avoid them. It looks for differences between two or more behaviors of social, economic, cultural, ethical, political and geographical systems and then looks at these differences in relation to some other variable coexisting in those societies to see if they are related (Bukhari, 2011).

3.2. Sample

In this study, all higher educational institutions in Oman and Russia were targeted. The sample targeted for this study was comprised of Russian and Omani undergraduate students both males and females at two Higher Educational Institutions in both countries, namely Sultan Qaboos University (SQU) in Oman and St. Petersburg State Technical University (SPSTU) in Russia. A total of 827 participants (500 Russians and 327 Omanis) participated and were analyzed in this survey.

At SPSTU, students using Information and Communication Technologies (ICT) in communication groups were targeted in the research process as they are more familiar with the 'global' SMNs than those used locally. These groups belong to students of technical specialties numbering about 25. At SQU, students from the instructional technology group were also involved in the research as they are more aware of the learning purposes of SMNs' uses. There were 30 students. Table 1 shows the sample size of the study.

Table 1. Sample of the study.

Variables			
Nationality	Total	Gender	
		Male	Female
Omani	327 (39.5%)	159 (48.6%)	168 (51.4%)
Russian	500 (60.5%)	245 (49%)	255 (51%)
Total	827 (100%)	404 (48.9%)	423 (51.1)

3.3. Instrument

This study used a survey approach to compare both the Omani and Russian cases where a structured questionnaire was used to collect the relevant data. There were 10 questions in the questionnaire. The first 5 questions were used to elicit demographic and personal information about the respondents. Questions 6, 7, and 8 were used to discover what networks, messengers or mail are preferred for them, the specific ways they communicate or socialize with their friends using SMN sites. In question 9, the respondents were asked to indicate how frequently they use the SMNs for educational activities. In question 10, they used to learn about their perceptions about the impact of SMNs applications in learning outcomes. Then, the reliability coefficient was calculated and Cronbach's alpha was at (0.88) which was considered a satisfactory reliability level.

3.4. Research Procedures

This research project began in January 2020 with a literature review. An extensive SMN survey was conducted and the content of the instrument was compiled largely using items drawn from SMN surveys. The instrument was given to a panel of faculty members at the SQU for review in terms of content, clarity and accuracy. They reviewed the instrument and gave suggestions which the researchers used to revise the survey. The survey was also translated from English to Arabic. The data collection began on April 1, 2020 and a copy of the survey (the English

version) sent to the Russian research collaborator at SPSTU. Three weeks later, the Russian collaborator sent data on April 23, 2020. In May 2020, an online survey was designed using Google Forms and the link to the questionnaires was administered to the Omani sample through the assistant researchers for collecting the data. Two months later, the Omani group collected the data from their target population. The data collection for this study took place from April 2020 to July 15, 2020.

3.5. Statistical Analysis

The collected data were exported to Excel Sheets and transformed into SPSS for analysis. Frequencies were used to analyze the samples' profiles and descriptive statistics (i.e. mean and standard deviation) were used to analyze the students' use and perception of using SMNs for learning. A T-test was used to compare the perception and use of SMN responses by students.

4. Study Findings

RQ1: *To what extent do HE students frequently use SMNs?*

In order to answer the first research question regarding the students use of SMNs at both countries a comparison of HE students' use frequencies of various SMNs (social connections, multimedia sharing, professional, academic, blogging, social bookmarking and cross-platform mobile applications) between the Omani and Russian contexts was conducted. The findings are presented in Table 2.

Table 2. Frequencies for participants' use of SMNs by Omani and Russian students (N = 327) and Russia (N = 493).

Scale value	Interpretation	Oman	%	Russia	%
		n		n	
7 – 12.60	Never used	22	6.7	61	12.2
12.61 – 18.21	Rarely used	86	26.3	203	40.6
18.22 – 23.82	Sometimes used	122	37.3	179	35.8
23.83 – 29.43	Often used	82	25.1	45	9.0
29.44 – 35.04	Always used	15	4.6	5	1.0

Table 2 shows that the Omani students tended to *sometimes* use different kinds of SMNs (mean (M) = 20.75, Standard deviation (SD) = 5.11), while the Russian students reported *rare* followed by a considerable *sometimes* (35%), use of various SMNs (M = 17.89, SD = 4.49). This finding shows that the SMNs remain at a moderate level of use by both groups of students and do not take priority over other means of communication.

RQ2: *What are SMNs preferences for HE students?*

In order to answer the second research question regarding SMN preferences of students in both countries, descriptive statistics were calculated. Table 3 shows the similarities and differences between Oman and Russia in terms of SMNs preferences.

Table 3. Descriptive statistics for the Omani and Russian students' preferences for the use of various SMNs.

Students	Variable	M	SD	$Min.$	$Max.$
Omani students	Social connections	3.86	1.18	1	5
	Multimedia sharing	3.62	1.30	1	5
	Professional	2.35	1.13	1	5
	Academic	2.60	1.25	1	5
	Blogging	2.03	1.14	1	5
	Social bookmarking	2.15	1.20	1	5
	Cross-platform mobile applications	4.13	1.19	1	5
Russian students	Social connections	3.59	1.52	1	5
	Multimedia sharing	3.37	1.28	1	5
	Professional	1.81	1.00	1	5
	Academic	1.77	0.98	1	5
	Blogging	1.43	0.81	1	5
	Social bookmarking	1.95	1.17	1	5
	Cross-platform mobile applications	3.96	1.13	1	5

Table 3 shows that the cross-platform mobile applications (Facebook, Twitter, VK, Instagram, YouTube, and WhatsApp) occupied the top place of SMNs in terms of usage in both Omani and Russian cultures (M = 4.13, SD = 1.19) and (M = 3.96, SD = 1.13), respectively. Moreover, the results were consistent between the two contexts in terms of the most preferred SMNs: social connections and multimedia sharing. In contrast, the least used SMNs were professional, academic, blogging and social bookmarking.

RQ3: *What are the purposes for which SMNs are used?*

Descriptive statistics were calculated in order to answer the third research question regarding SMNs top and least popular purposes of use among the students in both countries. The findings of the top purposes of use are presented in Table 4.

Table 4. Descriptive statistics for the Omani and Russian students' top purposes of SMN use.

Students	Variable	M	SD	Min	Max
Omani students	Communicate with classmates about course-related topics.	1.83	0.43	0	2
	Send private messages to a friend within the SMN site.	1.82	0.48	0	2
Russian students	Stay in touch with friends.	1.96	0.25	0	2
	Send private messages to a friend within the SMN site.	1.96	0.24	0	2

Table 4 shows that the top purpose for which SMNs are used among Omani students is to "communicate with classmates about course-related topics" ($M = 1.83$, $SD = 0.43$) followed by "send private messages to a friend within the SMNs site" ($M = 1.82$, $SD = 0.48$). The Russian students showed that their top use of SMNs is to "stay in touch with friends" ($M = 1.96$, $SD = 0.25$) and to "send private messages to a friend within the SMNs site" ($M = 1.96$, $SD = 0.24$). This finding shows that the Omani students have the intention of using SMNs for academic purposes while their Russian colleagues tend to socialize with friends.

The findings of the least common purposes of use are presented in Table 5.

Table 5. Descriptive statistics for the Omani students and Russian least purposes of SMNs use.

Students	Variable	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
Omani students	Post comments to a friend's blog	1.18	0.67	0	2
	Respond to site advertisements	1.20	0.67	0	2
Russian students	Post comments to a friend's blog	1.39	0.68	0	2
	Respond to site advertisements	1.25	0.60	0	2

Table 5 shows that the SMNs least used are similar by both Omani and Russian students, specifically "post comments to a friend's blog" and "respond to site advertisements" with a slight priority difference as the latter SMNs use mean scores first by the Omani students and second by their Russian counterparts. This finding shows that both groups of students have the least intention of using SMNs for social blogging or advertisement purposes.

RQ4: *What are students' perceptions of SMNs?*

Frequencies were calculated in order to answer the fourth research question regarding students' perceptions of SMNs in both countries. The findings are presented in Table 6.

Table 6. Frequencies for participants' perceptions of SMNs by Omani (N = 327) and Russian students (N= 500).

Students	Scale value	Interpretation	<i>n</i>	%
Omani students	15 – 27	High negative perception	1	0.3
	27.1 – 39.1	Negative perception	42	12.8
	39.2 – 51.2	Neutral	197	60.2
	51.3 – 63.3	Positive perception	85	26.0
	63.4 – 75.4	High positive perception	2	0.6
Russian students	15 – 27	High negative perception	0	0
	27.1 – 39.1	Negative perception	49	9.8
	39.2 – 51.2	Neutral	237	47.4
	51.3 – 63.3	Positive perception	178	35.6
	63.4 – 75.4	High positive perception	29	5.8

Table 6 shows *neutral* perceptions by most of the Omani (60.2%) and Russian (47.4%) students towards SMNs followed by positive perceptions in both cultures. This finding shows an interesting unanimous pattern of attitudes among both groups.

5. Results and Discussion

The findings of this study indicate a moderate level of use that varies between "rare and sometimes" in both HEI contexts in terms of frequency of use. This result is supported by Perovskik et al. (2019) and Al Kindi and Alhashmi (2012) who showed that both groups of students use the SMNs frequently or on a daily basis.

The preferences for the use of various SMNs indicate that cross-platform mobile applications were at the top of SMNs used by both groups for social connections and multimedia sharing whereas the least used ones were the professional, academic and blogging SMNs. These findings are substantiated by other literature such as Burke and Kraut (2016); Verduyn et al. (2017); Al-Barashdi and Aldhafri (2020); Perovskik et al. (2019) and Mukhametgaliyeva et al. (2022) who reiterated the dominance of socialization types in SMNs use with an addiction tendency. These results are of importance to the educators in both countries as they show tips for designing types of SMNs with attractive content for academic purposes i.e. using the social and multimedia rich design approach.

The top purposes for which SMNs are used are academic in nature among Omanis and social among Russians. This may reflect the differences between both contexts showing some learners' reserved reactions to social activity in a virtual environment due to gender and other cultural variables (Akinyemi, 2003). This result is corroborated by other research findings such as Echeng et al. (2016); Narayan et al. (2019) and Osman and Koh (2013) who showed social blogging as a purpose of SMNs use but with lower means. It seems perhaps normal for higher education considering the non-academic nature of this purpose of use.

The overall perceptions towards SMNs seem to be neutral among both categories of students followed by positive perceptions. Perceptions among both undergraduate groups of students may indicate a universal understanding of SMNs role in their university's life considering their age and developmental needs. This result was partially shown through other research such as Richardson et al. (2012); Perovskik et al. (2019); Papademetriou et al. (2022); Sobaih et al. (2021) and Quansah et al. (2016).

6. Conclusion and Recommendations

This research was conducted to compare students' perceptions and purposes of the use of SMNs. The study identifies the preferred SMNs among undergraduate students in the two countries: Russia and Oman. The researchers found that there is a greater tendency to use them for social interaction and messaging. This important finding confirms the need for educators to provide attractive academic content through a social and multimedia design approach. Neutral and ambivalent perceptions of students are held by using SMNs for academic purposes. The cultural characteristics of students also play an important role that should not be overlooked by educators in both higher education environments when employing SMNs to provide their academic content. These

characteristics should be paid attention to and addressed in order to activate communication between students and instructors and networking, participation and cooperation among students in the performance of their educational assignments. Therefore, the study suggests creating well-designed closed network communication for the students in both countries (and other similar HEIs) using the existing SMN platforms and employing their mobile applications for thematic exchange of information in relation to academic content and activities.

Future research in this field focuses on a qualitative netnographic analysis of the academic aspects of SMNs. It needs to collect electronic metadata and use it to find out the extent to which academic content topics are related to educational materials in the exchanged messages. In addition, the studies need to investigate the amount of plagiarism that occurred, the intra-mechanisms of managing and organizing interaction and control over publications and correspondence. The most interesting question is how these SMN groups are supportive of learning both in terms of information and emotional support.

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